

Acqui-hiring: Creating Value through a Novel Acquisition Practice

by

Beril Boyacıođlu Bakır

A Dissertation Submitted to the
Graduate School of Business
in Partial Fulfillment of the Requirements for
the Degree of
Doctor of Philosophy

in

Business Administration



KOÇ ÜNİVERSİTESİ

April 16, 2020

Acqui-hiring: Creating Value through a Novel Acquisition Practice

Koç University

Graduate School of Business

This is to certify that I have examined this copy of a doctoral dissertation by

Beril Boyacıođlu Bakır

and have found that it is complete and satisfactory in all respects,
and that any and all revisions required by the final
examining committee have been made.

Committee Members:

Prof. Zeynep Aycan (Advisor)

Dr. Mahmut N. Özdemir [Co-advisor]

Prof. Pınar Özcan

Assoc. Prof. Remzi Gözübüyük

Assist. Prof. Görkem Aksaray

Assist. Prof. Eda Aksoy

Date: _____

ABSTRACT

Acqui-hiring: Creating Value through a Novel Acquisition Practice

Beril Boyacıoğlu Bakır

Doctor of Philosophy in Business Administration

April 16, 2020

Acqui-hiring is a relatively novel acquisition practice of established technology firms. Unlike traditional technology acquisitions motivated by obtaining the product/technology of the acquired firm, acqui-hires are primarily motivated by gaining access to the talented human capital of start-ups. Established technology firms such as Google, Apple and Facebook have been steadily investing in acqui-hires in recent years. While there is growing research on acqui-hires, our understanding of the unique nature of this novel acquisition practice, the value creation logic of acqui-hires and the rationale behind acqui-hire integration remains limited. This dissertation provides conceptual and empirical analyses to fill these gaps in our understanding. First, we conducted a descriptive case study research in Silicon Valley. We distinguished acqui-hires from other technology acquisitions and identified the unique integration and value creation challenges of acqui-hires by examining four acquisitions of two prominent acquirers. Second, we develop a theoretical framework to explain how acquirers can unlock the value creation potential of acqui-hires building on the real options literature. We consider acqui-hires real options of acquirers whose underlying asset is the acquired talent. We argue that acqui-hires offer different sources of option value for acquirers depending on the pace of the commitment of the acquirer into the acquired talent. We explicate two different types of acqui-hires, namely growth acqui-hires and deferral acqui-hires, identify the different sources of value they generate and establish the conditions under which the value generated by one type of acqui-hire dominates the other. Third, we examine post-acquisition integration in acqui-hires. Whereas post-acquisition integration decisions aim to maximize knowledge transfer and minimize coordination costs in traditional technology acquisitions, we examine how acqui-hire integration may be influenced by the disruptiveness of the acqui-hire's know-how to the incumbent's current technology or business model. We empirically examine 250 acqui-hires of 29 established firms operating in technology industries between 2005-2015. We argue that the primary motive of acquirers in making post-acquisition integration decisions for their acqui-hires is to effectively recombine new and existing human resources to undergo organizational change and adapt to the rapid changes that take place in the high-velocity environments they operate. Applying a dynamic capabilities framework, we demonstrate that when the acquired start-up has disruptive know-how, the acqui-hire team is integrated as a whole into the disrupted business unit and the founder of the acquired start-up is assigned to a high status position. Furthermore, we examine how the lack of fit between acquired know-how type and post-acqui-hire integration decisions of the acquirer effects the exit decision of the acqui-hired founder from the acquirer. We show that a lack of fit between acquired know-how type and integration mode is likely to lead to the premature exit of acqui-hired founders. The

findings of this dissertation make noteworthy contributions to the real options literature, dynamic capabilities literature and post-acquisition integration literature as well as improve our understanding of the emerging phenomenon of acqui-hiring. Furthermore, this research has important practical implications for established technology firms that will enable them to effectively manage their acqui-hires.



ÖZETÇE

Satın Al-İstihdam Et: Yeni Bir Satın Alma Yöntemi ile Değer Yaratmak

Beril Boyacıođlu Bakır

İşletme, Doktora

16 Nisan 2020

Satın al-istihdam et, yüksek teknoloji firmalarının kullandığı görece yeni bir satın alma yöntemidir. Satın alınan firmanın ürününü veya geliştirdiği teknolojiyi elde etmeyi amaçlayan geleneksel teknoloji satın alımlarından farklı olarak, satın al-istihdam et tipi satın alımların birincil motivasyonu satın alınan inovasyon odaklı küçük firmaların yetenekli insan kaynağına erişim kazanmaktır. Son yıllarda Google, Apple ve Facebook gibi büyük teknoloji firmaları giderek artan bir hızla yetenekli insan kaynağına sahip teknoloji girişimlerini satın al-istihdam et yöntemiyle bünyelerine katmaktadır. Satın al-istihdam et tipi satın alımlara ilişkin araştırmalar giderek artmakla birlikte, bu yeni satın alma yönteminin kendine özgü özellikleri, değer yaratma mantığı ve satın alınan insan kaynağının nasıl entegre edileceğine ilişkin kararların gerekçeleri ile ilgili anlayışımız sınırlıdır. Bu tez anlayışımızdaki bu boşlukları doldurmak üzere kavramsal ve ampirik analizler sağlamaktadır. İlk olarak, Silikon Vadisi'nde bir tanımlayıcı vaka çalışması gerçekleştirdik. İki önde gelen büyük teknoloji firmasının dört satın alımını inceleyerek satın al-istihdam et tipi satın alımları diğer teknoloji satın alımlarından ayıran özellikleri ve bu tip satın alımlarda entegrasyon ve değer yaratmada karşılaşılan zorlukları belirledik. İkinci olarak, satın alımı gerçekleştiren firmaların satın al-istihdam et tipi satın alımların değer yaratma potansiyelini nasıl açığa çıkarabileceklerini açıklamak için reel opsiyon literatürü üzerine kurulu bir teorik çerçeve geliştiriyoruz. Satın al-istihdam et tipi satın alımları satın alımı gerçekleştiren firmanın dayanak varlığı kazanılan yetenekli insan kaynağı olan reel opsiyonları olarak düşünüyoruz. Satın al-istihdam et tipi satın alımların satın alımı gerçekleştiren firmaya, firmanın kazanılan insan kaynağına taahhüt hızına bağlı olarak farklı opsiyon değeri kaynakları sunduğunu tartışıyoruz. Büyüme ve erteleme bazlı iki farklı satın al-istihdam et tipi satın alımı açıklayarak yarattıkları farklı değer kaynaklarını saptıyor ve bu satın alım tiplerinden biri tarafından yaratılan değer diğerine üstün olacağı koşulları belirliyoruz. Son olarak, satın al-istihdam et tipi satın alımlarda satın alım sonrası entegrasyonu inceliyoruz. Geleneksel teknoloji satın alımlarında satın alım sonrası entegrasyon kararları bilgi transferini maksimize etmeyi veya koordinasyon maliyetlerini minimize etmeyi amaçla birlikte, biz satın al-istihdam et tipi satın alımlarda satın alım sonrası entegrasyonun satın alınan firmanın bilgi birikiminin satın alımı gerçekleştiren firmanın mevcut teknolojisini veya iş modelini bozguna uğraticı özelliği olup olmamasından nasıl etkilendiğini inceliyoruz. Teknoloji endüstrilerinde faaliyet gösteren 29 firma tarafından 2005-2015 yılları arasında gerçekleştirilen 250 satın al-istihdam et tipi satın alımı ampirik olarak inceledik. Satın alımı gerçekleştiren firmaların satın al-istihdam et yöntemiyle gerçekleştirdikleri satın alımlarda satın alım sonrası entegrasyon kararlarındaki birincil motivasyonun mevcut ve yeni insan kaynağını etkin bir şekilde birleştirerek örgütsel değişim gerçekleştirmek ve faaliyet gösterdikleri değişim hızı yüksek ortamlarda gerçekleşen değişimlere uyum sağlamak olduğunu tartışıyoruz. Dinamik yetkinlikler çerçevesi uygulayarak, satın alınan firmanın bozguna uğramasına sahip olması durumunda satın al-istihdam et yöntemiyle elde edilen takımın bozguna uğrama potansiyeli olan iş birimine bir bütün olarak entegre edildiğini ve satın alınan firma kurucusunun yüksek statülü bir pozisyona atandığını gösteriyoruz. Ayrıca, satın alınan firmanın sahip olduğu

bilgi birikimi tipi ile satın alımı gerçekleştiren firmanın satın alım sonrası entegrasyon kararları arasındaki uyumsuzluğun satın alınan firma kurucusunun satın alımı gerçekleştiren firmadan ayrılma kararı üzerindeki etkisini inceledik. Satın alınan firmanın sahip olduğu bilgi birikimi tipi ile entegrasyon yöntemi arasındaki uyumsuzluğun satın alınan firma kurucusunun satın alımı gerçekleştiren firmadan erken ayrılmasına yol açtığını gösteriyoruz. Bu tezin bulguları reel opsiyon literatürüne, dinamik yetkinlikler literatürüne ve satın alım sonrası entegrasyon literatürüne kayda değer katkılar yapmakla birlikte yeni ortaya çıkan bir olgu olan satın al-istihdam et tipi satın alımlarla ilgili anlayışımızı da iyileştirmektedir. Ayrıca, bu araştırmanın büyük teknoloji firmalarının satın al-istihdam et tipi satın alımlarını etkin bir şekilde yönetebilmelerini sağlayacak önemli pratik çıkarımları da bulunmaktadır.



ACKNOWLEDGEMENTS

Pursuing a PhD degree at Koç University Graduate School of Business has been an amazing journey. I would like to take this opportunity to express my gratitude to all the people who have shared this journey with me and supported me in this endeavor.

First, I would like to express my deepest gratitude to my co-advisor Dr. Mahmut N. Özdemir for his continuous guidance and support. His mentorship played a crucial role in shaping my PhD experience. He continuously challenged me to improve my work and supported me in every step of the way from finding research funds to presenting my work on different platforms and publishing results. I have learnt a lot from him about research and I am grateful for the time and effort he devoted to improve my academic and professional skills. I feel privileged to have had him supervise my thesis.

I would also like to express my gratitude to my advisor Prof. Zeynep Aycan for her insightful comments and encouragement. Her concern over not only my research but also my individual well-being and career aspirations meant a lot to me. Most importantly, she has been a wonderful role model as a scholar. I am honored to have her chair my dissertation committee.

I would also like to express my gratitude to Prof. Pınar Özcan, an inspirational scholar, whose guidance helped me build the foundations of my research. I feel very lucky to have met her early in my PhD. I am grateful to her for reviewing consecutive drafts of my essays and helping me improve my work. Having the opportunity to work with her on this dissertation was an invaluable learning experience.

I would also like to thank Assoc. Prof. Remzi Gözübüyük for his contributions to my research. It has always been a pleasure to discuss my research with him. His insightful comments on the earlier drafts of both my conceptual and empirical essays helped me improve my work considerably. I am grateful for having him on my committee.

I would also like to thank Assist. Prof. Görkem Aksaray and Assist. Prof. Eda Aksoy for taking part in my dissertation committee. I am grateful for their valuable comments and contributions.

I would also like to express my special gratitude to Prof. Samina Karim. Her support has been a great motivating force for me. I am grateful for her comments and suggestions, which have been extremely valuable in refining my empirical essay. I am looking forward to working with her in moving forward with my academic research.

I would also like to thank all management scholars who have contributed to my research in various conferences and seminars. The feedbacks that I received from the participants of the 2015 EDEN Advanced Strategic Management Doctoral Seminar, the 2016 European Theory Development Workshop, the 2016 AOM Conference, the 2016 National Management and Organization Congress, the 2017 DRUID Academy Conference, the 2017 SMS Special Conference, the 2018 KOS (Koç-Özyeğin-Sabancı) Management Seminar, and the 2018 SMS Conference were extremely valuable in moving my research forward.

I would also like to express my gratitude to the staff of the Koç University Graduate School of Business for their administrative support and assistance. Their continuous support has played an important role in my PhD journey.

I would also like to thank Umut Gökçen for initially convincing me that pursuing a PhD is the right path for me and supporting me during the whole experience.

I would also like to thank Gözde Yal Önder. Her unconditional support means more to me than she may realize. I am eternally grateful for having her in my life as a best friend.

I would also like to thank my parents, Nurefşan and Necati Boyacıoğlu, for their endless support and encouragement. I would like to thank my mother for being the joy of life as her name suggests. I would like to thank my father for teaching me to try to do my best in whatever it is that I do.

Finally, I would like to thank my husband Mustafa Can Bakır for his support and understanding. Being a PhD household is not an easy task and I am aware of all the sacrifices he needed to make for me to finish this dissertation. I would like him to know that all he has done has been fully appreciated and above all, I owe the largest debt of gratitude to him.

TABLE OF CONTENTS

List of Tables	xi
List of Figures	xii
Chapter 1: Introduction	1
Chapter 2: Case Study Research on Acqui-hires	5
2.1 Research Design.....	5
2.2 Overview of Cases	7
2.3 The Unique Nature of Acqui-hires.....	9
2.4 The Underlying Motivations of Acqui-hires.....	11
2.5 The Differences between Acqui-hires and Other Technology Acquisitions	12
2.6 The Integration and Value Creation Challenges of Acqui-hires.....	15
2.7 Conclusion.....	21
Chapter 3: How and When Do Different Types of Acqui-hires Create Value for Acquirers? A Real Options Analysis	22
3.1 Introduction	23
3.2 Acqui-hiring in the Extant Literature	25
3.3 Acqui-hiring as a Real Option.....	28
3.3.1 Growth Acqui-hires	29
3.3.2 Deferral Acqui-hires	31
3.4 Growth versus Deferral: When Does It Pay Off to Wait and When Not?	33
3.4.1 Value of the Acquired Talent	34
3.4.2 Market Uncertainty.....	37
3.4.3 Exercise Price of the Option.....	39
3.5 Discussion	43
3.5.1 Future Research Avenues	44
Chapter 4: Acqui-hires: Post-Acquisition Integration of Start-ups' Human Capital and Its Outcomes	48
4.1 Introduction	49

4.2 Theoretical Background	51
4.2.1 Traditional Technology Acquisition Integration vs. Acqui-hire Integration..	51
4.2.2 Dimensions of Post-acqui-hire Integration.....	53
4.3 Hypotheses	54
4.3.1 The Effect of Know-how Type on Post-acqui-hire Integration.....	54
4.3.2 Post-acqui-hire Integration and the Premature Exit of Acqui-hired Founders	58
4.4 Empirical Analysis	61
4.4.1 Sample and Data.....	61
4.4.2 Variable Definitions and Measures	62
4.4.3 Methods	68
4.5 Results	71
4.5.1 Acqui-hire Integration	71
4.5.3 Acqui-hire Integration Outcome.....	80
4.6 Discussion	83
4.6.1 Theoretical Contributions.....	83
4.6.2 Managerial Implications.....	86
4.6.3 Limitations and Future Research Opportunities.....	86
4.7 Conclusion.....	87
Chapter 5: Conclusion	89
5.1 Key Findings	89
5.2 Theoretical Contributions.....	91
5.3 Practical Implications.....	92
5.4 Limitations and Future Research Avenues	93
Bibliography	96
Appendix A	109
Appendix B	112
Appendix C	113
Appendix D	114
Appendix E	138

LIST OF TABLES

2.1 Distribution of interviews.	6
2.2 Detailed information about the cases.	8
4.1 Descriptive statistics and correlations for the analysis of antecedents of post-acqui-hire integration.	72
4.2 Logit and probit models on focused integration.	73
4.3 Logit and probit models on high status position of the founder.	78
4.4 Regression models on degree of distribution.	76
4.5 Heckman selection models.	74
4.6 Descriptive statistics and correlations for the analysis of outcomes of post-acqui-hire integration.	80
4.7 Logit analysis on the effect of the lack of fit between know-how type and post-acquisition integration decisions on the premature exit of acqui-hired founders.	82

LIST OF FIGURES

2.1 Types of technology acquisitions and their primary targets.	15
3.1 Classification of studies on technology acquisitions.	25
3.2 Factors affecting the relative values generated by growth and deferral acqui-hires.	34



Chapter 1

INTRODUCTION

High-technology firms traditionally have used acquisitions as a means to gain quick access to innovation streams (Graebner, 2004; Puranam, Singh, and Zollo, 2006; Puranam and Srikanth, 2007; Ranft and Lord, 2002). However, prior to the transition to digital technologies, acquisitions in high-technology industries mainly targeted the product or the patented technologies of the acquired firm. As the transition to digital becomes more widespread and the economy is increasingly based on digital technologies, the biggest technology companies have increasingly faced the challenge to attract the talent that will enable them to adapt to the rapid changes that take place in the high-velocity environments they operate. Acqui-hiring has emerged as a solution to meet this increasing demand for talent in high-technology industries where innovations are happening at a brisk pace.

Acqui-hiring refers to the acquisition of a technology start-up by an established technology firm primarily to gain access to the talented human capital of the start-up without necessarily showing an interest in the start-up's existing solutions (Chatterji and Patro, 2014). Many high-technology companies such as Google, Apple and Facebook have been steadily investing in acqui-hiring in recent years to capture the talent that will enable them to continue their leadership in the markets they dominate, to catch-up with their competitors in the markets where they are followers or to create new markets. In line with this trend, scholars have begun to pay special attention to this emerging phenomenon (Chatterji and Patro, 2014; Coyle and Polsky, 2013). However, little is known about the key characteristics of acqui-hire deals, the differences between acqui-hires and other technology acquisitions, the unique integration and value creation challenges of acqui-hires and how acquirers are attempting to deal with these challenges. This emerging phenomenon, while well-documented in the popular press, deserves more empirical and theoretical attention, hence the objective of this dissertation is to fill these gaps in our understanding and provide a step in moving forward with the research on acqui-hiring.

Given the increasing popularity of this novel acquisition type among practitioners, understanding the practical aspects of the phenomenon was a necessary pre-requisite to theorizing about it. Thus, I first conducted a descriptive case study research. My first aim was to provide a clear conceptual definition of an acqui-hire. While the emerging phenomenon of acqui-hiring seems to be arousing interest among management scholars, the term remains confusing. For example, does an acqui-hire involve the acquisition of an entire firm or does it simply mean that the acquirer hires away all or some of the target company's employees? Or can both be labeled acqui-hires if the acquirer is primarily after the human capital? What happens to the existing solutions of the acquired firm after the acquisition? Are they always shut down in the case of an acqui-hire or are there other alternatives? The case study research shed light on these questions thereby enabling a clearer understanding of the phenomenon.

Besides trying to establish a clear and consistent definition of acqui-hires, I also aimed to understand the differences between acqui-hires and other technology acquisitions, identify the unique integration and value creation challenges stemming from these differences and understand how acquirers are attempting to deal with these challenges. To that end, I examined four acquisitions of two prominent acquirers based in Silicon Valley. Chapter 2 summarizes the findings from the case study research.

Chapter 3 consists of a conceptual essay that presents a theoretical framework to explain the value creation logic of acqui-hires building on the real options literature. Many high-technology companies have been increasingly engaged in acqui-hiring in recent years. However, while some acqui-hires create value for their acquirers, several others fail to realize their value creation potential. The limited number of studies in the academic literature also view acqui-hiring from different perspectives in terms of its contribution to the acquirer's market value. Coyle and Polsky (2013) attribute the existence of acqui-hires mainly to the unique social structure and community norms of Silicon Valley and argue that acqui-hires are merely a rescue for struggling companies that will not be able to survive another round of financing. Thus, they do not view acqui-hiring as a value creating mechanism. On the other hand, Chatterji and Patro (2014) view acqui-hiring as an attempt to acquire talent to be able to seize new business opportunities and present acqui-hiring as a potentially value creating mechanism. However, they do not explain how and when exactly acqui-hires create value for acquirers.

In this essay, I contribute to this debate by introducing a real options-based model that suggests acqui-hiring can in fact be a strategic move that creates value for the acquirer depending on how the acqui-hire is structurally designed. I consider acqui-hires real options of acquirers whose underlying asset is the acquired talent. As real options, acqui-hires may generate different sources of value for acquirers (Trigeorgis, 1993; Trigeorgis and Reuer, 2017). I argue that the source of option value offered by an acqui-hire depends on the pace of the commitment of the acquirer into the acquired talent. I identify two different types of acqui-hires, namely growth acqui-hires and deferral acqui-hires, depending on the source of option value they generate. I propose that the relative values generated by growth and deferral acqui-hires depend on the value of talent, market uncertainty, and the costs of realizing revenue streams from the know-how of the acquired talent. Furthermore, I identify the conditions under which the value generated by one type of acqui-hire dominates the value generated via the other.

Chapter 4 consists of an empirical essay that provides insights into the antecedents and outcomes of post-acqui-hire integration. Post-acquisition integration has been extensively studied building on different theoretical perspectives (Graebner, Heimeriks, Huy and Vaara, 2017). However, extant research on post-acquisition integration in technology acquisitions mostly focuses on the maximization of knowledge transfer and the minimization of coordination costs as the key objectives of post-acquisition integration decisions (Graebner, 2004; Puranam, Singh, and Chaudhuri, 2009; Ranft and Lord, 2002). These studies have provided valuable insights into post-acquisition integration in traditional technology acquisitions, which target the product or technology of the acquired firm. However, traditional technology acquisitions involve little the challenge of integrating the human capital of the acquired firm. In acqui-hires, the main challenge of the acquirer is to exploit the know-how of the acqui-hired employees by choosing the appropriate integration modes. Thus, our understanding of the rationale behind post-acquisition integration decisions in acqui-hires, which mainly target the talented human capital of the acquired start-up, remains limited.

In this essay, I examine the underlying motivations of acquirers in making post-acqui-hire integration decisions by drawing upon the dynamic capabilities literature. I suggest that the primary motive of acquirers in making post-acquisition integration decisions for their acqui-hires is to effectively recombine new and existing human resources to undergo organizational change and quickly adapt to the changes that take

place in the high-velocity environments they operate. Moreover, I argue that post-acqui-hire integration is influenced by the disruptiveness of the acqui-hire's know-how to the incumbent's current technology or business model. Applying a dynamic capabilities framework, I find that when the acquired start-up has disruptive know-how, the acquired team is integrated as a whole into the disrupted business unit and the founder of the acquired start-up is assigned to a high status position. This is because the acquirer wants to overcome the organizational inertia persistent in its existing business units and modify its existing resource base to foster innovation. Furthermore, to contribute to our understanding about the outcomes of post-acquisition integration in acqui-hires, I examine how the lack of fit between the type of acquired firm's know-how and the post-acquisition integration decisions of acquirers influence the exit of the acqui-hired founders from the acquiring firms. I show that a lack of fit between acquired know-how type and integration mode is likely to lead to the premature exit of acqui-hired founders.

Chapter 5 concludes this dissertation with a discussion of the key findings, theoretical contributions, implications for practice, limitations of the research and possible avenues for future research.

Chapter 2

CASE STUDY RESEARCH ON ACQUI-HIRES

As the first step of my research, I conducted a descriptive case study to better understand the acqui-hiring phenomenon and build my research on solid foundations. The case study research was designed to provide preliminary answers to the following questions:

- What are the key characteristics of acqui-hires?
- What are the underlying motivations of acqui-hires?
- What are the differences between acqui-hires and other technology acquisitions?
- How is the acqui-hired talent integrated?
- What are the key factors affecting value creation from acqui-hires?

2.1 Research Design

Case studies are preferred research tools when the focus is on contemporary phenomenon within some real-life context (Yin, 1994). Since acqui-hiring is a pervasive acquisition practice which has been increasingly employed especially by established high-technology firms (Chatterji and Patro, 2014), I employed case study methodology to understand the phenomenon before theorizing about it. My aim was to answer the questions of what the characteristics that distinguish acqui-hires from other acquisitions are and how acquirers are attempting to deal with the unique integration and value creation challenges of acqui-hires. The objective of the study was to create empirical observations, record regularities and variations regarding the phenomenon that would then form the basis for theorizing (Glaser and Strauss, 2009).

The setting for the study was Silicon Valley based high-technology firms since acqui-hiring is an acquisition practice which has emerged from and is most widely employed in Silicon Valley (Chatterji and Patro, 2014; Coyle and Polsky, 2013). The case research was conducted between September 2015 and May 2016 on two prominent acquirers in the Information Technology (Computing and Communications) industry. The two acquiring firms were both established firms in their industries and were active in

acquiring smaller technology firms. The two firms have undertaken more than 200 acquisitions in total between 2005–2015. I examined 2 acquisitions of each acquiring firm because using multiple cases enables a replication logic in which cases are treated as a series of experiments, each serving to confirm or disconfirm inferences drawn from the others (Eisenhardt, 1991; Yin, 1994). The research used an embedded design that included: the acquiring firms, the acquired start-ups and investors who had invested in the acquired start-ups.

Multiple data sources were used in the study. By using data from different sources, I used a triangulation logic to strengthen the robustness of the findings (Jick, 1979). The primary data source was semi-structured interviews with the managers of acquiring firms, founders and key employees of acquired start-ups and investors of acquired start-ups. The interview protocols are provided in Appendix A. To mitigate potential biases, I interviewed several highly knowledgeable informants who viewed the focal acquisition from different perspectives in each case. I also used secondary sources such as company press releases, business press articles and news on technology blogs. The data was triangulated by the information that I gathered from different informants such as industry experts. Table 2.1 shows the distribution of the interviews. Each interview lasted between 45-75 minutes and was tape recorded. I used interview techniques such as event tracking and nondirective questioning that prior research has shown to yield accurate information from the informants (Huber and Power, 1985).

Table 2.1: Distribution of interviews.

Acquirer	Target	Number of Interviews	Interviewees
SearchCo	MovieReview.Com	3	SearchCo Product Management Director SearchCo Principal, Mergers and Acquisitions MovieReview.Com Founder

SearchCo	VisualSearch.Com	4	SearchCo Product Management Director SearchCo Principal, Mergers and Acquisitions VisualSearch.Com Engineering Manager VisualSearch.Com Investor
MicroProcessorCo	WristWearCo	4	MicroProcessorCo Senior Business Development Director, New Devices Group MicroProcessorCo Vice President, New Devices Group WristWearCo Founder WristWearCo Vice President of Product
MicroProcessorCo	EyeWearCo	3	MicroProcessorCo Senior Business Development Director, New Devices Group MicroProcessorCo Vice President, New Devices Group EyeWearCo Founder

I started data analysis by writing individual case histories for each acquisition. During the case write-up and analysis, I triangulated the data emphasizing themes that were supported by different data collection methods and confirmed by several informants (Jick, 1979). I then conducted a cross-case analysis, looking for similar constructs and themes in the cases (Eisenhardt and Graebner, 2007). Finally, I refined the emerging findings by revisiting data and looking for the identified pattern in each individual case (Glaser and Strauss, 2009; Yin, 1994).

2.2 Overview of Cases

The acquiring firms and the target firms are renamed in accordance with their lines of business for confidentiality purposes. The acquiring firms are renamed as SearchCo and MicroProcessorCo, while the target firms are renamed as MovieReview.Com, VisualSearch.Com, WristWearCo and EyeWearCo. Table 2.2 displays detailed information regarding the deals.

Table 2.2: Detailed information about the cases.

Acquirer	Target	Deal Date	Deal Size	Target Team Size	Target Financing Prior to Acquisition	Acquired Resources
SearchCo	MovieReview.Com	January, 2011	\$10 M	4	\$50k in 1 round from 2 investors	Human Capital
SearchCo	VisualSearch.Com	August, 2010	\$100 M	24	\$47.3M in 3 rounds from 8 investors	Human Capital
MicroProcessorCo	WristWearCo	March, 2014	\$100 M	60	\$43.5M in 3 rounds from 9 investors	Human Capital, Technology, Customer Base
MicroProcessorCo	EyeWearCo	June, 2015	\$175 M	75	\$17M in 3 rounds from 4 investors	Human Capital, Technology, Customer Base

SearchCo is one of the biggest high technology companies based in Silicon Valley and is actively involved in acquisitions of smaller technology firms. SearchCo, which specializes in internet-related services and products such as online advertising technologies, search engine, cloud computing, has conducted over 180 acquisitions between 2005–2015. MovieReview.Com was a movie website that provided reviews, news and information about movies based on data collected from social media. The Silicon Valley based start-up was founded in 2010. MovieReview.Com was a team of 4 when it was acquired by SearchCo in January 2011. VisualSearch.Com was a visual search engine that allowed users to find similar products on the web and compare their prices. It was also a Silicon Valley based start-up which was founded in 2006. VisualSearch.Com was a team of 24 people when it was acquired by SearchCo in August 2010.

MicroProcessorCo is also a Silicon Valley based established high-technology company, which specializes in designing and manufacturing integrated digital technology platforms. MicroProcessorCo is also an active acquirer with more than 40 acquisitions between 2005–2015. WristWearCo was a Silicon Valley based wearable technology company, which specialized in health tracking by wearable devices. WristWearCo, which was founded in 2010, had a team of 60 people when it was acquired by MicroProcessorCo in March 2014. EyeWearCo was a Canada based wearable technology company, which specialized in smart eyewear technology for sports and high-intensity environments. EyeWearCo, which was founded in 2008, had a team of 75 people when it was acquired by MicroProcessorCo in June 2015.

2.3 The Unique Nature of Acqui-hires

To understand the key characteristics of acqui-hires and the differences between acqui-hires and other technology acquisitions, I examined two cases (MovieReview.Com, VisualSearch.Com), which were pure talent acquisitions and two cases (WristWearCo, EyeWearCo), which involved the acquisition of both talent and technology. In line with prior research (Chatterji and Patro, 2014), the case study revealed that the acquirer's disinterest in the acquired start-up's existing product/service is a key characteristic of an acqui-hire. This is evident from the immediate shutdown of the acquired firm's product following the acquisition in most cases. In the acquisitions of MovieReview.Com and

VisualSearch.Com by SearchCo, the products of the target firms were shut down immediately after the acquisition. The managers of SearchCo indicated that in both cases the intention was not to use the target firms' products but rather to hire a talented team who were working on an area that SearchCo was interested in. They emphasized that the primary motivation driving the deals was to have access to the talented employees of the acquired start-ups.

“We were not going to use the product as is, we thought that hiring talented engineers who had been working together on an area which was close to what SearchCo was doing would be good.” [Product Management Director, SearchCo]

“It is more like this is a team of good engineers who has worked on a certain area that we are interested in and they can help us do something in that area.” [Product Management Director, SearchCo]

“There would be a team that is already working on something very close to what SearchCo wants to build and then we get them, and we just embed them into our existing teams.” [Principal, Mergers and Acquisitions, SearchCo]

Although both MovieReview.Com and VisualSearch.Com's products were shut down swiftly after their acquisition, the case research revealed that some acqui-hires may not involve the immediate shut down of the acquired start-up's product. In the rare case that the product of the acquired start-up is not shut down immediately after the acquisition, the acquirer lets the product live on for a while for existing users without accepting new customers or making additional investment. Alternatively, the product of the acquired start-up may be offered free or open-source by the acquirer, again showing that the acquirer has no interest in the product itself.

The case study also revealed the following characteristics of acqui-hire deals. First, the small team size of acquired start-ups is an indicator of an acqui-hire. The case research revealed that the team size of an acqui-hired start-up ranged between 1-10 and 11-50 in general. Second, acqui-hired start-ups are most often early stage start-ups that does not have a mature product but rather an idea or a product that is at the stage of development. Accordingly, acqui-hired start-ups are early stage in terms of financing too. The case research revealed that acqui-hires are most commonly seen after the first few rounds of financing. Finally, deal size is also another indicator of an acqui-hire. There

was consensus across informants that the size of an acqui-hire deal does not exceed \$100M in general.

“An acqui-hire is when the team does not have a product yet, but they are working on something good and the acquirer is buying the company just for the engineers.” [Angel Investor, VisualSearch.Com]

2.4 The Underlying Motivations of Acqui-hires

The case study revealed that the main motivation underlying acqui-hire deals is to have access to a proven team with a coherent way of thinking. The acquired start-up's team was cited as the most valuable asset of an acqui-hire. The reason why acquirers prefer acqui-hires over individual hiring is that it gives them access to a team that is accustomed to working together and experienced in a certain domain. Moreover, through acqui-hires acquirers have access to talented employees who they would not be able to hire through regular hiring processes. The acqui-hired start-up founders and employees confirm that they wouldn't have joined a corporate giant like SearchCo, had it not been for the acqui-hire. Because established firms have long and cumbersome interview processes and the payoff is considerably higher when they join an established firm through an acqui-hire.

“The reason why established firms like SearchCo acqui-hire rather than simply hiring is that the acqui-hired team has been working together already, there is a good working relationship that those people presumably have.” [Principal, Mergers and Acquisitions, SearchCo]

“None of us would have gone and applied to SearchCo because we liked working in start-ups and we weren't attracted to big companies. The thing that got us all join SearchCo was the fact that they acqui-hired us.” [Founder, MovieReview.Com]

“SearchCo acqui-hires small groups of talented engineers working on a certain area that they are interested in and looks at how they can implement their ideas at SearchCo's scale. They acquire talent, let them work with other people within SearchCo and use SearchCo's infrastructure and try to obtain 10X, 100X of their investment. Plus, the acquired team has a coherent way of thinking which is not possible to obtain through individual hiring.” [Engineering Manager, VisualSearch.Com]

Catching-up with or preempting competitors was also stated as other motivations of acqui-hires. When an established firm is behind its competitors in a certain area then

they acqui-hire a start-up working on that area to catch-up with their competitors utilizing the skills and know-how of the acqui-hired employees. An established firm may also conduct an acqui-hire to preempt its competitors by hindering their access to the talented employees of the start-up and utilizing the acqui-hired start-up's know-how to enter or create a new market and gain early mover advantages.

“There are several reasons why SearchCo conducts acqui-hires. First one is to quickly enter into a new market. We can enter a new market not through hiring but through acqui-hiring because hiring process takes a really long time in SearchCo. But instead we can go and buy teams who are already working in that area.” [Product Management Director, SearchCo]

“The reason why big firms acqui-hire rather than hiring the individuals they target has to do with financial aspects. It may be really important for instance for SearchCo to hire a certain very talented engineer before its competitors, but it would not be able to give that engineer the salary he wants if it hires him through regular HR processes. Acquiring his company instead enables SearchCo to offer him a better deal.” [Angle Investor, VisualSearch.Com]

2.5 The Differences between Acqui-hires and Other Technology Acquisitions

While in the acquisitions of MovieReview.Com and VisualSearch.Com, SearchCo targeted the talented employees of the acquired start-ups, in the acquisitions of WristWearCo and EyeWearCo, MicroProcessorCo targeted both the product/technology and the talent of the acquired firms. At the time of the acquisitions MicroProcessorCo was focusing on the wearables market. WristWearCo was a wearable technology company that produced wrist-based health trackers. They had a product in the market and unique technology that nobody else had. EyeWearCo was also a wearable technology company that produced smart eyewear products for sports and high intensity environments. They were the market leader in the heads-up displays. Both target firms had a wide user base in a market that MicroProcessorCo wanted to enter. Thus, the products of both target firms were kept alive and MicroProcessorCo continued to invest in developing the technologies further following the acquisitions. While accessing the technology and the user base was the main motive driving the acquisitions, MicroProcessorCo also wanted to utilize the talent of the acquired start-ups in developing new solutions to strengthen its

position in the wearables market. Thus, the teams of WristWearCo and EyeWearCo were both fully acquired too.

“They had the best wrist-based heart rate detecting technology in the market. Plus, they had entered the market earlier than many of their competitors and they had a relatively wider user base. Their product was ready, and they had a product roadmap.” [Senior Business Development Director, New Devices Group, MicroProcessorCo]

“It was because there was good IP, stuff that MicroProcessorCo wanted to get access to, but it was also because there were good people.” [Vice President, New Devices Group, MicroProcessorCo]

Different from the acquisitions of MovieReview.Com and VisualSearch.Com, the underlying motivations for the acquisitions of WristWearCo and EyeWearCo were cited as time-to-market pressure and the need to enrich product portfolio. MicroProcessorCo managers viewed relying on external talent and technology as the most appropriate way to enter a new market as in the cases of WristWearCo and EyeWearCo acquisitions. Through these acquisitions, MicroProcessorCo was able to quickly enter a new market, i.e. wearables market, that would otherwise have taken them too long to enter.

“When you are a big company, you tend to focus on delivering short-term businesses. A small company will go and drive something that is 3-5 years ahead. So, you can have an innovation group inside your company or you can rely on external innovation. The advantage of the second is that you can serve an ecosystem and decide to buy the things that are mature enough and relevant enough for your business.” [Vice President, New Devices Group, MicroProcessorCo]

“The reason why we are buying companies as opposed to hiring is simply time. If you hire people and develop the technology internally, it takes some time, maybe 2-3 years and you have to spend a lot of money to do it. And eventually by the time you get the technology developed, that technology may not be relevant anymore.” [Vice President, New Devices Group, MicroProcessorCo]

“Had it not been for the acquisition of EyeWearCo, MicroProcessorCo would have still been stuck with solutions they would not have been able to implement at the time frame they wanted because we spent 7-8 years and MicroProcessorCo was 3-4 years behind and the CEO wanted this like now.” [Founder, EyeWearCo]

Building on extant research (Chatterji and Patro, 2014; Coyle and Polsky, 2013), the findings of the case study and the examination of publicly available data on over 250 acqui-hire transactions, I establish a clear and consistent definition of acqui-hiring. Acqui-hiring refers to the *acquisition of a technology start-up* by an established technology firm *primarily to utilize the talented human capital of the start-up* for the development of new solutions *without any interest in its products and services*. Acquirer's primary motivation being gaining access to talent is a necessary but not a sufficient condition for an acquisition to be classified as an acqui-hire. There are two other key elements of an acqui-hire. First, the target firm is a technology start-up in acqui-hires (Chatterji and Patro, 2014). While in most cases the acquired start-up is at its pre-commercial stages (Chatterji and Patro, 2014), it can also be a pre-profit start-up who have just commercialized or a more mature start-up whose product is not promising anymore (Coyle and Polsky, 2013). Thus, the acquisitions of established technology-based companies which have a proven product cannot be considered acqui-hires even when one of the main motivations driving the deal may be gaining access to talent.

Second, the acquirer has no interest in the existing product/service of the acquired start-up in acqui-hires. Thus, the existing product/service of the acquired start-up is immediately shut down following the acquisition in most cases (Chatterji and Patro, 2014). Alternatively, the product may be offered either free or open source by the acquirer showing that it has no interest in generating revenues from the existing product of the acquired start-up. Or else, the acquirer may let the product/service of the acquired start-up live on for a while for existing users without accepting new customers or making further developments again showing that it has no interest in the product itself.

Moreover, the case study and the examination of publicly available data on over 1500 technology acquisitions revealed that there is a gray area between a traditional technology acquisition and an acqui-hire. Traditional technology acquisitions involve the acquisition of established technology-based companies or technology start-ups with a proven product/technology and primarily target the product or the patented technologies of the acquired firm. On the other hand, acqui-hires involve the acquisition of technology start-ups that do not have a proven product yet and primarily target the talented human capital of the acquired start-up. Yet, some acquisitions involving the acquisition of

established technology-based companies or technology start-ups with a proven product primarily target both the technology/product and the talent of the acquired firm. For lack of a better naming, I classify those acquisitions in which the acquirer has an equal interest in both the talent and the product/technology of the acquired firm as hybrid acquisitions. In hybrid acquisitions, although the acquirers mainly target the acquired firm’s product/technology and customer base, they are also equally interested in the acquired firm’s talented employees, as in the cases of Whatsapp’s acquisition by Facebook as well as WristWearCo’s and EyeWearCo’s acquisitions by MicroProcessorCo. Thus, hybrid acquisitions are also uniquely different from acqui-hires. Figure 2.1 presents the different types of technology acquisitions and their primary targets.

Acquisition Type	Primary Acquisition Target		
	Product / Technology	Human Capital	Customer Base
Traditional Technology Acquisition	✓	✗	✓
Hybrid Acquisition	✓	✓	✓
Acqui-hire	✗	✓	✗

Figure 2.1: Types of technology acquisitions and their primary targets.

2.6 The Integration and Value Creation Challenges of Acqui-hires

Once an acqui-hire deal is complete, the biggest challenge is carrying out an effective integration process (Chatterji and Patro, 2014). While this is a challenge in any acquisition (Haspeslagh and Jemison, 1991; Pablo, 1994; Puranam, Singh, and Zollo, 2006; Ranft and Lord, 2002), it is especially the case in an acqui-hire, as the main aim of the acquirer is to develop new solutions utilizing the talented employees of the acquired start-up rather than simply incorporating the product or technology they have developed.

There was consensus across interviewees that in acqui-hires, the acquired start-up is almost always integrated into the acquirer’s organization. While in technology or product-oriented acquisitions the acquired firms may be left independent, in acqui-hires leaving the acquired start-up autonomous is not an alternative. Because in acqui-hires the aim of the acquirers is to develop new solutions by combining the skills and know-how

of the acqui-hired employees with their existing resources, they integrate the acquired employees into their existing teams.

“Acquisitions of bigger deal sizes involving the acquisition of target firm’s product are generally left to operate independently. It is like SearchCo bets on that area and leaves the team independent to show confidence in them. They have access to SearchCo assets such as the infrastructure, data, brand but they decide which direction they will go. But that’s not the case in acqui-hires. It is more like this is a team of good engineers who has worked on a certain area that we are interested in and they can help us do something in that area. So, we integrate the team. SearchCo usually has a clear plan of what they will do with the acqui-hired team and the team is plugged in to the group they will work with.” [Product Management Director, SearchCo]

“Acqui-hires are typically integrated into the acquirers. You will almost never find them operating autonomously.” [Principal, Mergers and Acquisitions, SearchCo]

The case study revealed that finding the best organizational fit for the acqui-hired team and the right role for the acqui-hired founder are the key challenges in post acqui-hire integration. Two different integration modes emerge regarding the integration of the acquired start-up’s team. First, the acqui-hired team may be directly integrated into a specific business unit of the acquirer following the acquisition. Alternatively, the acquirer may leave the acqui-hired team independent for a while to decide where it can best utilize the team. During this initial period of independency, the acquirer lets the acqui-hired team to familiarize with the existing teams, learn about their projects and products, and figure out how they can implement their ideas at the acquiring company. The acquirer also observes the acqui-hired team’s performance during this period and integrates them to the business unit where they best fit.

Both MovieReview.Com and VisualSearch.Com were integrated into SearchCo following the acquisitions. However, the pace of the integration processes differed. MovieReview.Com was directly integrated into one of SearchCo’s main business units and started working on one of their existing projects. On the other hand, VisualSearch.Com was left independent for a few months after the acquisition and they continued to work on a project that they had been working on at the time of the acquisition. They tried to develop their idea using SearchCo’s infrastructure and figure out where it can be best implemented. After this transition period, SearchCo decided that

VisualSearch.Com's know-how can be best utilized in shopping and they integrated VisualSearch.Com's team into SearchCo Shopping.

“Basically, SearchCo had an area of the product that they did not have a team for. So, we instantly joined and owned that part. Since we were a small team, the integration process was smooth and easy. We started working on an existing project in the Video-sharing Platform Division. SearchCo wanted us to add functionality to an existing product.” [Founder, MovieReview.Com]

“When we first joined SearchCo, SearchCo did not tell us to do a certain thing. They let us brainstorm, invested in what we were doing and looked at how we can implement our ideas at SearchCo's scale. We were working on a project when we were acquired and we continued to work on that project initially after the acquisition. To be able to work on that project, we stayed autonomous for like 3 months. We tried to do one of those 10X things but it did not hit. Then we were integrated into SearchCo Shopping and implemented our solutions to SearchCo Shopping.” [Engineering Manager, VisualSearch.Com]

Although both MovieReview.Com and VisualSearch.Com's teams were kept together during the integration processes, the interviewees indicated that in some acqui-hires, the acquired team may be dismantled following the acquisition. Thus, dismantling the team and integrating the team members into different business units of the acquirer may be yet another acqui-hire integration mode. Factors affecting the decision of whether to keep the acquired team intact were stated as whether or not the acquirer has a clear plan about the acquired team and the acquired team size.

“When a large team is acqui-hired, SearchCo generally sprinkles them into different teams.” [Engineering Manager, VisualSearch.Com]

“If the acquired team is working on a specific project, generally the acquired employees are kept together but if they do not have a certain direction, they are dismantled into other groups.” [Product Management Director, SearchCo]

The case study also revealed that acqui-hired founders are most of the time key drivers of acqui-hire deals and they play an important role in the post-acquisition integration process. Thus, the position the acqui-hired founder is assigned to following the acquisition is critical for the success of the acqui-hire. The case research offers clear

indications that although acquirers tend to assign acqui-hired founders to high status positions following the acquisition, several founder related factors affect this decision. The acquirers tend to assign acqui-hired founders to high status positions because of two main reasons. First, the acqui-hired founders have established relationships with their own employees that enable them to mitigate the acquired employees' concerns following the acquisition. Moreover, the appointment of the acqui-hired founder to a high status position creates a positive sense of their worth in the new organization among the acquired employees, thus leading to a smooth integration process. Second, the acqui-hired founders generally have an entrepreneurial spirit that lead to a tendency to leave the acquirer unless they are given high status positions that enable them to pursue entrepreneurial activities within the acquiring firm. Still, there are several factors that affect the decision regarding the position of the acqui-hired founder following the acquisition. Seniority and experience of the acqui-hired founder, size of the acquired start-up and the importance of the project that the acquired start-up will work on to the acquirer are among the most cited factors.

“Most of the time the company being acquired do not want to think of it as an acqui-hire. They want to think of it as they are being bought for the product they developed. Founders are generally more realistic, they know that the acquirer is buying them for the team they have assembled, they may or may not use the product they have developed. But the top employees generally fall in love with the product and it takes some time to win them from it. Founders know their employees better so we generally assign them to an influential position and make them a part of the integration process. Still, the role offered to the founder of the start-up depends on the individual himself, his seniority level and the importance of the project that we plan to utilize the acqui-hired start-up in.”
[Principal, Mergers and Acquisitions, SearchCo]

“SearchCo expects an acqui-hired founder to come in, influence other people around him and turn the investment into 10X, 100X. However, founders of the acqui-hired start-ups generally do not stay in the acquiring firm. Those creative minds get bored of the bureaucracy at the big firm and they leave. One of the co-founders of VisualSearch.Com stayed at SearchCo and the other left within a year. Co-founder CTO of VisualSearch.Com, joined SearchCo as senior staff, which includes the top 1%, he stayed and he is now a director approaching a senior director level. Besides him, most of

the mid-level and below employees of VisualSearch.Com are still at SearchCo.”
[Engineering Manager, VisualSearch.Com]

MovieReview.Com had 4 co-founders who were all young entrepreneurs. Although they had worked in other start-ups previously, MovieReview.Com was their first experience as founders. MovieReview.Com was also quite an early stage start-up that was founded 6 months prior to the acquisition. Moreover, SearchCo had a clear plan about what they wanted MovieReview.Com's team to work on. Thus, two of MovieReview.Com's co-founders were assigned as software engineers, one as a product manager and the other as a designer, which can all be classified as low status positions within SearchCo. On the other hand, both co-founders of VisualSearch.Com were experienced entrepreneurs and they were leading a relatively larger team. VisualSearch.Com was a 5-year-old start-up which had raised three rounds of financing prior to the acquisition. Moreover, SearchCo did not have a plan about what exactly VisualSearch.Com would be working on at SearchCo indicating a more complex integration process. Thus, one of the co-founders was assigned as an engineering director and the other as a director of product management, which can both be considered high status positions within SearchCo.

One of the main factors that affect the value created via acqui-hires was cited as whether or not the acquirer has a clear plan of what to do with the acquired start-up. The interviewees stated that when the acquirer has a certain project in which they plan to utilize the acqui-hired talent, then it is more likely that the acqui-hire creates value. In the case of MovieReview.Com, SearchCo had a project in one of its main business units that it wanted MovieReview's team to work on, so they integrated the team into that division and assigned them to the project. The project turned out to be successful and then SearchCo utilized their talent in other projects of the same division. On the other hand, in the case of VisualSearch.Com, SearchCo did not have a certain project that it wanted VisualSearch.Com's team to work on. Rather, SearchCo invested in what VisualSearch.Com was doing and wanted to see if it would turn into something that will let them obtain 10X, 100X of their investment. What VisualSearch.Com was working on did not bring the expected return on investment. However, SearchCo utilized their talent to boost its Shopping division. They integrated VisualSearch.Com's team into SearchCo Shopping and assigned the founder of VisualSearch.Com to a high status position within the division. The founder of VisualSearch.Com was highly successful; he grew a 60

people team into a 300 people team and became the leader of the Shopping division. Thus, the latter case, where a more experimental approach was followed also led to value creation.

“When both the acquirer and the acqui-hired firm know what the acquisition is done for, then that acqui-hire becomes successful.” [Principal, Mergers and Acquisitions, SearchCo]

“At first SearchCo had a project that they wanted MovieReview.Com’s team to work on, so we started to work on that project as a team. We shut down what we built at MovieReview.Com and we tried to take some of the concepts and build it inside SearchCo. SearchCo wanted us to add functionality to an existing product of the Video-sharing Platform Division. After the successful completion of the initial project, we contributed to a lot of things that the Video-sharing Platform Division has launched over the years.” [Founder, MovieReview.Com]

“VisualSearch.Com acquisition is viewed as a successful acquisition within SearchCo because our solutions are now a big part of SearchCo Shopping and our leaders are now leaders of SearchCo Shopping. I believe that the value VisualSearch.Com added to SearchCo has far exceeded what SearchCo paid for us. We may not have become a moonshot but we provided a return far above the amount invested in us.” [Engineering Manager, VisualSearch.Com]

Executive support is also cited as critical in creating value from acqui-hires. When the leaders of the business unit that the acqui-hired team is integrated into are supportive of them, then it is more likely that the acqui-hired team creates value for the acquirer. Both MovieReview.Com and VisualSearch.Com were integrated into business units, the leaders and the existing teams of which supported them, leading to positive outcomes in both cases.

“When what the acqui-hired team will do after the acquisition is not clear enough or there are no concrete deliverables, then that team most of the time fails. Also, the leader of the organization that the acqui-hired team comes into has to be supporting their idea.” [Product Management Director, SearchCo]

“For the acqui-hired founders to turn the investment made in them to 10X, 100X, there needs to be a good support system around them. If his managers are supportive of

his ideas, then the acqui-hired founder can turn those ideas into reality. These visionary people need to be nourished. So even if the acqui-hired founder is given a high status role after the acquisition, he still needs executive support. The business unit that the acquired start-up is integrated into, whether it is a nimble unit, their vision and mentality and the head of that business unit, how connected he is, how much he supports the acquired team affect the value created by that acqui-hire. We entered into a nourishing environment. That's why we were able to create value." [Engineering Manager, VisualSearch.Com]

2.7 Conclusion

The case study research served to build a clearer understanding of the emerging phenomenon of acqui-hiring. Three main findings emerge from the case study research. First, acqui-hires are different from traditional technology acquisitions in that they only involve the acquisition of technology start-ups and mainly target the talented human capital of the acquired start-up rather than the technology/product developed by the acquired start-up. This is evident from the fact that the existing product/service of the acquired start-up is most often shut down immediately after the acquisition in acqui-hires. The case research also revealed that there is another type of technology acquisition that can be called a hybrid acquisition in which the acquirer targets both the talented human capital and the technology/product of the acquired firm, which may either be a technology start-up (or an established private technology-based company). Acqui-hires are also uniquely different from hybrid acquisitions since the latter involves an interest in the target firm's product and the customer base.

Second, in acqui-hires, the acquired start-up is almost always integrated into the acquirer's organization. Because the aim of the acquirer is to develop new solutions by synthesizing the skills and know-how of the acquired talent with its existing knowledge base and infrastructure, leaving the acquired start-up autonomous is not an alternative in acqui-hires. Third, integration of the acquired start-up's team and the position of the acquired start-up's founder following the acquisition emerge as the two critical dimensions in post acqui-hire integration. The case research offers clear indications that effective integration along these dimensions may have an influence on the value acqui-hires create for their acquirers.

Chapter 3

**HOW AND WHEN DO DIFFERENT TYPES OF ACQUI-HIRES
CREATE VALUE FOR ACQUIRERS? A REAL OPTIONS
ANALYSIS**

ABSTRACT

Acqui-hiring is a novel acquisition type that involves not only the transfer of ownership of the assets of a start-up to the acquirer but also the hiring of its founder and team by the acquirer. Unlike traditional technology acquisitions motivated by obtaining the product/technology of the acquired firm, acqui-hires are primarily motivated by gaining access to the talented human capital of start-ups. While there is growing research on acqui-hires, extant work explains little the different types of acqui-hires and how they can create value for acquirers. In this paper, I draw on real options theory to explicate two different types of acqui-hires, to identify the different sources of value they generate and to establish the conditions under which the value generated by one type of acqui-hire dominates the other. I argue that acqui-hires are real options whose underlying asset is the acquired talent. Unlike other start-up investment modes or collaboration agreements, acqui-hires enable the acquirer to utilize the acquired talent's skills and know-how in developing new solutions by integrating a cohesive team into its organization. Yet, an acquirer may either commit to its acqui-hire early on or it may choose to wait for uncertainties to resolve before making a commitment. I posit that depending on the pace of the commitment of the acquirer to the acquired talent, acqui-hires can offer different sources of option value for acquirers. Specifically, I argue that while *growth acqui-hires* generate value from early commitments characterized by high-status hiring and an immediate structural integration of the acquired team, *deferral acqui-hires* generate value from deferred commitments characterized by low-status hiring and staged integration. I propose that the relative values generated by growth and deferral acqui-hires depend on the value of talent, market uncertainty, and the costs of realizing revenue streams from the know-how of the acquired talent.

3.1 Introduction

Acqui-hiring is a relatively novel acquisition practice of established technology firms. Unlike traditional technology acquisitions that target the tangible and intangible assets of the acquired firm, acqui-hires target the talented human capital of the acquired start-up. An acqui-hire deal involves both transferring the ownership of the assets of a start-up and hiring its founders and key employees. However, the existing solutions of the acquired start-up are generally discontinued after the acquisition. Thus, human resource acquisition is the key strategic driver of acqui-hires. The biggest technology companies such as Google, Apple and Facebook have been steadily investing in acqui-hiring in recent years. In line with this trend, scholars have also begun to pay special attention to this emerging phenomenon. However, there is disagreement about whether it is a strategic move that creates value for the acquirer or a cultural idiosyncrasy of Silicon Valley (Chatterji and Patro, 2014; Coyle and Polsky, 2013). On the one hand, Coyle and Polsky (2013) propose that an acqui-hire can hardly create value for the acquirer because it is usually a way of exiting a low-potential start-up for its investors and founders. They explain the practice of acqui-hiring as an emerging solution in a culture (Silicon Valley) where established technology firms cannot easily hire a talented start-up team because of the unique social structure and community norms that make the bypassing of venture capitalists costly in the long-term. Focusing on the underlying motivations of acqui-hire deals, they overlook the value that can be derived from future growth opportunities acqui-hires may generate. On the other hand, Chatterji and Patro (2014) argue that acqui-hiring has the potential to create value for the acquirer because it allows for asset orchestration, the act of continuously identifying and obtaining missing resources and aligning them with the existing resources to respond to opportunities in a firm's environment (Teece, 2012). However, they do not elaborate on the value creation mechanisms of acqui-hires.

In this paper, I contribute to this debate by introducing a real options-based model that suggests acqui-hiring can in fact be a strategic move that creates value for the acquirer depending on how the acqui-hire is structurally designed. Real options theory provides a framework for analyzing investment decisions under uncertainty (Amram and Kulatilaka, 1999; Dixit and Pindyck, 1994) and explains how future growth opportunities enhance the market value of firms (Kester, 1984; Myers, 1977). Because acqui-hires are investments made by established firms under considerable uncertainty, real options theory has the potential to offer key insights into value creation from acqui-hires. I

consider acqui-hires real options of acquirers whose underlying asset is the acquired talent. I argue that acqui-hires offer different sources of option value for acquirers depending on the pace of the commitment of the acquirer into the acquired talent. An acquirer may either commit to its acqui-hire early on or it may choose to wait for uncertainties to resolve before making a commitment. To capture this decision regarding the acquirers' pacing of their investments in the acquired start-up, I distinguish between two types of acqui-hires, *growth acqui-hires* and *deferral acqui-hires*. While a growth acqui-hire is characterized by high-status hiring and an immediate structural integration of the acquired team, a deferral acqui-hire is characterized by low-status hiring and an initial autonomy for the acquired team within the acquirer's organization. I posit that growth acqui-hires generate value by providing privileged accesses to growth opportunities, while deferral acqui-hires generate value by minimizing the opportunity costs of early commitments. I propose that the value of talent, the level of market uncertainty, and the costs of generating revenue streams from the know-how of the acquired talent affect the relative values generated by growth and deferral acqui-hires.

I seek to contribute to the literature on acqui-hiring in several ways. First, I extend the work of Chatterji and Patro (2014) by identifying two different types of acqui-hires and providing insights into the mechanisms through which these acqui-hire types create value for the acquirer. Specifically, I argue that depending on how the acqui-hire is structurally designed, the value generated via the acqui-hire can either be growth or deferral based. Moreover, I identify the conditions under which the value generated by one type of acqui-hire dominates the value generated via the other. I also extend some pioneering research that focused on acquisitions involving technology and talent transfer (Graebner, 2004; Ranft and Lord, 2000). This stream has argued that hiring the executives of acquired firms for senior-level positions is crucial for creating value from technology acquisitions. On the contrary, I argue that depending on the value of talent, market uncertainty and exercise price, low status appointments can be preferred over high status appointments. Finally, this study also contributes to real options theory. Real options theory has been used to analyze human capital related issues such as workforce investment decisions (Foote and Folta, 2002), how firms manage the uncertainties associated with human assets (Bhattacharya and Wright, 2005) and the role of employee incentives in strategic investments (Wang and Lim, 2008). By viewing acqui-hires as a

form of human capital investment, I extend the application domain of real options theory to the context of acqui-hires.

3.2 Acqui-hiring in the Extant Literature

Acqui-hiring has not received much attention in the literature so far. Only recently, a law paper (Coyle and Polsky, 2013) and an exploratory paper in a symposium on dynamic capabilities (Chatterji and Patro, 2014) have tried to explain this emerging phenomenon. In order to better understand acqui-hiring within the acquisitions literature and to clarify the difference between acqui-hires and traditional acquisition practices, I reviewed the acquisitions literature and classified prior research on acquisitions into four different categories depending on the setting and whether the analysis involves human capital or non-human capital related aspects of the acquisition. Figure 3.1 shows the key studies in each category.

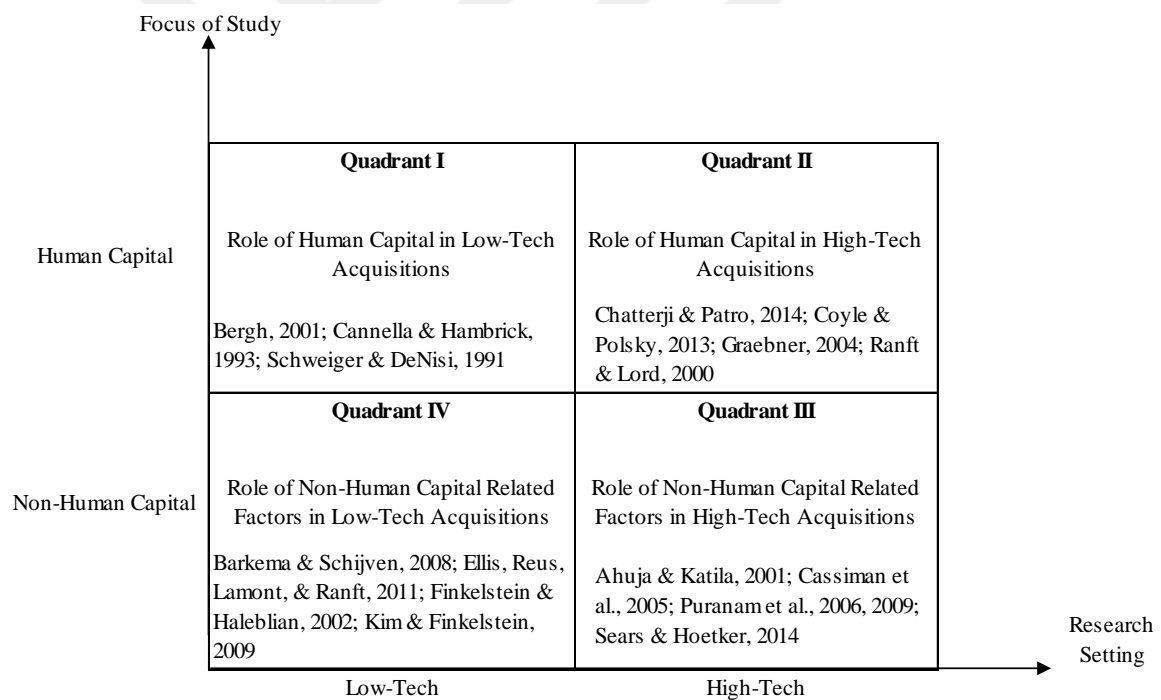


Figure 3.1: Classification of studies on technology acquisitions.

While studies in Quadrants I and II focus on the role of human capital in technology acquisitions, studies in Quadrants III and IV examine the role of factors other than human capital in technology acquisitions. Technology acquisitions are also divided into two groups: those taking place in low-tech industries, and those being executed in

high-tech industries. In this classification, acqui-hiring, which is a practice unique to high technology firms (Chatterji and Patro, 2014; Coyle and Polsky, 2013), falls into Quadrant II that consists of studies pertaining to the role of human capital in high technology acquisitions. Studies in this quadrant mainly examine how the acquired human capital influence the value created via high technology acquisitions. As discussed before, studies on acqui-hiring present opposing views regarding whether the acquired human capital contributes to the value of the acquirer. While Coyle and Polsky (2013) argue that acqui-hires are mostly conducted to preserve the existing investment structure of Silicon Valley and are not necessarily value creating mechanisms, Chatterji and Patro (2014) view acqui-hiring as a tool for asset orchestration, which is an important dynamic capability implemented in the management of human capital, that provides key resources facilitating acquirers' growth.

Some of the earlier studies in Quadrant II examine acquisitions involving both talent and technology transfer and highlight the role of key employees and acquired leaders in creating value from those acquisitions (Graebner, 2004; Ranft and Lord, 2000, 2002). They reveal that retention of valuable human assets after the acquisition is of central importance in high technology acquisitions and autonomy, status and commitment are the most important determinants of retention of key employees (Ranft and Lord, 2000, 2002). Moreover, the roles given to the acquired leaders after the acquisition also have a substantial effect in creating value from technology acquisitions. This is because if they are given cross-organizational responsibilities following the acquisition, acquired leaders are able to perform certain mobilizing and mitigating actions such as accelerating coordination across the two companies, managing internal pacing and addressing employee concerns (Graebner, 2004).

The vast majority of studies on high technology acquisitions fall into Quadrant III, which focuses on the impact of acquisitions on innovation performance of acquirers (Ahuja and Katila, 2001; Cassiman, Colombo, Garrone, and Veugelers, 2005; Cloudt, Hagedoorn, and Van Kranenburg, 2006; Makri, Hitt, and Lane, 2010). Measuring the effect of acquisitions on innovation performance through patents (Ahuja and Katila, 2001; Cloudt et al., 2006), some of these studies report a direct negative impact of acquisitions on the acquiring firm's innovation performance (Hitt, Hoskisson, Ireland, and Harrison, 1991), while others argue that acquisitions' impact on innovation performance depends on technological relatedness and size of the acquired knowledge base (Ahuja and Katila,

2001; Colombo and Rabbiosi, 2014; Desyllas and Hughes, 2010; Makri et al., 2010). Another stream of research in Quadrant III focuses on post-acquisition integration processes and examines the link between structural integration of acquired firms and post-acquisition innovation outcomes (Paruchuri, Nerkar, and Hambrick, 2006; Puranam, Singh, and Chaudhuri, 2009; Puranam, Singh, and Zollo, 2006; Puranam and Srikanth, 2007). Defining structural integration as the complete absorption of the operations and personnel of the acquired firm, these studies highlight that structural integration is preferred over autonomy when the objective of the acquiring firm is to obtain the know-how possessed by the acquired firm rather than a standalone product (Puranam et al., 2009; Puranam and Srikanth, 2007).

In contrast to these studies, studies in Quadrants I and IV look at acquisitions in low-tech industries such as manufacturing or banking. Studies focused on human capital issues in low-tech acquisitions in Quadrant I highlight executive continuity as a key determinant of post-acquisition performance (Bergh, 2001; Cannella and Hambrick, 1993). Similar to the studies in Quadrant II, they view acquired executives as a critical resource and propose that they should be given high status roles following the acquisition, but mainly to facilitate effective implementation of the acquisition and to exploit existing solutions of the acquired firm rather than to create new solutions. Finally, studies in Quadrant IV investigate non-human capital aspects of low-tech acquisitions such as the effect of prior acquisition experience or relatedness on post-acquisition performance (Barkema and Schijven, 2008; Finkelstein and Halebian, 2002). These studies are not highly relevant for the topic of acqui-hires.

Overall, extant research on acquisitions reveals the factors affecting value creation in technology acquisitions. However, they identify different sources of value. While some studies view technology related intangible assets of the acquired firm as the primary source of value created via technology acquisitions, others focus on the acquired human capital as the key resource in creating value from technology acquisitions. Research on acqui-hiring is featured in this second stream. Recently several studies have defined what acqui-hiring is and discussed the underlying reasons of acqui-hires (Chatterji and Patro, 2014; Coyle and Polsky, 2013). However, more research is needed to understand the different types of acqui-hires and explain how and when they can contribute to the value of acquirers.

3.3 Acqui-hiring as a Real Option

Real options are investments in real assets made not primarily for immediate cash flows but for the economic value that will be generated via future growth opportunities (Kester, 1984). Real investments can create value by conferring two different types of options which are mutually exclusive: strategic growth options and options to wait-to-invest, i.e. deferral options. These two types of real options, however, have different sources of value. While strategic growth options create value through the strategic advantages arising from early investment (Kulatilaka and Perotti, 1998), deferral options generate value through the managerial flexibility resulting from delaying the investment (McDonald and Siegel, 1986).

Acqui-hiring can be thought of as a real option because it involves investing in talent without any expectation of immediate cash flow as made evident by the shutdown of the start-up's product. The aim of the acquirer is to develop new solutions and take advantage of future growth opportunities utilizing the acquired talent's skills and know-how. Moreover, different from other start-up investment modes (e.g., Corporate Venture Capital investment, minority equity investment) or collaboration agreements, acqui-hires involve keeping the acquired team intact and generating value through their collective know-how. I argue that while acqui-hiring a start-up presents the acquirer with a real option, whether the option value generated by the acqui-hire is growth or deferral based depends on the pace of the commitment of the acquirer into the acquired start-up. The acquirer may either invest immediately by assigning the acquired start-up's founder to a high status position and structurally integrating the team of the start-up or it may wait for uncertainties to resolve before making such a commitment. On the one hand, making an early commitment in the presence of uncertainty leads to an opportunity cost causing the acquirer to lose the potential to make a different decision once the uncertainties are resolved (Dixit and Pindyck, 1994; Folta, 1998). On the other hand, deferring the commitment in the presence of growth opportunities may lead to preemption by competitors thus eroding the worth of future growth options (Folta and O'Brien, 2004; Kulatilaka and Perotti, 1998). These different investment decisions of the acquirers correspond to two distinct types of acqui-hires both of which are frequently observed: growth acqui-hires and deferral acqui-hires. Below I describe the characteristics of growth and deferral acqui-hires and explain how these two acqui-hire types can create value through different means.

3.3.1 Growth Acqui-hires

I define acqui-hires that involve the appointment of the acquired start-up's founder to a high status position (e.g., senior director or vice president) and the immediate structural integration of the start-up's team as *growth acqui-hires*. Prior literature defines structural integration as the complete integration of the acquired firm into the acquirer as opposed to structural separation, which refers to preserving the acquired firm as a distinct organizational entity (Puranam et al., 2009; Puranam and Srikanth, 2007). In the case of acqui-hiring, the acquired team is almost always integrated into the acquirer. However, the pacing of the integration process differs. I refer to the case in which the acquirer directly integrates the acquired team into a specific business unit after the acquisition as immediate structural integration and the case in which the integration is carried out incrementally as staged integration.

Following Graebner (2004), I argue that assigning the acquired start-up's founder to a high status position after the acquisition enables the acquirer to take better advantage of future growth opportunities. Prior literature highlights that the knowledge and skills of founders are key factors that lead to differentiation and growth for technology firms (Colombo and Grilli, 2005; Feeser and Willard, 1990). However, the ability of acquired founders to generate future growth opportunities for the acquirer depends to a large extent on whether they have the necessary power to be influential in decision-making. Finkelstein argues that "top managers' power plays a key role in strategic decision making" (1992: 505) and prior literature suggests that a higher-ranking managerial position is an indication of authority and power (Boeker and Karichalil, 2002). When assigned to a high status position that grants them the necessary authority and power, the acquired entrepreneurs can champion new ideas from development to reality, thereby developing new businesses within the acquiring firm.

Moreover, I argue that immediate structural integration of the acquired start-up also enables the acquirer to promptly seize future growth opportunities. Grant argues that in technology-intensive industries, "the critical source of competitive advantage is knowledge integration rather than knowledge itself" (1996a: 380). Prior literature also suggests that structural integration enhances knowledge transfer and coordination between the acquirer and the acquired firm (Haspeslagh and Jemison, 1991; Puranam and Srikanth, 2007). By immediately integrating the acquired start-up's team, the acquirer

gains an opportunity to quickly enter into a new market in which the acquired start-up has experience or to improve its existing products and offer new generations of those products via the complementary knowledge of the start-up.

Real options theory suggests that early investment results in the acquisition of growth opportunities relative to competitors and a greater ability to expand in the future (Kulatilaka and Perotti, 1998). Such growth opportunities offering future comparative advantages are called strategic growth options. Growth acqui-hires provide the acquirers with strategic growth options since early commitment to the acqui-hire may produce significant preemptive effects. Employment of the founder and his/her team by the acquirer hinders the rivals' access to their know-how, thus providing the acquirer with a strategic advantage relative to competitors. However, acqui-hiring a start-up does not completely neutralize the potential threat that it may pose as it is possible that the key acquired employees may leave and launch another start-up or join a competitor. Early commitment of the acquirer into the acqui-hired team ensures the elimination of a potential threat that they may pose by enabling the smooth transfer of their know-how. Moreover, exercising an option on knowledge-based assets requires that the knowledge must be integrated with other organizational resources (Coff and Laverly, 2007). Thus, to exercise the growth options embedded in acqui-hires, the know-how of the acquired employees must be successfully integrated. Early commitment to the acqui-hired talent enables the acquirer to smoothly exercise the growth options offered by the acqui-hire by facilitating the integration of the acquired employees' know-how.

By assigning the acquired start-up's founder to a high status position the acquirer enhances the motivation and commitment of the founder, thereby preventing him/her from launching another start-up or joining a competitor. Similarly, structural integration enhances the coordination and cooperation among the acquirer and the acquired start-up by providing common procedures, common authority and common goals and aligning the interests of both organizations toward these common goals (Puranam et al., 2009). Aligned incentives and interests resulting from structural integration will prevent the acquired start-up's employees from exploiting a new idea themselves or sharing it with competitors. Finally, early commitment to the acqui-hired team may also produce significant preemptive effects by dissuading competitors from investing in the area of the acquired start-up's specialization, thus resulting in higher market shares and a stronger competitive position for the acquirer (Kulatilaka and Perotti, 1998).

On the other hand, early commitment reduces the acquirer's strategic flexibility, i.e. the ability to adapt its future actions in response to resolution of uncertainty (Trigerorgis, 1993). Making an early commitment in the presence of uncertainty leads to an opportunity cost causing the acquirer to lose the potential to make a different decision once the uncertainties are resolved (Dixit and Pindyck, 1994; Folta, 1998). When the acqui-hired team is immediately integrated, the acquirer incurs significant organizational costs that result from the cultural alignment of the two firms, loss of autonomy of the acquired firm's employees and internal resistance from the existing employees (Barkema and Schijven, 2008; Puranam et al., 2009; Puranam and Srikanth, 2007). Moreover, the more the acqui-hired team is integrated with the acquirer, the greater will be the organizational costs of disengagement (Coff and Lavery, 2007). The acqui-hired employees and existing employees of the acquirer will develop co-specialized skills and routines over time, increasing the costs of making a different decision upon resolution of uncertainty.

3.3.2 Deferral Acqui-hires

Alternatively, the acquirer may assign the acqui-hired founder to a low status position such as a software engineer or a product manager and leave the acquired start-up's team autonomous for a while following the acquisition. I present such acqui-hires as deferral acqui-hires. I argue that acqui-hires offer acquirers the privileged rights, but not obligations, to exploit the talented human capital of acquired start-ups to enter new markets and create new solutions. The efforts of the acquired start-up's founder and his/her team provide the acquirer with some technical and commercial opportunities. However, while the acquirer has the opportunity to utilize the know-how of the acquired start-up's founder and team for its existing and novel projects, as the employer it retains the final decision-making authority on whether to invest further in the new solutions created by the founder and his/her team. By opting for a deferral acqui-hire, the acquirer keeps its options open and preserves the right not to pursue the growth opportunities offered by the acqui-hired team if uncertainty resolves unfavorably.

In the case of a deferral acqui-hire, the acquirer adopts a wait-and-see approach and defers the decision of assigning the founder to a high status position and structurally integrating the start-up's team. There are no immediate expectations from the acqui-hired founder and team, thus the acquirer leaves the team independent initially. However, this

form of independence is different from structural separation, which is the preferred strategy when the primary motivation of an acquisition is to obtain a successful product that has a large user base as in the case of Google's acquisition of Youtube. In deferral acqui-hires, the acquirer waits observing both the acqui-hired team's performance and the market conditions and then decides whether or not to promote the founder to a high status position and to structurally integrate the team. Moreover, deferring the integration process for a while provides the acquirer with the opportunity to figure out how and where it can best utilize the acquired team's know-how and skills avoiding the opportunity costs of immediate integration. During this initial period when the acqui-hired founder and his/her team operate rather autonomously, they learn about the acquiring company's products, projects and culture while the acquirer at the same time observes their performance and decides how to best utilize their skills. Rather than immediately incurring the costs of a high-level appointment and structural integration, the acquirer waits for arrival of new information before investing further in the acquired start-up. Thus, I argue that a deferral acqui-hire can create value by providing the acquirer with the managerial flexibility to defer the investment until uncertainties are resolved (McDonald and Siegel, 1986).

Real options theory emphasizes the value associated with deferring the investment in the face of uncertainty and argues that the option to defer or stage investment can be a valuable source of flexibility (Dixit and Pindyck, 1994; McDonald and Siegel, 1986). Delaying the investment when there is considerable external uncertainty provides management with the flexibility to adapt its future actions in response to resolution of external uncertainties (McDonald and Siegel, 1986; Trigeorgis, 1993). Thus, I argue that following a deferred integration approach can create value by enabling the acquirer to operate flexibly in response to uncertain conditions. The efforts of the acqui-hired founder and his/her team provide the acquirer with future growth opportunities, however, the technical and commercial uncertainties surrounding their know-how will be high as the technology they offer is at its earlier stages of development (McGrath, 1997). Thus, although the acquirer gains a strategic advantage relative to its competitors by acquiring the start-up, it may need some time to assess the true potential of the acqui-hired team's know-how. In this case, it is likely that the acquirer will benefit from delaying its commitment assessing the potential demand for the technology and waiting for uncertainties to resolve (Leiblein and Ziedonis, 2007; McGrath, 1997). By deferring the integration process for a while, the acquirer keeps its options open and preserves the right

not to exercise the growth opportunities offered by the acqui-hired team if uncertainties resolve unfavorably. Moreover, as a large technology firm, the acquirer most often has many alternative projects that await investment. Thus, as the number of potential alternative investment projects increases, the opportunity cost of committing increases (Leiblein and Ziedonis, 2007). Deferring the integration of the acqui-hired team provides the acquirer with the opportunity to make a different decision when new information that affects the relative value of investing in the solutions offered by the acqui-hired team compared to the alternative investment opportunities arrive.

On the other hand, deferring the commitment in the presence of growth opportunities may lead to preemption by competitors thus eroding the worth of future growth options (Folta and O'Brien, 2004; Kulatilaka and Perotti, 1998). Although deferred integration enables the acquirer to wait for the resolution of uncertainties before making a commitment, not investing immediately may lead competitors to seize the opportunity. The acquirer waits observing both the acqui-hired team's performance and the market conditions and then decides whether or not to invest further in the acqui-hired team. However, in the meantime the acquirer also delays the development of new solutions. The likelihood of development of new solutions is low in this case since misalignment of interests and lack of communication between the acqui-hired team and the existing employees may reduce the number and quality of ideas (Burgers and Covin, 2016). Thus, time spent in this suboptimal condition may cause the acquirer to lose the opportunity to become an early mover and lead to preemption by competitors.

In sum, while growth acqui-hires has the potential to generate value through the strategic advantages resulting from early commitment that produce a significant preemptive effect, deferral acqui-hires may generate value by minimizing the opportunity costs of early commitment. Thus, there is a trade-off between potential early-mover competitive advantages and the emergence of potential alternative opportunities. Next, I provide insights into the management of this trade-off by explaining under which conditions the value generated by one of these two acqui-hire types is more likely to dominate the value generated by the other.

3.4 Growth versus Deferral: When Does It Pay Off to Wait and When Not?

Real options theory suggests that there are three main factors that affect the value of a real option: the value of the underlying asset, uncertainty regarding the future conditions

in an industry and the cost of exercising the option (Folta, 1998; Leiblein and Ziedonis, 2007; Miller and Folta, 2002). Below I explore the factors affecting these key determinants, and identify the conditions under which the value generated by one type of acqui-hire is likely to dominate the value generated by the other. Summarizing my arguments, Figure 3.2 depicts the relationships proposed below.

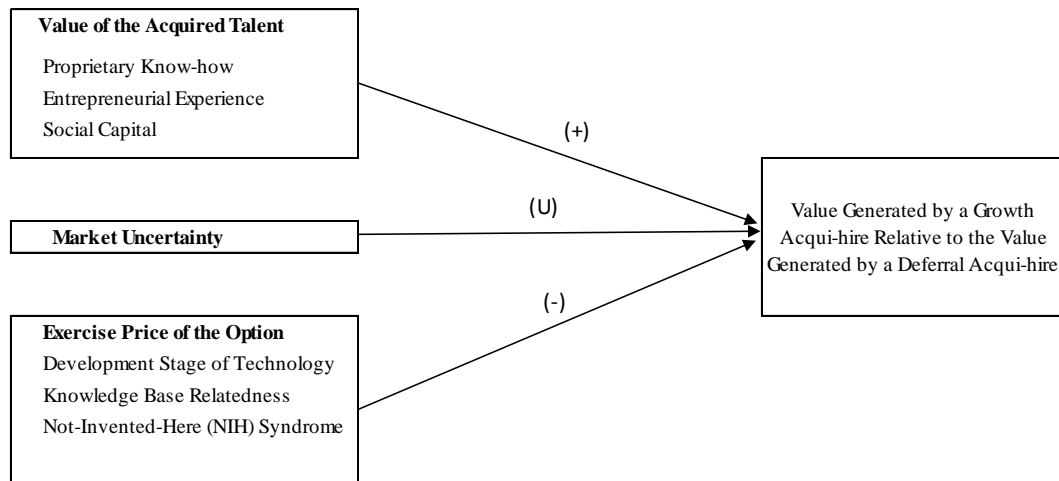


Figure 3.2: Factors affecting the relative values generated by growth and deferral acqui-hires.

3.4.1 Value of the Acquired Talent

One of the main factors that affects the relative values of growth and deferral options is the value of the underlying asset. The underlying asset in the case of acqui-hiring is the talented human capital of the acquired start-up, namely the founder and the team. The value that can be generated by a growth acqui-hire increases with increasing value of the acquired talent since “superior human resources enhance a firm’s ability to attain, sustain and even enhance its competitive advantage” (Florin, Lubatkin, and Schulze, 2003: 375). Prior literature highlights that individuals with greater human capital enable technology firms to enjoy superior growth (Colombo and Grilli, 2005). There are three drivers of the value of a technology firm’s human resources pointed out in the literature: proprietary know-how, entrepreneurial experience and social capital (Colombo and Grilli, 2005; Florin et al., 2003; Hsu, 2007).

Proprietary Know-how

One of the key drivers of value of the acquired talent is the degree to which the knowledge they possess is proprietary. If the founder and the team of the acquired start-up have proprietary knowledge of a market or a technology that competitors cannot duplicate, they would offer the acquirer privileged growth opportunities. On the other hand, if a competitor has already exploited a first-mover advantage in the market where the acquired start-up's founder and team are specialized, then their knowledge may no longer be valuable to the acquirer. In other words, if the acquired talent possesses shared know-how, they will not be able to provide distinctive capabilities that will enable the acquirer to gain advantage over its competitors. Tong and Reuer (2006) argue that while shared options present collective opportunities to competitors, proprietary options present opportunities uniquely available to a firm but not to others and the heterogeneity in a firm's proprietary options explains most of the variance in the value that is created from these options. When the acquirer can obtain proprietary growth options via the acqui-hire, early commitment may lead to significant preemptive effects. On the other hand, deferring the commitment may result in losing the acquired talent and their proprietary know-how to competitors. Real options theory suggests that when strategic preemption is possible early investment can result in larger market shares and higher profits relative to deferring the investment (Kulatilaka and Perotti, 1998). Prior literature also reveals that when there are significant preemptive effects associated with early investment, growth option value is magnified relative to deferral option value (Leiblein and Ziedonis, 2007; Lin and Kulatilaka, 2007). Accordingly, I predict:

Proposition 1: The more proprietary the knowledge possessed by the acquired talent, the more likely the value generated by a growth acqui-hire will dominate the value generated by a deferral acqui-hire.

Entrepreneurial Experience

Entrepreneurial experience of the start-up's founder/founding team also affects the value of the underlying asset. Serial entrepreneurs are likely to have learned not only from their successes but also from their failures and thus they are less likely to repeat their past mistakes (McGrath, 1999; Sitkin, 1992). As a result, they are able to better exploit the new opportunities relative to novice entrepreneurs. Moreover, experienced entrepreneurs are capable of continuously identifying new business opportunities and creating new

solutions, thus having a high potential for generating future growth opportunities for the acquirer (Hsu, 2007). However, founders with “prior entrepreneurial experience may be psychologically attracted by the thrill of start-up” (Gimeno, Folta, Cooper, and Woo, 1997: 759) and hence may decide to leave and launch another start-up unless they are offered high status positions that enable them to pursue entrepreneurial activities within the acquiring firm. I argue that acqui-hiring an experienced entrepreneur and his/her team can result in fast development of new solutions that may produce significant preemptive effects once the founder is assigned to a high status position granting him the necessary authority and power to materialize these solutions. Moreover, by assigning the experienced founder to a high status position and immediately integrating the team, the acquirer reduces the risk of their departure, thereby making the option generated via the acqui-hire more proprietary. Real options theory suggests that the value of a growth option depends on how exclusive the owner’s right is to exercise the option, in other words, how proprietary the option is (Kester, 1984). Thus, I argue that the value of a strategic growth option is likely to dominate the value of a deferral option when the acquired founder is an experienced entrepreneur. Novice entrepreneurs and their teams, on the other hand, lack both the experience and the knowledge necessary to promptly identify the needs in the market and develop new solutions, thus having a lower potential to create growth opportunities. Therefore, it is likely that a wait-and-see approach will benefit the acquirer more in this case. Accordingly, I predict:

Proposition 2: The greater entrepreneurial experience the acquired talent has, the more likely the value generated by a growth acqui-hire will dominate the value generated by a deferral acqui-hire.

Social Capital of the Acquired Talent

Another key driver of the value of acquired talent is social capital. According to Portes, social capital refers to the “ability to secure benefits through membership in networks and other social structures” (1998: 6). Access to social networks is especially important in technology-driven industries because production of technical knowledge utilizing human capital is a highly social process (Bozeman and Mangematin, 2004). A wide social network reduces the amount of time and investment required to collect information (Florin et al., 2003) as the links in these networks act as conduits for knowledge transfer (Coleman, 1988). In other words, established social ties provide entrepreneurs with

enriched information channels (Hsu, 2007). Thus, the greater social capital the acquired talent has, the more access they will have to market related knowledge, which will help them to continuously define, evaluate and implement new business opportunities. Moreover, if the acquired talent has a wide social network, they can easily get access to resources and capabilities required to develop new solutions. For instance, if the acquirer wants to enter a market but has missing capabilities, the acquired talent can provide the resources necessary to develop those capabilities through their networks. They will enable the acquirer to build new partnerships that will lead to faster development of new solutions through which the acquirer may gain strategic advantages relative to its competitors. However, the acqui-hired founder may not have enough motivation to utilize his/her social network for creating growth opportunities for the acquirer unless he/she is offered a high status position. Moreover, the appointment of the founder to a low status position also increases the risk of his/her departure thereby hindering access to his/her social network. Similarly, structurally integrating the team of the start-up is also necessary to better utilize the social networks of the start-up's team since structural integration will enhance the ability to transfer, assimilate and exploit knowledge from the enriched social network. Thus, if the acquired talent has wide social networks, then a growth acqui-hire may lead to substantial growth opportunities by enabling the acquirer to utilize these networks to enter new markets and preempt competitors. Therefore, I argue that when the acquired talent has greater social capital, strategic growth option logic is likely to dominate the waiting-to-invest option logic. On the other hand, acquired talent with less social capital may not be fully aware of the trends and needs in the market. They are also less likely to have the necessary connections to attract new partners who will enhance the acquirer's capabilities of exploiting new opportunities, thus enhancing the value of a deferral option relative to the value of a strategic growth option. Accordingly, I predict:

Proposition 3: The greater the social capital of the acquired talent, the more likely the value generated by a growth acqui-hire will dominate the value generated by a deferral acqui-hire.

3.4.2 Market Uncertainty

Market uncertainty is another factor that affects the relative values of growth and deferral options. Market uncertainty refers to the level of unpredictability regarding the future conditions in an industry (Folta and O'Brien, 2004; Kulatilaka and Perotti, 1998;

Trigeorgis, 1993). It derives from demand volatility and the variability in customer preferences and is analogous to market risk (Beckman, Haunschild and Phillips, 2004). In fact, both growth options and deferral options increase in value with increasing market uncertainty (Folta and O'Brien, 2004). However, the value of a growth option may be more sensitive to uncertainty than the value of a deferral option because of two reasons. First, the upside of a deferral option is bounded by the opportunity costs of the investment whereas a growth option has no such upper bound on its value (Folta and O'Brien, 2004; Trigeorgis, 1993). In other words, the value of a deferral option cannot exceed the amount of total irreversible commitment, however, the value of a growth option escalates with uncertainty due to the asymmetry in its pay-off distribution (Folta and O'Brien, 2004; Vassolo, Anand and Folta, 2004). Second, an increase in the uncertainty about future industry conditions leads to an increase in the potential economic value of gaining a competitive advantage in that industry (Folta and O'Brien, 2004; Kulatilaka and Perotti, 1998). Unexpected variations in demand can affect market size and the expected cash flows from the commercialization of the solutions developed by the acquired talent. When the uncertainty about future market demand is high, early commitment to the acqui-hire may have strategic benefits. It will enable the acquirer to preempt competitors and gain early mover advantages thus leading to greater ex-post profits relative to the case of deferring the commitment (Folta and O'Brien, 2004; Kulatilaka and Perotti, 1998). As an early mover in a highly uncertain environment, the acquirer will have the chance to determine industry standards and capture a greater share of the market (Kulatilaka and Perotti, 1998; Miller and Folta, 2002). On the other hand, if the acquirer defers commitment, it avoids the opportunity cost of early commitment, but also loses the opportunity of earning higher profits if the uncertainty resolves favorably. Thus, although higher uncertainty leads to higher risk exposure, the greater upside opportunities may outweigh the downside risk (Kulatilaka and Perotti, 1998). Lin and Kulatilaka (2007) examine firms' investment decisions in network industries where strategic advantages arising from early commitment lead to strategic growth options and find that under high uncertainty strategic growth option often dominates the deferral option, thus reducing the investment threshold.

At the other extreme, a very low market uncertainty indicating a negligible risk exposure, also enhances the growth option value through the possibility of preempting rivals. Low uncertainty in high-valued technologies motivates the acquirers to accelerate

their investments. Thus, the value of a strategic growth option may be substantially greater than the value of a deferral option at extreme levels of uncertainty. However, at moderate levels of uncertainty, the potential gain is less significant relative to the cost of the investment, thereby increasing the value of not investing and raising the threshold for investment in the growth option. Thus, I argue that the acquirer is likely to benefit more from a deferral acqui-hire at moderate levels of uncertainty. Folta and O'Brien (2004) investigate the effect of market uncertainty on the established firms' decision to enter a new industry. Examining the net value of the dueling options, i.e. growth and deferral options, present in entry decisions, the authors find that while uncertainty negatively affects the probability of entry throughout most of the range of measured uncertainty, the value of growth options overshadows the value of deferral options under very high and very low levels of uncertainty. Accordingly, I predict:

Proposition 4: At either high or low levels of market uncertainty, the value generated by a growth acqui-hire is likely to dominate the value generated by a deferral acqui-hire. Whereas at moderate levels of market uncertainty, the value generated by a deferral acqui-hire is likely to dominate the value generated by a growth acqui-hire, thereby resulting in a U-shaped effect.

3.4.3 Exercise Price of the Option

The last factor that affects the relative values of growth and deferral options is the exercise price of the option, which refers to the development and commercialization costs (McGrath, 1997) of the technical know-how offered by the acquired talent, in the case of acqui-hiring. I argue that a high exercise price leads to an increase in the value of waiting to invest relative to the value of immediate investment. Real options theory suggests that a deferral option's value is equal to the opportunity cost of making an irreversible investment (Folta and O'Brien, 2004; Leiblein and Ziedonis, 2007). Accordingly, the value that can be generated by a deferral acqui-hire is determined by the opportunity cost of immediately investing in the acquired talent. An increase in the exercise price increases the opportunity cost of committing thereby enhancing the deferral option value. Below I discuss the drivers of the exercise price in the case of acqui-hiring.

Development Stage of the Technology

Development costs involve both the direct costs of the acquired talent, i.e. salaries and benefits offered to the founder and the team during their employment period, and the opportunity cost of organizational restructuring resulting from structural integration. Commercialization costs, on the other hand, involve investments in complementary assets, i.e. costs of creating sale, distribution, service and communication channels (McGrath, 1997). Both of these costs depend crucially on the development stage of the technology offered by the acquired talent. In the earlier stages of technology development, both development and commercialization costs are greater since design variations require extensive experimentation and rework, and the costs of creating complementary assets for a new technology are high. Moreover, to introduce a new technology, the acquirer first needs to communicate the benefits of the technology, form a customer base and train the customers in the new field (McGrath, 1997). Thus, when the technology offered by the acquired talent is at its earlier stages of development, uncertainty regarding the development and commercialization costs will be high leading to an increased exercise price. Therefore, it is likely that the acquirer will benefit from making staged investments assessing the potential demand for the technology and waiting for uncertainties to resolve. Hence, I argue that the deferral option dominates the growth option if the acquired talent is working on a nascent technology. However, if the technology offered by the acquired talent is at its later stages of development, both development and commercialization costs are reduced due to the existence of a dominant design reducing the experimentation and rework necessary and indicating established merits in the marketplace and educated customers (Tushman and Anderson, 1990; McGrath, 1997). In this case, investing immediately may enable the acquirer to quickly offer a new solution and preempt competitors. Therefore, it is likely that the acquirer will benefit more from a growth acqui-hire. Accordingly, I predict:

Proposition 5: The earlier the development stage of the technology offered by the acquired talent, the more likely the value generated by a deferral acqui-hire will dominate the value generated by a growth acqui-hire.

Relatedness of the Knowledge Bases

Another key driver of the exercise price is the cost of structural integration. Knowledge must often be transferred and integrated to realize its full potential (Grant, 1996b; Kogut

and Zander, 1992). Accordingly, to be able to fully transfer the know-how of the acquired start-up and utilize it in developing new solutions, the acquirer needs to structurally integrate the acquired start-up. However, structural integration imposes organizational costs on the acquirer due to its disruptive consequences (Puranam et al., 2009). One of the factors affecting the costs of structural integration is the relatedness of the knowledge bases of the acquirer and the acquired start-up. If the knowledge base of the acquired start-up is unrelated to that of the acquirer, then the organizational costs of integration will inflate the exercise price (Coff and Lavery, 2007). The absorptive capacity argument suggests that the ability to assimilate and use new knowledge is enhanced when the new knowledge is related to what is already known (Cohen and Levinthal, 1990). Sharing a common stock of knowledge facilitates the integration of the acquired and acquiring knowledge bases through common skills, shared languages and similar cognitive structures (Kogut and Zander, 1992; Lane and Lubatkin, 1998). Sakhartov and Folta (2014) argue that resource relatedness not only creates benefits from the synergy generated by combining the two knowledge bases but also from the ability to redeploy resources. While synergy provides sharing benefits due to complementarity in uses of firm-specific resources, redeployability of resources to alternative product markets enables the management to operate flexibly in response to uncertain conditions.

On the other hand, when the knowledge bases of the acquired firm and the acquirer are unrelated, the integration of the knowledge bases can be resource consuming or even counter-productive (Haspeslagh and Jemison, 1991), thus leading to an increased exercise price. The increased exercise price in turn increases the value of waiting to invest until uncertainties are resolved. Folta, Johnson, and O'Brien (2006) assess the effect of target industry relatedness on market entry decisions. They provide evidence suggesting that the value of the option to defer increases when entry into unrelated industries is considered, since the irreversibility of the investment and the sunk costs associated with the investment, i.e. exercise price of the option, increases. Consistent with their view, I argue that the waiting-to-invest option dominates the growth option when the acquired start-up's knowledge base is unrelated indicating an unrelated diversification. By leaving the team of the acquired start-up autonomous initially and assigning the founder to a low status position, the acquirer will avoid the costs stemming from structural integration of the team and the high status position given to the founder, assessing the potential alternative opportunities in the meantime. Accordingly, I predict:

Proposition 6: The more unrelated the knowledge bases of the acquiring and the acquired firm, the more likely the value generated by a deferral acqui-hire will dominate the value generated by a growth acqui-hire.

The Not-Invented-Here Syndrome

The presence of the not-invented-here (NIH) syndrome in the acquiring firm also affects the cost of structural integration, and thus the exercise price of the option. The NIH syndrome is a profound negative attitude toward knowledge derived from a source that is perceived as external (Katz and Allen, 1982). The specialized knowledge and expertise together with the ingrained practices and the internal language shared by the employees of an acquiring firm may lead to the NIH syndrome (Cohen and Levinthal, 1990), thereby impeding the incorporation of the acquired firm's knowledge. In the case of acqui-hiring, there are two possible causes for the NIH syndrome. The first one is the presence of a rival in-house project. There may be a group of people within the acquirer working on a project, which belongs to the acquired start-up's area of specialization. These individuals may fear that the incoming team may draw the attention of top management away and even cause the withdrawal of funds from the existing project. The second possible cause is that the acquirer's decision of appointing an acqui-hired founder to a high status position rather than promoting someone from within, can create frustration among existing employees and lead to resistance toward the ideas or solutions offered by the acqui-hired founder. Thus, the presence of the NIH syndrome within the acquiring firm can render structural integration costly and complicated, thereby leading to an increase in the exercise price. I argue that in this case, the acquirer is likely to benefit more from a deferral acqui-hire by assigning the acqui-hired founder to a low status position and leaving the team autonomous initially to let them learn about the company's culture, processes, projects and see if they can fit in.

On the other hand, NIH syndrome may not be present or its level may be relatively low in some firms. This may either be due to the organizational culture of the firm or specific to an acqui-hire case. For instance, in some cases, the product teams that work on projects related with the acquired start-up's knowledge and expertise are involved in the acquisition decision. In other words, the acqui-hire takes place with their consent. Thus, they are willing to work together with the acqui-hired talent and present no negative attitude toward them. In such cases, structural integration will be easier and less costly

and the acqui-hired founder is less likely to face resistance from the existing employees if he/she is assigned to a high status position. Therefore, it is more likely that the acquirer will benefit more from a growth acqui-hire. Accordingly, I predict:

Proposition 7: The higher the level of the not-invented-here (NIH) syndrome in the acquiring firm, the more likely the value generated by a deferral acqui-hire will dominate the value generated by a growth acqui-hire.

3.5 Discussion

In accordance with its increasing popularity among practitioners, acqui-hiring has started to attract attention in the academic literature. By drawing upon real options theory, this paper aims to identify the different types of acqui-hires and shed light on the mechanisms through which these different acqui-hire types create value for the acquirer. I propose that acqui-hires can be of different types depending on the pacing of the acquirer's investment into the acquired start-up. In line with real options theory, I present two different types of acqui-hires, namely growth acqui-hires and deferral acqui-hires. I argue that while a growth acqui-hire can create value by providing the acquirer with strategic growth options, a deferral acqui-hire can create value by providing the acquirer with the option to wait to invest until uncertainties are resolved. Discussing the factors affecting the relative values generated by growth and deferral acqui-hires, I identify the situations under which the value generated by one type of acqui-hire dominates the value generated via the other.

Coyle and Polsky (2013) attribute the existence of acqui-hires to the unique social structure and norms of Silicon Valley and argue that acqui-hiring is not a value creating mechanism, but merely a rescue for struggling companies that will not be able to survive another round of financing. Chatterji and Patro (2014), on the other hand, view acqui-hiring as a potentially value creating mechanism that serves as a tool for asset orchestration, but overlook that acqui-hires can be conducted in different ways and how this may affect the value created. In this paper, I challenge Coyle and Polsky's (2013) argument and extend Chatterji and Patro's (2014) work through a real options approach. By presenting two different types of acqui-hires in terms of autonomy and status and arguing that each type can create value under different conditions, I also extend the works of Ranft and Lord (2000) and Graebner (2004), who argue that autonomy and status are essential for creating value from technology acquisitions.

I also contribute to the real options literature by applying real options logic to acqui-hiring, which is a human asset investment decision. Moreover, I integrate organizational issues into real options theory by differentiating acqui-hires depending on how they are structurally designed and explaining how these different structural designs can lead to value creation under different conditions using real options reasoning. Although I argue that real options theory can be used to explain how acqui-hires create value for acquirers, there are some organizational elements such as culture, routines and decision-making processes that affect the investment decisions of acquirers and thus the value generated via the acqui-hires. The effects of these organizational issues can be further investigated in future studies integrating real options theory further with organizational theory.

3.5.1 Future Research Avenues

Examining the acqui-hiring phenomenon from the real options lens, I have developed testable propositions regarding the acqui-hire type that is expected to generate the maximum value under different conditions. I expect future research to test these propositions through both qualitative and quantitative studies. Although it is a challenging task to construct a comprehensive database of acqui-hires, researchers can use databases such as Crunchbase and Zephyr (Chatterji and Patro, 2014), and differentiate acqui-hires from other acquisitions listed in these databases even by relying on press releases. I believe that in classifying an acquisition as an acqui-hire, it is important to ensure that the primary motivation is to acquire the human capital even though the acquired company possesses other valuable assets such as a certain technology or a large customer base. The next step will be to distinguish growth acqui-hires from deferral acqui-hires by checking the roles offered to the acqui-hired founders and whether or not the acquired start-up's team is structurally integrated immediately following the acquisition, which can be done via press releases and LinkedIn accounts of the founders and employees. Once a comprehensive dataset is established, researchers can move on to test the propositions put forward in this paper.

First of all, to measure the values generated by growth and deferral acqui-hires, i.e. the values of growth and deferral options, researchers can utilize the option value calculation techniques employed in real options literature (Tong and Reuer, 2006; Vassolo et al., 2004). Further, to test the effect of the value of the underlying asset on the

relative values generated by growth and deferral acqui-hires, the proprietary knowledge possessed by the acquired talent can be measured by examining the number of patents and applications. Data regarding entrepreneurial experience of the founder can be collected from the LinkedIn accounts of acqui-hired founders. The effect of social capital can be tested utilizing social network analysis tools such as blockmodeling following the examples in prior literature (Nohria and Garcia-Pont, 1991; Shan, Walker, and Kogut, 1994). In measuring the effect of market uncertainty on the relative values generated by growth and deferral acqui-hires, Compustat Industrial and Business Segments databases can be used to construct firm-level and industry-level variables (Folta and O'Brien, 2004). Moreover, volatility of stock market returns, which can be calculated by using data from publicly available websites or proprietary databases, can be taken as a measure of uncertainty (Folta, 1998). Finally, in testing the effect of exercise price on the relative values generated by growth and deferral acqui-hires, measures indicating the development stage of the technology offered by the acquired talent will be one of the key operational issues. Development stage of the technology can be determined by using patent application counts as a measure. However, this alone may not be adequate. Researchers can also utilize other technology life cycle indicators (e.g., trends over time in number of items, technological needs noted, spin-off technologies linked, dependent claims) developed in the literature (Haupt, Kloyer, and Lange, 2007; Watts and Porter, 1997). To measure knowledge base relatedness, researchers can utilize the methodology proposed by Teece et al. (1994) to assess inter-industry relatedness. This methodology is based on co-occurrence analysis, which measures the relatedness between two industries by assessing whether two industries are often found together in the same economic entity. Building on the work of Teece et al. (1994), Bryce and Winter (2009) developed a general inter-industry relatedness index, which can be applied across industry and firm contexts. Researchers studying the effect of knowledge base relatedness on the relative values generated by growth and deferral acqui-hires, can construct a measure of knowledge base relatedness based on the relatedness measures introduced by Teece et al. (1994) and the inter-industry relatedness index developed by Bryce and Winter (2009). Lastly, to operationalize the NIH syndrome, researchers can utilize explicit attitude measures following Mehrwald (1999). Considering NIH syndrome as a multi-dimensional construct, Mehrwald (1999) developed multiple item scales to measure the NIH attitude. Researchers can either conduct surveys including those scales among the employees of

the firms they examine or they can rely on other indirect or implicit measures developed by psychology researchers, such as word classification or sentence completion, which are known to prevent response biases (Fazio and Olson, 2003; Nosek, Hawkins, and Frazier, 2011).

While I have taken a step to contribute to the understanding of the emerging phenomenon of acqui-hiring with this study, there are still open issues that present promising research opportunities. For instance, venture capitalists are often closely involved in acqui-hire deals. Therefore, venture capital characteristics, such as the network or portfolio diversification of the venture capitalist and the structure of the deal between the start-up and the venture capitalist, may have significant effects on the terms and structure of an acqui-hire deal, which might in turn affect the value created via the acqui-hire.

Another important domain for future research is the examination of the acqui-hiring phenomenon from the start-up's perspective. Extant research dealt with the acqui-hiring phenomenon mainly through the acquirer's perspective, investigating the reasons why they conduct acqui-hires rather than simply hiring the targeted employees of the start-up (Chatterji and Patro, 2014; Coyle and Polsky, 2013). I argue that following Graebner's work (e.g., Graebner and Eisenhardt, 2004) on understanding the seller's point of view, acqui-hires should also be examined from the start-up's point of view to better understand the phenomenon. Real options logic can again be applied in this exercise of examining acqui-hiring from the start-up's perspective. McGrath (1999) argues that entrepreneurial initiatives can be viewed as real options and suggests that they be managed using real options reasoning. In line with this view, I propose that the founder and the shareholders of the start-up make a decision to exercise the option by selling their company to an established firm. Future research could provide insights into the motivations underlying this decision and the financial gains that accrue to the founder and shareholders of the start-up.

Another question which remains open is to what extent acqui-hiring is a Silicon Valley specific phenomenon. Although Coyle and Polsky (2013) argue that it is almost unheard of outside of Silicon Valley, to the best of my knowledge there is no research looking into whether established high technology firms in Europe, Japan or developing countries acquire small companies with the intention of utilizing their talented human

capital. If future studies identify acqui-hiring in other parts of the world, studies comparing acqui-hires across different geographies can help generalize the findings and put forward the differences in practice stemming from cultural, legal or other effects.

In sum, I propose that acqui-hiring presents fruitful research opportunities for scholars of strategic management and hope that this study will prompt future attempts to further contribute to the understanding of the acqui-hiring phenomenon.



Chapter 4

ACQUI-HIRES: POST-ACQUISITION INTEGRATION OF START-UPS' HUMAN CAPITAL AND ITS OUTCOMES

ABSTRACT

Research on acquisition integration has focused on how acquirers integrate the technologies of targets into the acquiring firms. Acqui-hires are different from traditional technology acquisitions because they target the talented human capital of the acquired start-ups. Whereas post-acquisition integration decisions aim to maximize knowledge transfer and minimize coordination costs in traditional technology acquisitions, our understanding of the rationale behind post-acqui-hire integration decisions are limited. I argue that post-acqui-hire integration is influenced by the disruptiveness of the acqui-hire's know-how to the incumbent's current technology or business model. Applying a dynamic capabilities framework, I find that when the acquired start-up has disruptive know-how, the acqui-hire team is integrated as a whole into the disrupted business unit and the founder of the acquired start-up is assigned to a high status position. Furthermore, I examine how the lack of fit between acquired know-how type and integration choice effects the exit decision of the acqui-hired founder from the acquirer. I show that a lack of fit between acquired know-how type and integration mode has a positive relationship with the premature exit of acqui-hired founders.

4.1 Introduction

Strategy scholars have extensively studied the antecedents and outcomes of post-acquisition integration to better understand how value is created by acquiring firms (Capron, Dussauge, & Mitchell, 1998; Haspeslagh and Jemison, 1991; Pablo, 1994; Zollo and Singh, 2004). Recently, however, acqui-hires have emerged as a novel acquisition practice among established technology firms in which the main goal of the acquisition is to obtain a start-up firm's human capital (Coyle and Polsky, 2013). To date, though we know that these acqui-hires are becoming more prevalent (Chatterji and Patro, 2014), we do not yet know how acquiring firms create value from these acqui-hires through their post-acquisition integration. My goal, in this study, is to shed insights into the acquirer's integration decision –both at the level of the individual acqui-hire founder(s) and at the level of the entire acqui-hired team– from a dynamic capabilities perspective that views acquisitions as key mechanisms for reconfiguration and strategic renewal (Agarwal and Helfat 2009; Karim and Capron, 2016; Teece, 2007). I present arguments for why the acqui-hire's type of know-how is relevant in the acquirer's integration decision, and further examine post-integration outcomes.

Past studies of traditional post-acquisition integration build on multiple theoretical perspectives (Paruchuri, Nerkar, and Hambrick, 2006; Puranam, Singh, and Chaudhuri, 2009; Ranft and Lord, 2002). The knowledge-based view of the firm (KBV) argues that post-acquisition integration decisions of acquirers are designed to maximize the amount of knowledge transferred from the acquired firms to the acquirers (Capron, Dussauge, and Mitchell, 1998; Graebner, 2004; Ranft and Lord, 2002). Another research stream highlights the coordination-autonomy dilemma as the fundamental challenge in technology acquisitions and argues that the key objective of post-acquisition integration decisions is to minimize coordination costs (Puranam, Singh, and Zollo, 2006; Puranam et. al, 2009). While these studies provide valuable insights into post-acquisition integration in technology acquisitions, they rely on the common assumption that acquirers pursue acquisitions either to directly obtain the product/technology developed by the acquired firm (Ahuja and Katila, 2001; Puranam et. al, 2009) or to transfer the acquired firm's knowledge (Choi and McNamara, 2018; Puranam and Srikanth, 2007).

Unlike traditional technology acquisitions that target the tangible and intangible assets of the acquired firm, acqui-hires target the talented human capital of the acquired

start-up (Coyle and Polsky, 2013). In acqui-hires, acquirers utilize the talented employees of the acquired start-up in developing new solutions rather than directly incorporating the product they have developed or transferring their knowledge (Chatterji and Patro, 2014). Thus, the acquired start-up is almost always integrated into the acquirer's organization; the primary concern of the acquirer is *how* to integrate the acquired talent – either by keeping the talent together as a preserved team that is moved into a business unit or else by distributing the talent into multiple parts of the acquiring firm.

In this paper, I examine the underlying motivations of acquirers in making post-acqui-hire integration decisions by drawing upon the dynamic capabilities literature. This perspective offers a framework to explain how the post-acqui-hire integration decisions of acquirers can be used to reconfigure firms for innovation and new strategic opportunities (Agarwal and Helfat 2009; Karim and Williams, 2012). Established firms tend to develop routines and path dependencies leading to inertia and structural rigidities that inhibit breakthrough innovation (Teece, 2007). Dynamic capabilities view (Eisenhardt and Martin, 2000) argues that organizations need to continuously and purposefully reconfigure their resources to overcome these rigidities (Karim, 2006; Schilke, Hu, and Helfat, 2018; Teece, Pisano, and Shuen, 1997). In particular, a dynamic capabilities perspective provides a framework that explains how new and existing resources can be recombined in novel ways to drive innovation and maintain competitive advantage (Helfat, 1997; Karim and Kaul, 2015; Karim and Mitchell, 2000; Teece, 2007). Acqui-hires provide acquiring firms with the external human capital resources they need to reconfigure their existing business units (Chatterji and Patro, 2014). However, acquirers need to integrate their acqui-hires effectively to undergo the organizational change that will enable them to respond to the competitive threats and maintain their competitive positions in the high-velocity environments they operate.

In this paper, I argue that the post-acqui-hire integration decisions of acquirers are influenced by the type of acquired firm's know-how. Specifically, I hypothesize that when the acquired start-up's know-how is disruptive to the acquirer's current technology or business model in one of its main lines of business, the acqui-hired team is likely to be integrated as a whole into the disrupted business unit. Moreover, I predict that the acqui-hired founder is likely to be assigned to a high status position in the acquiring firm. Furthermore, to examine outcomes of integration decisions, I develop several hypotheses about how the lack of fit between the type of acquired firm's know-how and the post-

acqui-hire integration decisions of acquirers may have a relationship with the exit of the acqui-hired founders from the acquiring firms.

This study offers several noteworthy contributions to the literature. First, by examining post-acqui-hire integration, I demonstrate that one of the primary motives of acquirers is to effectively recombine new and existing human resources to adapt to the brisk changes that take place in high-technology industries. This is important because it complements prior studies that have mainly viewed post-acquisition integration as a means of achieving coordination between the acquiring and acquired firms (Puranam et. al, 2009) and knowledge transfer from the acquired firm to the acquirer (Ranft and Lord, 2002). Second, this study contributes to the research stream that examines the relationship between post-acquisition integration and performance outcomes of technology acquisitions. Previous studies have examined the effects of integration on the retention of key acquired employees and have found that integration is negatively associated with retention (Ranft and Lord, 2000). The findings of this study suggest that rather than integration itself it is the lack of fit between the integration mode and the type of acquired firm's know-how that leads to the premature exit of acqui-hired founders.

Third, this study offers one of the first large-scale empirical tests on acqui-hires. Previous studies have explored the increasing practice of acqui-hiring and examined several cases (Chatterji and Patro, 2014; Coyle and Polsky, 2013), however, they do not address the rationale behind acqui-hire integration decisions. I extend the research on acqui-hires by conducting an empirical analysis and providing insights into the antecedents and outcomes of post-acqui-hire integration. Finally, I extend the dynamic capabilities perspective by demonstrating that established technology firms can reconfigure their business units and drive organizational change through effective integration of acqui-hires.

4.2 Theoretical Background

4.2.1 Traditional Technology Acquisition Integration vs. Acqui-hire Integration

Post-acquisition integration has been identified as a critical process that influences acquisition outcomes (Haspeslagh and Jemison, 1991; Jemison and Sitkin, 1986; Larsson and Finkelstein, 1999; Pablo, 1994). Extant research has shown that effective post-acquisition integration may lead to improved economic outcomes (Zollo and Reuer, 2010;

Zollo and Singh, 2004), retention of key employees (Ranft and Lord, 2000), and organizational reconfiguration necessary to gain and sustain competitive advantage (Capron and Mitchell, 1998; Karim, 2006). Thus, the ability to effectively integrate the acquired firm is a central challenge for acquirers.

The knowledge-based view of the firm has been one of the key theoretical perspectives informing our understanding of post-acquisition integration. Highlighting knowledge as a significant strategic resource of an organization, the KBV logic has considered the maximization of knowledge transfer from the acquired firm to the acquirer crucial to a successful acquisition (Grant, 1996b; Kogut and Zander, 1992; Paruchuri et al., 2006; Ranft and Lord, 2002). Studies in this stream highlight that integration of the acquired firm into the acquirer's organization facilitates knowledge transfer and favors synergy realization (Graebner, 2004; Ranft and Lord, 2002). Yet, integration may also have adverse consequences such as departure of key employees (Ranft and Lord, 2000), decrease in the productivity of inventors (Barden 2012; Paruchuri et al., 2006) and disruptions of the routines that underlie the tacit and socially complex knowledge of the acquired firm (Ranft and Lord, 2002). Examining how acquirers can mitigate these adverse consequences to maximize knowledge transfer, these studies offer remedies such as enabling rich communications between the two firms, applying a gradual integration process (Ranft and Lord, 2002) and giving acquired leaders cross-organizational responsibilities (Graebner, 2004).

Another stream of post-acquisition integration research has viewed the choice between structural integration and preservation of autonomy as central to the success of technology acquisitions. Puranam and his colleagues define structural integration as the complete absorption of the acquired firm by the acquirer as opposed to structural separation, which refers to preserving the acquired firm as a distinct organizational entity. Basing the integration decision on a cost-benefit calculus of coordination versus autonomy, they examine when the coordination benefits of integration outweigh the disruptive consequences resulting from the loss of autonomy. Puranam, Singh and Chaudhuri (2009) highlight that when the objective of the acquirer is to obtain a standalone product as opposed to a complementary technology, structural separation is likely to be preferred over structural integration. Moreover, Puranam and Srikanth (2007) argue that when the objective of the acquisition is to leverage the existing knowledge of the acquired firm, structural integration is likely to be the preferred design choice.

Overall, extant research on post-acquisition integration in technology acquisitions mostly focuses on the initial decision of whether or not to structurally integrate the acquired firm (Puranam et al., 2006, 2009; Puranam and Srikanth, 2007; Ranft and Lord, 2002). Yet, the insights from this domain can be partially extended to the context of acqui-hires, where the acquirer mainly targets the talented human capital of the acquired start-up, often shutting down the product or service in development swiftly after the acquisition (Chatterji and Patro, 2014; Coyle and Polsky, 2013). Moreover, in acqui-hires, acquirers are most often large, multi-business technology firms, further complicating the integration process. There is still much room to extend our understanding of post-acquisition integration beyond that of traditional acquisitions, and to explain the heterogeneity in post-acquisition integration decisions in these novel types of technology acqui-hires.

4.2.2 Dimensions of Post-acqui-hire Integration

I argue that the two critical dimensions of post-acquisition integration in the context of acqui-hires are the post-acquisition position of the acqui-hired founder and the way in which the acquired start-up's team is integrated. Integration along these dimensions may result in organizational renewal by triggering reconfiguration of business units (Agarwal and Helfat 2009; Karim, 2006). In other words, the acqui-hired founder and team may act as mechanisms of organizational change when integrated effectively. To understand how the acqui-hired team can be integrated into the acquirer's organization, I identify two integration modes: focused integration versus distributed integration. Focused integration refers to integrating the acqui-hired team as a whole into a particular business unit following the acquisition, while distributed integration refers to dismantling the team and moving the team members to multiple business units. In addition, the acquirer may either assign the acqui-hired founder to a high status position such as a vice president or a senior director or a low status position such as a software engineer or a product designer.

Dynamic capabilities, defined as "the capacity of an organization to purposefully create, extend, or modify its resource base" (Helfat et al., 2007:4), provides a theoretical perspective to analyze how firms integrate acqui-hires, namely the acquired knowledge-based human capital resources, to stay competitive in high-velocity environments. The dynamic capabilities perspective highlights that competitive advantage can flow from the ownership of scarce and difficult-to-imitate assets, especially know-how (Teece, 2007).

Teece (2007) argues that proprietary know-how is necessary to sense opportunities and reconfigure resources so as to seize those opportunities. In acqui-hires, the aim of the acquirer is to modify its existing resource base utilizing the acqui-hired employees' know-how. Accordingly, I argue that the type of acquired start-up's know-how shapes the acquirer's post-acqui-hire integration decisions. Thus, I examine how post-acqui-hire integration decisions may be influenced by the type of acquired start-up's know-how, where this know-how is either disruptive or complementary.

4.3 Hypotheses

4.3.1 The Effect of Know-how Type on Post-acqui-hire Integration

In acqui-hires, the targeted asset is the know-how of the acquired employees. Yet, the acquired employees' know-how may have different characteristics, and I argue that this may influence post-acqui-hire integration decisions. I distinguish between two types of know-how that acquired employees may possess: disruptive know-how versus complementary know-how. I define disruptive know-how as the proprietary know-how of an acquired firm that has the potential to generate novel solutions that may threaten the acquirer's competitive position in one of its main lines of business. On the other hand, I define complementary know-how as the fungible know-how of an acquired firm that is likely to generate incremental improvements in an acquirer's existing businesses.

I expect that when the acquired start-up has disruptive know-how, the acquirer is likely to follow a focused integration approach, i.e. the acqui-hired team will be integrated as a whole into the business unit that may potentially be disrupted. I suggest that the reasons for the acquirer to pursue focused integration are to utilize a cohesive team in initiating change and to create internal competition. Integrating a proven team with a coherent way of thinking and specialized knowledge in a certain domain may help incumbent firms to overcome inertia and initiate change (Lechner and Floyd, 2011). When an acqui-hired team having disruptive know-how is integrated as a whole into a business unit, the team can potentially disrupt the status-quo and may initiate change by having a critical mass or coalition with sufficient power to persuade/evoke support from decision makers for their solutions. A critical mass of valuable human capital must be present to influence unit performance (Dierickx and Cool, 1989). If there is no critical mass of valuable human capital, the acquired human capital resources is less likely to influence unit performance and initiate change, no matter how proprietary their

knowledge is (Nyberg and Ployhart, 2013). When the acquired start-up has disruptive know-how, keeping the team together is also critical to preserve the socially complex knowledge embedded in team interactions and relationships among individuals (Karim, 2012; Ranft and Lord, 2002). Thus, when the acqui-hired team has disruptive know-how, keeping the team together may facilitate developing new solutions that utilize their proprietary know-how. Moreover, entry into new technological niches is unlikely to receive support from key decision makers in incumbent firms if there is fragmented support for these new directions (Kotha, Zheng and George, 2011). However, if there is a critical mass of employees to initiate change and accumulate support for the new solution/technology, gaining approval is more likely (Jansen, 2004). Thus, in the case of acqui-hiring a start-up with disruptive know-how, opting for focused integration may enable the acquirer to develop innovative responses in the face of technological change.

The second reason to pursue focused integration when the acqui-hired start-up has disruptive know-how is to create internal competition. Internal competition, when purposefully created, may serve as a tool for incumbent firms to overcome organizational inertia (Barden, 2012; Birkinshaw, 2001; Birkinshaw and Lingbald, 2005; Taylor, 2010). When an acquired start-up has disruptive know-how, integrating the acqui-hired team with the business unit that may potentially be disrupted can remove the sources of inertia by introducing new perspectives and routines that may challenge the status quo (Karim, 2006). Integration of the acqui-hired team into the existing business unit will create awareness of new innovation opportunities within the existing business unit and provide them with access to new technology (Taylor, 2010). Moreover, the employees of the existing business unit may be motivated to work harder when faced with a direct competitive threat (Birkinshaw, 2001). The dynamic interactions between the two teams may catalyze creative action and facilitate the development of new solutions; this competitive process can initiate search for new technologies and may result in a continuous renewal of the firm's technologies (Taylor, 2010).

Still, focused integration may also have adverse consequences. First, the acqui-hired team may face resistance from the existing employees, resulting in inter-organizational conflicts. Although conflict in organizations is generally considered as negative, in this case it may act as an impetus to explore potential innovative opportunities. Second, integrating a team that has the potential to develop novel solutions in an existing business unit of the acquirer may lead to cannibalization of the acquirer's

own products. However, the fear of cannibalizing their own products is one of the main factors that inhibit innovation in established firms (Teece, 2007). Failure to explore potential innovative opportunities due to anti-cannibalization bias may lead competitors to seize those opportunities. Thus, established firms must also consider the opportunity cost of not cannibalizing their own products.

So far I have argued for focused integration of acqui-hires with disruptive know-how. Alternatively, the acquired start-up may have complementary know-how. Complementary know-how is not threatening in nature, but rather has the potential to improve acquirer's existing solutions and enable the acquirer to maintain its current technology and product portfolio with incremental improvements. Another salient characteristic of complementary know-how is that it is fungible, i.e. applicable to many businesses (Anand and Singh, 1997). Thus, an acqui-hired team which has complementary know-how is likely to have the ability to contribute to several of the acquirer's projects, and potentially across multiple business units. For instance, an established technology firm may acqui-hire a design start-up consisting of talented product designers and may utilize the know-how of these product designers in multiple products of its various business units. Similarly, the acqui-hired team may be composed of software engineers specialized on a certain technology that may be applied to various projects carried out in different business units of the acquirer. Accordingly, I argue that when the acquired start-up has complementary know-how, the acquirer is likely to follow a distributed integration approach, i.e. the acquirer will dismantle the team and integrate the team members to various business units. I suggest that the reason for the acquirer to pursue distributed integration is to spread the acquired start-up's know-how throughout the organization and improve its existing solutions via their complementary know-how.

In line with the above discussion, I hypothesize:

Hypothesis 1: When the acquired start-up has disruptive know-how, it is likely that the acqui-hired team will undergo focused integration, i.e. the team will be integrated as a whole into the business unit that may potentially be disrupted.

Founders of the acquired start-ups are most often the key drivers of acqui-hire deals (Chatterji and Patro, 2014). Thus, post-acqui-hire positions of the founders are particularly critical for acquirers to benefit from acqui-hires. I argue that when the

acquired start-up has disruptive know-how, the acquirer is likely to assign the acqui-hired founder to a high status position. The reason is threefold as I elaborate next.

First, by assigning an acqui-hired founder to a high status position the acquirer can alter the existing business unit's leadership structure and remove the obstacles to change. Managers of an existing business unit often do not have the time or energy to explore new opportunities because they are heavily focused on existing projects (March, 1991). Thus, they may fail to recognize potential innovative opportunities. Acquirers can overcome the myopia of existing business unit's managers by assigning an acqui-hired founder who has a new perspective of the technological environment to a high status position within the business unit. Moreover, innovation often have new requirements that may threaten existing routines. Managers of existing business units of an established firm are likely to avoid changing the current operations and routines (Barden, 2012; Teece, 2007). By introducing new executives with different perspectives into an existing business unit, the acquirer may enable the revamping of dysfunctional routines that inhibit innovation. The acqui-hired founders, who have proprietary knowledge in the technological domain that the business unit is working on, are likely to become key influence leaders when assigned to a high status position. Thus, they will be able to accumulate the support needed to implement change (Jansen, 2004). Furthermore, by virtue of their prominent position, they will be capable of seeing technological trends that may affect the acquirer's competitive position in the future and have an effective communication with the rest of the organization, which will lead to higher levels of organizational innovation (Elenkov, Judge and Wright, 2005).

Second, assigning the acqui-hired founder to a high status position is likely to enable the acquirer to harness his/her proprietary know-how inside the firm and to not lose it to a rival. The ability of acqui-hired founders to generate innovative opportunities for the acquirer depends to a large extent on whether they have the necessary power to be influential in decision-making. Prior literature suggests that a higher-ranking position is an indication of authority and power (Boeker and Karichalil, 2002). By assigning an acqui-hired founder who has disruptive know-how to a high status position, the acquirer provides him/her with the necessary authority and power to create and materialize new solutions using his/her proprietary know-how. Moreover, appointment of the founder to a high status position after the acquisition reduces the risk of his/her departure (Cannella and Hambrick, 1993; Ranft and Lord, 2000). Retention of acqui-hired founders is

particularly important when they have disruptive know-how because if they leave, they may join a competitor or launch another start-up and develop solutions that may pose a competitive threat to the acquirer.

Third, the acqui-hired founders are likely to discover and exploit unexpected synergies between their team and the business unit they are integrated into if they are assigned to high status positions following the acquisition (Graebner, 2004). The acqui-hired founders are uniquely qualified to identify opportunities for unexpected resource reconfigurations because of their deep understanding of their own businesses and established relationships with their own employees (Graebner, 2004). The high status position granted to the acqui-hired founder will also expose him/her to the resources and activities of the business unit that his/her team is integrated into and enable him/her to interact with existing employees and managers of the business unit from a position of equal or higher status (Graebner, 2004).

Assigning the acqui-hired founder to a high status position may also lead to adverse consequences. The acquirer's decision of appointing an acqui-hired founder to a high status position rather than promoting someone from within the organization, can create frustration among existing employees and lead to resistance toward the solutions offered by the acqui-hired founder. Yet, when the acqui-hired founder has disruptive know-how, the benefits that are expected to result from his/her appointment to a high status position may outweigh the downsides associated with the decision. Alternatively, when the acqui-hired founder has complementary know-how, the acquirer is likely to assign him/her to a low status position as his/her know-how is not proprietary but rather accessible in the external talent market.

In line with the above discussion, I hypothesize:

Hypothesis 2: When the acquired start-up has disruptive know-how, it is likely that the acqui-hired founder will be assigned to a high status position.

4.3.2 Post-acqui-hire Integration and the Premature Exit of Acqui-hired Founders

I argue that business unit reconfiguration needs of acquirers shape their post-acqui-hire integration decisions. Business unit reconfiguration needs in turn are driven by the need to undergo organizational renewal to be able to respond to the changes in the business environment (Agarwal and Helfat, 2009; Karim and Capron, 2016; Teece, 2007). Thus,

acqui-hires, when integrated effectively, have the potential to enable the business unit reconfiguration that will drive organizational change, catalyze creative action and foster innovation. On the other hand, ineffective integration is likely to lead to a failure in meeting the need for organizational change, thus leading to negative performance outcomes. Accordingly, I argue that post-acqui-hire integration decisions of acquirers' influence performance outcomes of acqui-hires.

Because founders of the acquired start-ups are most often the driving forces behind acqui-hire deals (Chatterji and Patro, 2014; Coyle and Polsky, 2013), our unit of analysis is the acqui-hired founder in investigating the outcomes of post-acqui-hire integration. Following prior research studying the outcomes of acquisitions (Cannella and Hambrick, 1993; Ernst and Vitt, 2000; Ranft and Lord, 2000), I examine the premature exit of the acqui-hired founders as one of the key outcomes that signals the ineffectiveness of post-acqui-hire integration. I define premature exit as the exit of the acqui-hired founder from the acquiring firm within a year after the acquisition. This is a conservative measure of exit because the acqui-hired founders usually have time vested contracts that require them to stay with the acquiring firm for a predetermined period of time which is most commonly three to four years (Coyle and Polsky, 2013). The acqui-hired founder's right to the vested options is contingent upon his/her continued employment by the acquirer until the vesting date. If the acqui-hired founder leaves the acquiring firm before the vesting period ends, he/she forfeits all rights to unvested options. Thus, the exit of the acqui-hired founder from the acquiring firm without even waiting for the vesting period to end can be considered as a signal of ineffective integration since the acquirer was unable to retain the founder with the incentives contractually agreed upon.

I argue that the premature exit of acqui-hired founders depends on the extent of fit between the type of acquired firm's know-how and the post-acqui-hire integration decisions of the acquirer. Specifically, I argue that the lack of fit between disruptive know-how and focused integration is positively related to the premature exit of acqui-hired founders. Start-up founders are talented entrepreneurs who are often unlikely to join an established firm, if not through an acqui-hire (Zenger, 1994). Thus, acquirers need to keep the acqui-hired founders motivated to ensure their retention and continued productivity (Paruchuri et al., 2006; Ranft and Lord, 2000). Retaining these talented individuals is especially critical when they have disruptive know-how, both to prevent competitors' from accessing their know-how and to utilize their proprietary know-how in

developing new solutions. When the acqui-hired founder has disruptive know-how, i.e. proprietary knowledge of a market or a technology, he/she has a higher likelihood of finding alternative job opportunities or building a new start-up. We argue that when integrating a start-up which has disruptive know-how, the aim of the acquirer is to challenge the existing business unit that the acqui-hired team is integrated into and undergo organizational change. The acqui-hired founder had developed a proven team with a coherent way of thinking and he/she may need the team to stay together to be able to challenge the existing business unit in realizing potential innovative opportunities. Moreover, he/she will need to have a critical mass to initiate change in the existing business unit (Jansen, 2004; Nyberg and Ployhart, 2013). If the acquirer follows a distributed integration approach and dismantles a team having disruptive know-how following the acqui-hire, gathering this critical mass will be less likely. Dismantling the team would also mean the elimination of a familiar support system for the acqui-hired founder and cause him/her to face power struggles (Paruchuri et al., 2006). This may create a sense of loss and failure in the acqui-hired founder which may in turn lead to his/her departure. Accordingly, I predict:

Hypothesis 3: The lack of fit between disruptive know-how and focused integration is positively related to the premature exit of acqui-hired founders.

Similarly, I argue that the lack of fit between disruptive know-how and a high status position of the founder is positively related to the premature exit of acqui-hired founders. Acqui-hired founders are most often psychologically attracted by the thrill of start-up (Gimeno, Folta, Cooper, and Woo, 1997) and, hence, are likely to leave and launch another start-up unless they are offered high status positions that enable them to pursue entrepreneurial activities within the acquiring firm. Premature exit of the acqui-hired founder if not assigned to a high status position is more likely when he/she has disruptive know-how because his/her know-how will also be extremely valuable for the competitors. Moreover, to overcome the organizational inertia that is persistent in existing business units of the acquirer and alter the existing routines that inhibit innovation, the acqui-hired founder needs to be assigned to a high status position where he/she has the necessary authority and power to enforce such change (Barden, 2012; Graebner, 2004). Otherwise, resistance from existing employees is likely to impede the acqui-hired founder from materializing the new solutions he/she develops using his/her proprietary know-how and, thus, is likely to lead to his/her departure. Accordingly, I predict:

Hypothesis 4: The lack of fit between disruptive know-how and high status position is positively related to the premature exit of acqui-hired founders.

4.4 Empirical Analysis

4.4.1 Sample and Data

Acqui-hires are the acquisition of technology start-ups by established technology firms primarily to gain access to the start-up's talented human capital (i.e. founders and employees) (Chatterji and Patro, 2014; Coyle and Polsky, 2013). I chose my sample of acquirers from 2005–2015 in the Nasdaq stock exchange listed as belonging to a technology industry. To have a comprehensive dataset, I included all subcategories, which resulted in a total of 663 unique firms, in my initial sample. I then searched each of these 663 firms along with the following keywords: “acqui-hire”, “acqhire”, “talent”, “talent acquisition”, “key employees acquired” in Internet search engines. This exercise produced 49 unique acquiring firms pursuing acqui-hires. Next, I noted all acquisitions of these 49 acquiring firms between 2005 and 2015 using Crunchbase. Crunchbase is a platform for finding business information about public and private companies. It includes information about the founders and team members of companies, investments and funding information, acquisitions, news and industry trends. I used Crunchbase Pro, which includes features like advanced search, to access company, investor and funding data of acquiring firms and acquired start-ups in our sample. The time window starts from 2005 because the term acqui-hire was first used in 2005 to describe Google's acquisition of the two-person social location start-up Dodgeball (Geron, 2016) and ends at 2015 to be able to examine the outcomes of acqui-hires. The 49 acquiring firms had 1636 acquisitions listed in Crunchbase; my next task was to identify the acqui-hires among these 1636 acquisitions.

Two independent reviewers coded the entire sample of 1636 acquisitions to label them as acqui-hires or not. The decision tree used in the coding process is provided in Appendix B. First, the target firm is a technology start-up in the case of acqui-hires (Chatterji and Patro, 2014). While the reviewers considered pre-product, pre-revenue or pre-profit private and incorporated technology-based companies as start-ups, they did not add established private or public technology-based companies to their samples. Second, the reviewers looked at whether the primary motivation of the transaction was to acquire the human capital. For each acquisition, the reviewers searched a wide variety of business

press articles, technology blogs and company press releases at the time of the acquisition to isolate acquisitions in which talent/human capital was reported as the primary motivation for the transaction (See Appendix D). The set of articles and press releases on a particular acquisition was made available to each reviewer so that each could independently assess whether the target was acquired primarily for talent. Third, to complement these sources the reviewers checked whether at least one co-founder and key team members of the acquired start-up were actually hired by the acquirer by using LinkedIn and Crunchbase. Finally, another key characteristic of acqui-hires is that the acquirer has no interest in the acquired firm's product/service. Thus, in most cases the acqui-hired start-up's product/service is discontinued after the acquisition (Chatterji and Patro, 2014). In the rare case that the product of the acquired start-up is not shut down immediately after the acquisition, the acquirer lets the product live on for a while for existing users without accepting new customers or making additional investment. Alternatively, the product of the acquired start-up may be offered free or open-source by the acquirer, again showing that the acquirer has no interest in the product itself. Thus, the reviewers finally examined what happened to the product/service of the acquired start-up following the acquisition by relying on business press articles, technology blogs and company press releases.

There was 93% agreement between the reviewers ($p < 0.01$). The acquisitions that were coded as acqui-hires by both reviewers were included in the final sample. The resulting acqui-hire dataset had 30 unique acquirers and 264 acqui-hires. Data availability reduced our final sample size to 29 unique acquirers and 250 acqui-hires.

4.4.2 Variable Definitions and Measures

Dependent Variables

In my first set of hypotheses, I examine two dependent variables - the focused integration of the acqui-hired team as well as the high status position of the acqui-hired founder. I used Crunchbase and LinkedIn to track the acqui-hired talent.

First, I identified the team members of the target firm from Crunchbase. Crunchbase sources their data in four ways: the venture program, machine learning, an in-house data team, and the Crunchbase Community. Crunchbase's data analysts provide manual data validation, and further, machine learning algorithms validate data accuracy.

Although all members of the acqui-hire team may not be listed, key team members are listed on Crunchbase. Next, I checked the LinkedIn accounts of those employees to identify, post-acqui-hire, their new positions and the business units in which they work in the acquiring firm. Of the 574 founding team members of acquired firms, 95% (545) were found on LinkedIn.

Next, I examined press releases, business press articles and technology blogs to obtain information on the integration of the target firm's team after the acquisition. Such announcements often contain a statement about whether the target firm would be moved into a specific business unit of the acquiring firm such as "the team will be joining [acquirer]'s division" or "[acquirer] acqui-hired the team from [target] to work on / boost its division" (See Appendix E). If an explicit mention was made of moving the target firm's team as a whole into a specific business unit of the acquirer immediately after the acquisition and the LinkedIn accounts of the target firm's employees confirmed this transition, I recorded this as instance of focused integration, or else it was considered a distributed integration.

For acqui-hired founder's position post-acqui-hire, I looked at the positions of the co-founders of the target firm at the acquiring firm. In 80% (200) of the acqui-hires in the sample, the acquired start-up had more than one founder. The number of co-founders the target firm had ranged between 1 to 6, with the average number of co-founders being 2.3. Following an acqui-hire, the acquirer may assign the acquired founders to a high status position or not. High status positions can include both managerial/executive positions (e.g., vice president) as well as non-managerial senior level positions (e.g., senior research scientist). Acqui-hired founder's position was measured as a binary variable and coded as 1 when all co-founders of the target firm were assigned to a high status position following the acquisition and 0 otherwise.¹ We obtained the information on founders' positions after the acquisition from the LinkedIn accounts of the target firms' founders.

To test the robustness of our findings, we also used a continuous variable, i.e. degree of distribution, as the dependent variable in examining the relationship between disruptive know-how and focused integration. In cases of focused integration, degree of

¹ As a robustness check I also used two other variables for the high status position of acqui-hired founders. First one was a binary variable which was coded as 1 when at least one co-founder of the target firm was assigned to a high status position and 0 otherwise. The second was a continuous variable, from 0 to 1, measured as the ratio of co-founders who were assigned to high status positions.

distribution took the value of 1, indicating that the acquired team is integrated into a single business unit. In cases of distributed integration, on the other hand, I identified the number of business units that the acquired firm's team members were integrated into from the LinkedIn accounts of the team members of the acquired firm that I was able to find on LinkedIn. Thus, degree of distribution was measured as the number of business units that the acquired firm's team members were integrated into.

In my second set of hypotheses the dependent variable examined is the outcome of post-acqui-hire integration as premature exit of the acqui-hired founders. I define premature exit as the exit of the acqui-hired founders from the acquiring firm within a year after the acquisition. I relied on the LinkedIn accounts of the target firms' founders to record premature exit. Premature exit was measured as a binary variable and coded as 1 when one or more co-founders of the target firm exit the acquiring firm within a year after the acquisition and 0 otherwise.

Independent Variables

The independent variable in examining the antecedents of post-acqui-hire integration is disruptive know-how. Because there exists no common measure of the disruptiveness of a firm's know-how, I took the following approach to determine whether the target firm's know-how was disruptive or not to an acquirer's technology or business model in one of its main lines of business. Prior literature has highlighted the key characteristics of disruptive technologies as (1) serving a niche segment rather than the mainstream market in their early development and (2) introducing a different set of features and performance attributes relative to existing solutions (Adner, 2002; Christensen, 1997; Govindarajan and Kopalle, 2006). In the case of acqui-hires, the target firm is a start-up (i.e. a young firm with few employees as compared to an established larger firm) that does not serve a large customer base but rather a niche customer segment, thus satisfying the first condition stated in prior literature. However, the acqui-hire target's technology solution may be either (a) novel with the potential to lead to breakthrough developments and challenge existing solutions or (b) a solution that leads to incremental development and improvements on the existing solutions.

To assess whether the acqui-hired know-how was disruptive or not, two independent reviewers coded the entire sample of 250 acqui-hires. The decision tree used in the coding process is provided in Appendix C. For each acqui-hire, the reviewers first

identified the acquirer's main lines of business through its annual report at the year of the acquisition. The reviewers then relied on business press articles from sources such as The Wall Street Journal, The New York Times, The Guardian, Forbes and news on technology blogs such as TechCrunch, VentureBeat, GigaOM, ZDNet, Mashable, Business Insider to determine whether or not the target firm's know-how has the potential to disrupt the acquirer in one of its main lines of business. The set of articles on a particular acquisition was made available to each reviewer so that each could independently assess whether the target firm's know-how was disruptive to acquirer's current technology or business model in one of its main lines of business. Disruptive know-how was measured as a binary variable, coded as 1 when a target firm was identified by the business and technology press as offering a novel solution that addresses the needs of a niche customer segment in one of acquirer's main lines of business and 0 otherwise. There was 92% agreement between reviewers ($p < 0.01$). Target firm's know-how was coded as disruptive only when both reviewers coded a target firm's know-how as disruptive.

The two independent variables in examining the outcomes of post-acqui-hire integration (i.e., premature founder exit) are (a) the lack of fit between disruptive know-how and focused integration and (b) the lack of fit between disruptive know-how and high status position of the founder. I adopt Venkatraman's (1989) "fit-as-matching" approach to examine the influence of the lack of fit between the type of acquired start-ups' know-how and post-acqui-hire integration decisions of acquirers on the premature exit of acqui-hired founders from the acquiring firms. Under the fit-as-matching perspective, fit is a theoretically defined match between two related variables, without reference to a criterion variable (Venkatraman, 1989). I follow Dewar and Werbel's (1979) approach in operationalizing the notion of fit. In this method, the residuals from the regression of one variable on the other are used to reflect fit, which can then be used to examine the criterion variable. I regress disruptive know-how on focused integration, and also on high status position of the founder. I then calculate the residuals of each of these regressions. I use the absolute values of the residuals to indicate the lack of fit between disruptive know-how and focused integration and the lack of fit between disruptive know-how and high status position of the founder.

Control Variables

When examining my first set of hypotheses about acqui-hire integration, I controlled for several acquiring and target firm characteristics that could possibly influence the decisions regarding the integration of the target firm's team and position of the target firm's founder/s following the acquisition. First, I controlled for the *size of acquirers*, measured as the log of the number of acquiring firm employees at the time of the acquisition. Age and size of target firms, as well as the size of acquirers, may influence acquirers' decisions regarding post-acquisition integration (Pablo, 1994; Puranam et al., 2009). Thus, I controlled for the target firm age and size. *Target firm age* was measured as the number of months from the launch of the target firm to acquisition. For the size of the target firm, I was not able to obtain the exact number of employees at the time of the acquisition for all target firms but I obtained information regarding whether the target firm had 1-10, 11-50 or 51-200 employees from Crunchbase and LinkedIn. Thus, I created three dummy variables as small, medium and large for target firm size. *Small target* was coded as 1 if the target firm had 1-10 employees and 0 otherwise. *Medium target* was coded as 1 if the target firm had 11-50 employees and 0 otherwise. *Large target* was coded as 1 if the target firm had 51-200 employees and 0 otherwise. None of the target firms in our sample had more than 200 employees. I also controlled for the *target firm founding team size*, measured as the number of co-founders in a target firm. I controlled for the *target firm funding round*, i.e. the number of rounds in which the target firm had raised capital, as this might indicate the performance of the target firm. Investment in start-ups is made in a series of rounds. Typically, the start-up first raises capital to launch the enterprise in what is called a seed round. Then, if the company shows promise, it may raise additional funds in subsequent rounds of financing (Coyle and Polsky, 2013). Thus, the number of rounds the target firm raised capital is an indicator of its prior performance and may influence the acquirer's post-acquisition integration decisions.

Recent research highlights that acqui-hiring is most frequently employed by high-technology firms mainly based in Silicon Valley (Chatterji and Patro, 2014; Coyle and Polsky, 2013). However, there are a few non-US acquirers in our sample and these firms may have different post-acquisition integration approaches than their US counterparts. Moreover, US-based acquirers occasionally acquire start-ups located in countries other than US, which may affect the acquirer's post-acquisition integration decisions. Thus, the

acqui-hires in the sample was classified as a *US transaction* and coded as 1 if both the acquirer and the target firm were based in the United States and 0 otherwise. I also controlled for the *prior acqui-hire experience of the acquirer*. Prior experience may enhance the competence of the acquirers to manage acqui-hires and thus affect their post-acquisition integration decisions (Puranam et al., 2009). Prior acqui-hire experience was measured as a count of acqui-hires conducted by the acquirer three years prior to the focal acqui-hire. Moreover, I controlled for the *team skill heterogeneity of the target firm*. In acqui-hires, target firm employees may have heterogeneous skills that may necessitate that they stay as a team to complement one another or the team's skills may be rather homogeneous, e.g. a design start-up composed of all product designers. I identified target firm employees' roles in the target firm through their LinkedIn accounts and Crunchbase. Thinking team skill heterogeneity as a Herfindahl concentration of roles (Weinstock, 1982), I coded team skill heterogeneity as 1 if it was less concentrated to a similar role indicating that the team members had heterogeneous skills that complemented one another and 0 otherwise.

I also controlled for the target firm's *founders' established firm experience*. The acqui-hired founders may be entrepreneurs who have never worked in an established firm or they may have prior experience in the acquirer or another established firm. Whether the founders have experience in an established firm or not may influence acquirers' post-acquisition integration decisions. I coded founders' established firm experience as 1 when one or more co-founders of the target firm had prior experience in an established firm and 0 otherwise. Finally, I controlled for the target firm's *founders' start-up founding experience*. Experienced entrepreneurs may be psychologically attracted by the thrill of start-up (Gimeno et al., 1997) and, hence, may have a tendency to leave the acquirer and launch another start-up. This could potentially confound the effect of know-how type on the acquirers' post-acquisition integration decisions, unless controlled for. I obtained information regarding the number of start-ups founded by target firm's founders from the founders' LinkedIn accounts. Prior start-up experience was measured as a count of start-ups founded by the target firm's founders prior to the focal start-up. I also added year dummies in our models. While the results did not change significantly when the year dummies are included, chi-squared tests indicated that models without year dummies provided a better fit. Thus, I do not report the results of the models including year dummies.

For my second set of hypotheses about the outcomes of post-acqui-hire integration, I controlled for several factors that may influence the dependent variable. First, I controlled for personal factors that could affect the premature exit of acquired founders: target firm's *founders' established firm experience* and target firm's *founders' start-up founding experience*. I also controlled for *target firm founding team size* and *target firm funding round*. I additionally controlled for the *size of the acquirer* as it may affect the exit decisions of the acquired founders (Bergh, 2001; Hambrick and Cannella, 1993).

4.4.3 Methods

Acqui-hire Integration

For my first set of hypotheses examining post-acqui-hire integration, the dependent variables (i.e., focused integration, high status position of acquired founder) are dichotomous. Thus, my primary estimation approach was to use logistic regression models for panel data. Following prior research (Puranam et al., 2009) I report three alternate logit estimations: fixed effects logit, random effects logit and simple logit with standard errors clustered by acquirer. The fixed effects or conditional logit model potentially imposes the most powerful control on unobserved heterogeneity and is ideally suited for studying heterogeneous decision making (Greene, 2000). However, the fixed effects model calculates the likelihood of an event occurring for the acquirer given the actual number of events occurred for the acquirer. This means that acquirers that show no variance in their integration decisions across targets will not contribute anything to the model and will therefore be omitted. Thus, the fixed effects model reduces the sample size. As can be seen from Table 4.2 and Table 4.3, 225 and 204 observations are used respectively in the fixed effects models for focused integration and high status position of the founder. The random effects model, on the other hand, is more efficient in the usage of data; however, it assumes the unobserved variables to be uncorrelated with all the observed variables (Allison, 2009). I therefore estimated both the random effects and fixed effects models. I also estimated a simple logit model with standard errors clustered by acquirer. I report the results of all three logit models.

In case the dependent variables have an effect on one another, I also estimated a bivariate probit model, which is a joint model for two binary outcomes. I report the results of the bivariate probit models in my analyses. However, the likelihood ratio test at the

end of the bivariate probit regressions indicated that it is appropriate to estimate two separate models. This is not surprising, given the insignificant correlation (0.044) between the dependent variables.

Finally, I estimated a Heckman sample selection model to account for sample selection bias. Because the firms in our sample have strategically chosen to acqui-hire start-ups, there can be a sample selection bias or sample-induced endogeneity issue (Bascle, 2008). Acquirers that choose to conduct acqui-hires might differ systematically from acquirers that do not conduct acqui-hires. If these systematic differences also affect acquirers' post-acquisition integration decisions, then our results may suffer from sample selection bias. Thus, I estimated the two-stage Heckman sample selection model as a robustness check. Heckman proposes a two-stage approach: in the first stage, the probability of selection is estimated; in the second stage the selection parameter (LAMBDA or inverse Mills Ratio) is entered into the regression to account for potential sample selection bias (Certo, Busenbark, Woo and Semadeni, 2016). Heckman models include at least one variable in the first stage that does not appear in the second stage. These variables, known as exclusion restrictions (Bascle, 2008; Certo et al., 2016), influence the probability of an observation appearing in the sample, i.e. they predict the likelihood to acqui-hire, but do not influence the ultimate variable of interest in the second stage, i.e. they do not predict the integration decision.

I used the 'heckprob' command in Stata 15 as the dependent variables are dichotomous. In the first stage, the probability of acqui-hiring is estimated; followed by the second-stage estimation of the post-acquisition integration decisions, i.e. focused integration and high status position of the founder. The selection model included all 663 firms listed in Nasdaq under technology industry. Data availability reduced this number to 611 firms. Acqui-hire is a novel acquisition type that emerged from and primarily seen in Silicon Valley (Chatterji and Patro, 2014; Coyle and Polsky, 2013). Thus, I included whether the *acquiring firm is US-based* in the selection model. Extant research highlights that prior acquisition experience increases the likelihood of conducting additional acquisitions (Arikan and McGahan, 2010; Haleblian, Kim, and Rajagopalan, 2006). I thus included *acquisition experience* of the acquiring firm, i.e. the total number of acquiring firms' acquisitions during the study period, in the selection model. I also expect that if a firm is backed by a venture capital (VC) firm, the probability of engaging in acqui-hire activity also increases (Arikan and Capron, 2010; Hsu, 2006). Thus, I added a dummy

variable for *VC backing*, which takes the value of 1 if the firm is backed by a venture capital firm and 0 otherwise. Finally, I included the *acquiring firms' age* measured as the number of years from founding to the end of the study period, in the selection model. I report the results of the Heckman two-stage sample selection model. The Wald tests of independent equations (i.e., $\rho=0$) show that the null hypothesis that $\rho=0$ was rejected at $p=0.041$ and $p=0.002$ when the dependent variable is focused integration and high status position, respectively, suggesting that the use of the Heckman selection model was justified.

As a robustness check, I also examined the effect of disruptive know-how on degree of distribution. Since degree of distribution is a continuous variable, I used regression models for panel data. I report three alternate estimations: random effects regression, fixed effects regression and simple regression with standard errors clustered by acquirer. I also estimated a Heckman sample selection model to account for sample selection bias. I report the results of the Heckman two-stage sample selection model. However, I fail to reject independence when the dependent variable is degree of distribution. Thus, in this case I determine that there is no statistically significant source of bias due to sample selection of firms that have conducted acqui-hire deals. The results of Models 2, 3 and 4 presented in Table 4.4, are robust to sample selection bias.

Acqui-Hire Integration Outcome

For my second set of hypotheses which examine the outcomes of post-acqui-hire integration (i.e., premature exit of acqui-hired founders), I adopt Venkatraman's (1989) "fit-as-matching" approach. Initially established when testing contingency theories (Govindarajan, 1988; Jennings and Seaman, 1994), this methodology analyzes how the fit between two variables may predict a third variable (Dewar and Werbel, 1979). Venkatraman (1989) identifies six different fit perspectives: moderation, mediation, matching, gestalts, profile deviation and covariation. The fit-as-matching perspective is suitable for strategy concepts in which fit is a theoretically defined match between two related variables. The measure of fit between two variables is developed independent of any external performance criterion, and the influence of fit on a set of criterion variables can be subsequently examined (Venkatraman, 1989). More recently, this methodology has been used to assess the effect of exploratory and exploitative activities on firm performance (Cao, Gedajlovic, and Zhang, 2009; He and Wong, 2004), the impact of

human resource management practices on turnover, productivity and financial performance (Huselid, 1995), and the effect of resource ambidexterity achieved through alliance portfolios on firm performance (Wassmer, Li, and Madhok, 2017) in the strategy literature.

In my second set of analyses, the independent variables are the lack of fit between disruptive know-how and focused integration for Hypothesis 3, and the lack of fit between disruptive know-how and high status position of the founder for Hypothesis 4. I examine the relationship of these fit variables with the premature exit of acqui-hired founders, which is a binary variable, by using logistic regression with standard errors clustered by acquirer.

4.5 Results

4.5.1 Acqui-hire Integration

Table 4.1 reports summary statistics and correlation coefficients of the variables used in examining the antecedents of post-acqui-hire integration. The highest correlation between two variables is -0.279 ($p=0.000$); also, the highest Variance Inflation Factor for our variables is 1.31, well below the suggested max threshold of 10 (Cohen, Cohen, West and Aiken, 2002; Kutner, Nachtsheim, and Neter, 2004). Thus, multicollinearity is not a major concern in my models. The correlations between focused integration and disruptive know-how, and high status position and disruptive know-how are significant and in the predicted positive direction. However, it should be noted that these variables are dichotomous. The correlation between degree of distribution and disruptive know-how is also significant and in the predicted negative direction.

Target age, target size, target founding team size, target team skill heterogeneity, acquirer's acqui-hire experience and founder's start-up experience are associated with focused integration. While target age, target size, target founding team size and acquirer's acqui-hire experience are associated with the high status position given to the acqui-hired founder following the acquisition. Moreover, target age, target size and target team skill heterogeneity are associated with the degree of distribution.

Table 4.1: Descriptive statistics and correlations for the analysis of antecedents of post-acqui-hire integration.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.Focused integration	1														
2.High status position	0.044	1													
3.Degreee of distribution	-0.822	0.044	1												
4.Disruptive know-how	0.213	0.142	-0.148	1											
5.Log (acquirer employees)	-0.045	0.001	-0.001	0.007	1										
6.Acquirer acqui-hire experience	0.129	-0.160	-0.061	0.079	0.255	1									
7.Target age	-0.148	0.168	0.242	-0.075	0.188	0.017	1								
8.Target funding round	-0.102	0.036	0.044	0.060	0.118	0.074	0.046	1							
9.Target founding team size	-0.122	-0.148	0.076	0.066	0.030	0.045	-0.102	0.181	1						
10.Target size small	0.169	-0.183	-0.192	-0.012	-0.165	0.003	-0.267	-0.260	-0.026	1					
11.Target size large	-0.116	0.139	0.243	-0.003	0.113	-0.068	0.252	0.205	0.077	-0.267	1				
12.Target team skill heterogeneity	-0.146	0.060	0.140	0.004	-0.006	0.066	0.069	0.204	0.144	-0.302	0.113	1			
13.Founder large firm experience	0.009	0.029	-0.035	0.020	-0.039	0.088	-0.279	0.118	0.270	0.012	-0.002	0.194	1		
14.Founder start-up experience	-0.134	-0.004	0.065	-0.007	0.038	-0.002	-0.057	0.190	0.100	-0.104	-0.059	0.172	-0.049	1	
15.US transaction	-0.009	0.060	0.011	0.047	-0.152	0.047	-0.163	0.170	-0.078	0.087	0.042	0.0300	0.208	0.106	1
Mean	0.772	0.408	1.412	0.188	9.201	9.980	40.244	1.104	2.296	0.608	0.044	0.784	0.640	0.868	0.836
S.D	0.420	0.493	0.924	0.391	1.681	9.081	35.294	1.224	0.949	0.490	0.206	0.412	0.481	1.180	0.371

N=250 Coefficients greater than 0.128 are significant at p<0.05 level or lower.

I first examine the relationship between the type of acqui-hire know-how (as disruptive or complementary) and post-acqui-hire integration (of focused integration). Recall that Hypothesis 1 predicts a positive relationship between disruptive know-how and focused integration. I present the results in Table 4.2. Model 1 is the random effects model with only control variables: characteristics of the target firm such as its age, size, founding team size, funding round, team skill heterogeneity, founders' prior established firm experience and start-up experience; the size of the acquirer and its acqui-hire experience; whether both the acquirer and the target are US-based firms or not. The only variable that is significant in this model is target age, which has a negative coefficient. Other controls are not significant. When I add disruptive know-how in Model 2, its coefficient is positive and significant ($\beta=2.447$, $p=0.002$), in support of Hypothesis 1. The full model has a Wald chi squared of 26.14 ($p=0.010$). Models 3 and 4 replicate the specifications but with a conditional fixed effects model and simple logit model with clustered standard errors, respectively. Model 5 presents the results obtained from the 2nd stage Heckman model; the coefficient estimate for disruptive know-how is positive and

significant ($\beta=1.212$, $p=0.001$). Results of the first stage selection equation of the Heckman model are reported separately in Table 4.3, Model 1. Finally, Model 6 of Table 4.2 presents the results obtained from the bivariate probit model. Using Model 5 as our main findings, the coefficient magnitude implies that when an acqui-hire's know-how is disruptive, the acquirer is 2.36 times more likely to pursue focused integration. Across all models, even with different sample sizes and model assumptions, the results provide strong and consistent support for Hypothesis 1.

Table 4.2: Logit and probit models on focused integration.

	LOGIT MODELS				PROBIT MODELS	
	(1) Random effects	(2) Random effects	(3) Fixed effects	(4) Simple logit	(5) Heckman	(6) Bivariate probit
VARIABLES						
Disruptive know-how		2.447 (0.792) [0.002]	2.404 (0.840) [0.004]	2.440 (0.892) [0.006]	1.212 (0.357) [0.001]	1.207 (0.362) [0.001]
Log (acquirer employees)	-0.029 (0.117) [0.802]	0.009 (0.116) [0.935]	-0.485 (0.410) [0.236]	-0.003 (0.117) [0.978]	-0.046 (0.063) [0.462]	-0.015 (0.060) [0.809]
Acquirer acqui-hire experience	0.037 (0.023) [0.107]	0.037 (0.022) [0.094]	0.027 (0.032) [0.405]	0.040 (0.017) [0.022]	0.014 (0.012) [0.271]	0.025 (0.012) [0.032]
Target age	-0.009 (0.005) [0.055]	-0.009 (0.005) [0.059]	-0.011 (0.005) [0.039]	-0.009 (0.006) [0.113]	-0.005 (0.003) [0.079]	-0.005 (0.003) [0.060]
Target funding round	-0.049 (0.136) [0.721]	-0.101 (0.142) [0.474]	-0.182 (0.167) [0.276]	-0.098 (0.093) [0.291]	-0.059 (0.081) [0.472]	-0.058 (0.082) [0.477]
Target founding team size	-0.300 (0.183) [0.101]	-0.360 (0.191) [0.059]	-0.343 (0.215) [0.111]	-0.361 (0.229) [0.115]	-0.166 (0.105) [0.114]	-0.196 (0.105) [0.063]
Target size small	0.450 (0.367) [0.220]	0.588 (0.380) [0.122]	0.655 (0.439) [0.136]	0.567 (0.456) [0.214]	0.248 (0.210) [0.238]	0.295 (0.214) [0.167]
Target size large	-0.056 (0.759) [0.941]	-0.109 (0.785) [0.890]	0.536 (0.954) [0.575]	-0.172 (0.707) [0.808]	-0.096 (0.448) [0.830]	-0.093 (0.458) [0.840]
Target team skill heterogeneity	-0.703 (0.514)	-0.692 (0.522)	-0.634 (0.566)	-0.670 (0.373)	-0.439 (0.280)	-0.395 (0.283)

	[0.171]	[0.185]	[0.263]	[0.072]	[0.117]	[0.163]
Founder large firm experience	0.103	0.082	0.130	0.033	0.078	0.006
	(0.393)	(0.406)	(0.435)	(0.540)	(0.228)	(0.227)
	[0.793]	[0.840]	[0.765]	[0.951]	[0.731]	[0.980]
Founder start-up experience	-0.176	-0.205	-0.088	-0.217	-0.105	-0.111
	(0.136)	(0.141)	(0.158)	(0.136)	(0.079)	(0.080)
	[0.193]	[0.146]	[0.578]	[0.110]	[0.182]	[0.166]
US transaction	-0.333	-0.509	-0.764	-0.508	-0.439	-0.305
	(0.483)	(0.493)	(0.648)	(0.400)	(0.293)	(0.287)
	[0.491]	[0.303]	[0.238]	[0.205]	[0.134]	[0.287]
Constant	3.021	2.738	n.a.	2.852	2.334	1.776
	-1.332	-1.318	n.a.	-1.384	(0.765)	(0.724)
	[0.023]	[0.038]	n.a.	[0.039]	[0.002]	[0.014]
n	250	250	225	250	250	250
Wald Chi ²	19.59	26.14	32.19	47.31	29.45	66.30
p>Chi ²	0.051	0.010	0.001	0.000	0.003	0.000
Log likelihood	-121.34	-113.18	-73.16	-113.36	-230.62	-262.81

Standard errors are in parentheses; p values are in brackets.

Table 4.3 presents the results from the first stage selection equations of the Heckman models for focused integration, high status position and degree of distribution, respectively. As expected, when a firm is backed by a venture capital firm, the probability of conducting an acqui-hire increases. Also, the greater the past acquisition experience, the more likely it is that the firm will pursue an acqui-hire. Finally, acquirer's age has a negative and significant impact on the probability of conducting an acqui-hire. The older the acquiring firm, the less likely it is that the firm will pursue an acqui-hire.

Table 4.3: First stage of Heckman selection models.

VARIABLES	Likelihood of Acqui-hiring		
	(1) Focused Integration	(2) High Status Position	(3) Degree of Distribution
US based	-0.084 (0.256)	-0.098 (0.254)	-0.105 (0.256)

	[0.743]	[0.701]	[0.682]
Venture capital backed	1.303	1.315	1.316
	(0.236)	(0.236)	(0.239)
	[0.000]	[0.000]	[0.000]
Age	-0.008	-0.009	-0.008
	(0.004)	(0.004)	(0.004)
	[0.069]	[0.044]	[0.059]
Acquisition experience	0.078	0.078	0.078
	(0.006)	(0.006)	(0.006)
	[0.000]	[0.000]	[0.000]
Constant	-2.619	-2.611	-2.605
	(0.348)	(0.348)	(0.349)
	[0.000]	[0.000]	[0.000]
	-0.493	0.615	0.169
athrho	(0.266)	(0.213)	(0.169)
	[0.064]	[0.004]	[0.318]
	-0.457	0.547	0.167
rho	(0.210)	(0.149)	(0.164)

Standard errors are in parentheses; p values are in brackets.

As a robustness check for Hypothesis 1, I explored whether the results change when the dependent variable is the 'degree of distribution.' Table 4.4 shows the results for this robustness analysis in which the dependent variable is the construct 'degree of distribution', a continuous variable, using random effects regression, fixed effects regression, simple regression with clustered standard errors and Heckman selection models. In Model 1 of Table 4.4, only the control variables are included. The variables that are significant in this case are target age and target size. In Model 2 of Table 4.4, I enter disruptive know-how. This model shows the results obtained from random effects regression. The coefficient of disruptive know-how is negative and significant ($\beta=-0.323$, $p=0.024$). Hypothesis 1 predicts a positive relationship between disruptive know-how and focused integration. Accordingly, I predict a negative relationship between disruptive know-how and degree of distribution. The full model has a Wald chi squared of 40.93 ($p=0.000$). Models 3 and 4 replicate the specification in Model 2 with a fixed effects regression and simple regression model with clustered standard errors, respectively. Model 5 presents the results obtained from the 2nd stage Heckman model. Results of the first stage selection equation of the Heckman model are reported separately in Table 4.3, Model 3. The results in Table 4.4 remain consistent with those of Table 4.2; across all

models acqui-hire disruptive know-how is negatively related (since this time I have reverse coded for distribution) to the degree of distribution.

Table 4.4: Regression models on degree of distribution.

VARIABLES	REGRESSION MODELS				
	(1) Random effects	(2) Random effects	(3) Fixed effects	(4) Simple regression	(5) Heckman
Disruptive know-how		-0.323 (0.143) [0.024]	-0.310 (0.153) [0.043]	-0.323 (0.159) [0.052]	-0.325 (0.139) [0.019]
Log (acquirer employees)	-0.028 (0.036) [0.434]	-0.028 (0.036) [0.427]	0.021 (0.103) [0.837]	-0.028 (0.039) [0.470]	-0.020 (0.036) [0.577]
Acquirer acqui-hire experience	-0.005 (0.006) [0.484]	-0.003 (0.006) [0.591]	-0.001 (0.009) [0.946]	-0.003 (0.006) [0.555]	-0.000 (0.007) [0.962]
Target age	0.005 (0.002) [0.004]	0.005 (0.002) [0.006]	0.005 (0.002) [0.008]	0.005 (0.002) [0.033]	0.005 (0.002) [0.0059]
Target funding round	-0.049 (0.051) [0.338]	-0.044 (0.050) [0.383]	-0.029 (0.055) [0.605]	-0.044 (0.049) [0.374]	-0.043 (0.049) [0.382]
Target founding team size	0.084 (0.064) [0.186]	0.093 (0.063) [0.143]	0.070 (0.068) [0.301]	0.093 (0.067) [0.176]	0.083 (0.062) [0.181]
Target size small	-0.173 (0.131) [0.184]	-0.182 (0.130) [0.160]	-0.196 (0.142) [0.167]	-0.182 (0.145) [0.221]	-0.163 (0.127) [0.1999]
Target size large	0.767 (0.297) [0.010]	0.766 (0.295) [0.009]	0.657 (0.334) [0.051]	0.766 (0.611) [0.220]	0.768 (0.286) [0.007]
Target team skill heterogeneity	0.162 (0.149) [0.277]	0.159 (0.148) [0.283]	0.136 (0.158) [0.390]	0.159 (0.102) [0.232]	0.170 (0.144) [0.240]
Founder large firm experience	-0.026 (0.132) [0.845]	-0.037 (0.131) [0.779]	-0.085 (0.139) [0.543]	-0.037 (0.163) [0.823]	-0.052 (0.128) [0.686]
Founder start-up experience	0.050 (0.050) [0.320]	0.046 (0.050) [0.354]	0.014 (0.053) [0.795]	0.046 (0.049) [0.356]	0.043 (0.048) [0.380]
US transaction	0.123	0.138	0.214	0.138	0.167

	(0.164)	(0.163)	(0.191)	(0.152)	(0.161)
	[0.453]	[398]	[0.265]	[0.372]	[0.299]
Constant	1.181	1.227	0.787	1.227	1.075
	(0.431)	(0.428)	(0.983)	(0.464)	(0.443)
	[0.006]	[0.004]	[0.424]	[0.013]	[0.015]
n	250	250	250	250	250
Wald Chi ²	35.25	40.93			41.10
p>Chi ²	0.000	0.000			0.000
F			2.53	7.84	
p>F			0.004	0.000	
Log likelihood					-432.96

Standard errors are in parentheses; p values are in brackets.

The findings in Table 4.2 and Table 4.4 provide strong support for my expectations that acquirers pursue focused integration of acqui-hires when the know-how of the acquired start-up is disruptive. These findings are aligned with a dynamic capabilities perspective that views acquisitions and acqui-hires as mechanisms for reconfiguration to create new opportunities at the acquiring firm. It is by keeping the acqui-hired team together that the acquirer can harness the acqui-hired team's know-how and pursue the acqui-hired technological developments and solutions. By keeping the team together, the employees' embedded routines, ways of working, and complementarities are all preserved, and can be used by the acquirer to pursue the disruptive technology or business model. Preserving the acqui-hired team in a business unit also gives them some critical mass for initiating change and pursuing disruptive ideas that may not have the support of the majority within the business unit.

Next, I examine Hypothesis 2 which predicts a positive relationship between disruptive know-how and high status position of the acqui-hired founder. I present the results in Table 4.5. Similar to the analysis above, Model 1 is the random effects model with only control variables. The variables that are significant in this case are acquirer's acqui-hire experience, target age, target size and target founding team size. When I add disruptive know-how in Model 2, the estimated coefficient is positive and significant ($\beta=1.084$, $p=0.013$), in support of Hypothesis 2. The full model has a Wald chi squared of 28.50 ($p=0.005$). Models 3 and 4 replicate the specifications but with a conditional fixed effects model and simple logit model with clustered standard errors, respectively. Model 5 presents the results obtained from the 2nd stage Heckman model; the coefficient

estimate for disruptive know-how is positive and significant ($\beta=0.586$, $p=0.007$). Results of the first stage selection equation of the Heckman model are reported separately in Table 4.3, Model 2. Finally, Model 6 presents the results obtained from the bivariate probit model. Using Model 5 as our main findings, the coefficient magnitude implies that when an acqui-hire's know-how is disruptive, the acquirer is 0.79 times more likely to appoint the acqui-hired founder to a high status position. Across all models, even with different sample sizes and model assumptions, the results provide strong and consistent support for Hypothesis 2.²

Table 4.5: Logit and probit models on high status position of the founder.

	LOGIT MODELS				PROBIT	
	(1) Random effects	(2) Random effects	(3) Fixed effects	(4) Simple logit	(5) Heckman	(6) Bivariate probit
VARIABLES						
Disruptive know-how		1.084 (0.436) [0.013]	1.087 (0.447) [0.015]	1.030 (0.259) [0.000]	0.586 (0.217) [0.007]	0.602 (0.218) [0.006]
Log (acquirer employees)	0.027 (0.153) [0.858]	0.047 (0.156) [0.766]	0.109 (0.315) [0.729]	0.016 (0.178) [0.928]	0.041 (0.055) [0.452]	0.011 (0.054) [0.843]
Acquirer acqui-hire experience	-0.049 (0.023) [0.032]	-0.049 (0.023) [0.035]	-0.030 (0.027) [0.264]	-0.050 (0.045) [0.269]	-0.015 (0.010) [0.148]	-0.028 (0.009) [0.005]
Target age	0.012 (0.006) [0.032]	0.013 (0.006) [0.021]	0.013 (0.006) [0.031]	0.011 (0.005) [0.034]	0.006 (0.003) [0.021]	0.007 (0.003) [0.019]
Target funding round	-0.110 (0.149) [0.460]	-0.130 (0.155) [0.402]	-0.154 (0.160) [0.335]	-0.045 (0.170) [0.791]	-0.010 (0.076) [0.891]	-0.016 (0.077) [0.839]
Target founding team size	-0.550 (0.188) [0.003]	-0.586 (0.191) [0.002]	-0.596 (0.195) [0.002]	-0.455 (0.174) [0.009]	-0.288 (0.094) [0.002]	-0.256 (0.096) [0.008]
Target size small	-0.673 (0.372)	-0.686 (0.379)	-0.460 (0.396)	-0.634 (0.350)	-0.295 (0.189)	-0.362 (0.193)

² As a robustness check, I repeat all logit and probit models for the dependent variable “at least one co-founder is given a high status position”, which is a binary variable. I also estimate random effects regression, fixed effects regression, simple regression with clustered standard errors and heckman sample selection models for the dependent variable “ratio of co-founders given high status position”, which is a continuous variable. The coefficient estimate for disruptive know-how is positive and significant across all models.

	[0.070]	[0.070]	[0.245]	[0.070]	[0.119]	[0.061]
Target size large	0.986	1.034	1.174	0.794	0.478	0.467
	(0.916)	(0.923)	(0.926)	(0.778)	(0.451)	(0.470)
	[0.282]	[0.262]	[0.205]	[0.307]	[0.289]	[0.321]
Target team skill heterogeneity	0.166	0.108	0.053	0.074	0.084	0.071
	(0.434)	(0.435)	(0.436)	(0.323)	(0.226)	(0.229)
	[0.702]	[0.805]	[0.904]	[0.819]	[0.712]	[0.758]
Founder large firm experience	0.422	0.477	0.270	0.628	0.308	0.369
	(0.386)	(0.394)	(0.399)	(0.358)	(0.197)	(0.201)
	[0.274]	[0.226]	[0.499]	[0.080]	[0.118]	[0.066]
Founder start-up experience	0.003	0.023	0.023	0.019	-0.009	0.009
	(0.149)	(0.154)	(0.157)	(0.096)	(0.076)	(0.078)
	[0.982]	[0.880]	[0.885]	[0.844]	[0.908]	[0.908]
US transaction	0.572	0.494	0.775	0.413	0.369	0.249
	(0.525)	(0.522)	(0.607)	(0.546)	(0.253)	(0.255)
	[0.276]	[0.344]	[0.202]	[0.449]	[0.145]	[0.330]
Constant	0.540	0.338	n.a.	-0.109	-0.725	-0.159
	-1.614	-1.648	n.a.	-1.541	(0.671)	(0.657)
	[0.738]	[0.838]	n.a.	[0.943]	[0.280]	[0.809]
n	250	250	204	250	250	250
Wald Chi ²	24.36	28.50	30.71	99.41	31.05	66.30
p>Chi ²	0.011	0.005	0.002	0.000	0.002	0.000
Log likelihood	-134.98	-131.80	-87.64	-149.15	-263.97	-262.81

Standard errors are in parentheses; p values are in brackets.

The findings in Table 4.5 corroborate my expectations that acquirer's may be using acqui-hires with disruptive know-how to initiate change in the acquirer's business unit. When the acqui-hired founder is given a high status position in the acquiring firm, he/she has more power and influence to see that the disruptive technology or business model is actually pursued effectively at the acquiring firm (Barden, 2012). Further, a high status position contractually binds the founder (initially) as an employee of the acquiring firm whereas the alternative would be losing the founder to either another entrepreneurial venture or working for another firm, both of which could be rivals to the acquirer.

Thus, this study highlights that acquirers are trying to create value from acqui-hires with disruptive know-how by keeping the team preserved in a business unit and giving the founder status with which to exert some power or influence within the business unit. Next, I examine how the fit or misfit between these expectations may influence the retention of the acqui-hired founder.

4.5.3 Acqui-hire Integration Outcome

In the second part of our analysis, I examine the outcomes of post-acqui-hire integration in the form of premature exit of acqui-hired founders. Table 4.6 reports summary statistics and correlation coefficients of the variables used in the second set of equations. The highest correlation between two variables is 0.270 ($p=0.000$) and the highest Variance Inflation Factor for our variables is 1.13, again, well below the suggested max threshold of 10 (Cohen et al., 2002; Kutner et al., 2004). Again, high collinearity between the variables is not a major concern for my analysis. The correlation between the independent variable for Hypothesis 3, disruptive know-how and focused integration misfit, and the dependent variable of premature exit of acqui-hired founders is in the predicted positive direction. However, the correlation between the dependent variable for Hypothesis 4, disruptive know-how and high status position misfit, and the dependent variable of premature exit of acqui-hired founders is *not* in the predicted direction as it is negative in the correlation table. Among the control variables, founders' prior established firm experience, founders' prior start-up founding experience and target firm founding team size are associated with the premature exit of the acqui-hired founders.

Table 4.3: Descriptive statistics and correlations for the analysis of outcomes of post-acqui-hire integration.

	1	2	3	4	5	6	7	8
1.Premature exit	1							
2.Disruptive know-how–focused integration misfit	0.126	1						
3.Disruptive know-how–high status position misfit	-0.009	0.001	1					
4.Founder large firm experience	0.116	0.014	0.112	1				
5.Founder start-up experience	0.126	0.148	-0.047	-0.049	1			
6.Log (acquirer employees)	0.062	0.035	0.008	-0.039	0.038	1		
7.Target funding round	0.020	0.155	0.084	0.118	0.190	0.118	1	
8. Target founding team size	0.217	0.161	0.032	0.270	0.099	0.029	0.181	1
Mean	0.116	0.814	1.032	0.640	0.868	9.201	1.104	2.296
S.D.	0.321	0.496	0.359	0.481	1.180	1.682	1.224	0.949

N=250 Coefficients greater than 0.125 are significant at $p<0.05$ level or lower.

Table 4.7 presents results from the logistic regression analysis examining the relationships between the lack of fit between know-how type and post-acquisition integration decisions on the premature exit of acqui-hired founders. To test Hypothesis 3, I study misfit between disruptive know-how and focused integration. In Model 1, I find support for Hypothesis 3 asserting that the lack of fit between disruptive know-how and preserved integration is positively related to the premature exit of acqui-hired founders ($\beta=0.569$, $p=0.025$). The full model has a Wald chi squared of 35.43 ($p=0.000$). The coefficient magnitude implies that when there is a misfit (i.e., the acqui-hire know-how is disruptive but the acquirer pursued distributed integration instead of focused integration), there is 0.77 times more likelihood that an acqui-hired founder will prematurely exit the acquiring firm.

The findings in Table 4.7 indicate that acquirers are more successful in retaining the acqui-hired founders (past a year) in cases where, for disruptive know-how, the founder's team is also kept intact as a whole. From a dynamic capabilities perspective this makes sense as the means to a more effective end for an acquirer – of pursuing the disruptive technology post-acqui-hire. The founder may be integral in motivating his/her former employees or coordinating their work and innovative process. Further, by knowing that his/her team is intact in a business unit, the founder is given the means by which to continue doing what he/she initiated in his/her firm to begin with – a continuation of the disruptive technology or product offering.

To test Hypothesis 4, I study the misfit between disruptive know-how and founder's high status position. However, in Model 2, I do not find support for Hypothesis 4 ($\beta=-0.229$, $p=0.705$), suggesting that the lack of fit between disruptive know-how and high status position of the acqui-hired founder may not influence the premature exit of acqui-hired founders. Among the control variables, founders' start-up experience and target firm founding team size have a positive and significant relationship with the premature exit of acqui-hired founders.

Table 4.4: Logit analysis on the effect of the lack of fit between know-how type and post-acquisition integration decisions on the premature exit of acqui-hired founders.

VARIABLES	Premature Exit of Acqui-hired Founders	
	(1)	(2)
Disruptive know-how–focused integration misfit	0.569 (0.254) [0.025]	
Disruptive know-how–high status position misfit		-0.229 (0.605) [0.705]
Founder large firm experience	0.679 (0.587) [0.247]	0.678 (0.575) [0.138]
Founder start-up experience	0.252 (0.140) [0.072]	0.275 (0.138) [0.047]
Log (acquirer employees)	0.129 (0.183) [0.480]	0.128 (0.182) [0.483]
Target funding round	-0.136 (0.169) [0.420]	-0.114 (0.162) [0.484]
Target founding team size	0.541 (0.191) [0.005]	0.585 (0.178) [0.001]
Constant	-5.689 (1.779) [0.001]	-5.106 (1.665) [0.002]
n	250	250
Wald Chi ²	35.43	41.07
p>Chi ²	0.000	0.000
Log likelihood	-80.62	-81.46

Standard errors are in parentheses; p values are in brackets.

4.6 Discussion

My goal in this paper was to study the antecedents and outcomes of post-acqui-hire integration. In the first part of my analysis, I examined the relationship between the acquired employees' know-how and two different post-acqui-hire integration decisions of the acquirers – namely whether acquirers keep the acquired team together and whether they give the acquired founders high status positions. Overall, I find that when the acquired start-up has disruptive know-how, it is likely that the acquired team will undergo focused integration and the acquired founder will be assigned to a high status position. In the second part of my analysis, I study a performance outcome of post-acqui-hire integration decisions, namely, whether the acquired founder prematurely leaves the acquiring firm. I examined the relationship between the misfit of acquired employees' know-how and the acquirers' post-acqui-hire integration decisions on the premature exit of acquired founders. I find that while the lack of fit between disruptive know-how and focused integration is positively related to the premature exit of acquired founders, the lack of fit between disruptive know-how and high status position is not significantly related to the premature exit of acquired founders. This study has several theoretical implications.

4.6.1 Theoretical Contributions

First, this study contributes to the post-acquisition integration literature by focusing on integration of acquired employees, specifically. As novel acquisitions that are sought for the target firm's human capital, we still know little about how acquirers try to create value from these types of purchases. Second, whereas traditional post-acquisition integration studies have highlighted objectives such as the minimization of coordination costs and transfer of knowledge and resources between firms (Capron, Dussauge, and Mitchell, 1998; Puranam and Srikanth, 2007; Paruchuri et al., 2006; Ranft and Lord, 2002), the findings of this study suggest that post-acquisition integration decisions in acquired employees are also designed to effectively recombine new and existing human resources to embrace the former's disruptive know-how and respond to the changes in the business environment.

Studies building on KBV have viewed maximization of knowledge transfer as the main motive that shapes post-acquisition integration decisions and have mainly focused on the tacitness and social complexity of acquired firm's knowledge as factors that influence the transfer of knowledge from the acquired firm to the acquirer (Graebner,

2004; Paruchuri et al., 2006; Ranft and Lord, 2002). However, I highlight the importance of the disruptiveness of acquired firm's know-how as a key determinant of post-acqui-hire integration decisions. The arguments I develop and the resulting findings enhance our understanding of post-acquisition integration decisions of acquirers by distinguishing disruptive know-how from complementary know-how. The notion of disruptive know-how in this study demonstrates that post-acquisition integration can be viewed as a mechanism to respond to the competitive threats in high-velocity environments.

Another group of studies have viewed minimization of coordination costs as the main motive of post-acquisition integration decisions of acquires (Puranam et al., 2006, 2009; Puranam and Srikanth, 2007). These studies mainly focus on the question of whether or not to integrate the acquired firm into the acquirer's organization. Puranam and Srikanth (2007) found that when the objective of the acquisition is to leverage the existing knowledge of the acquired firm, structural integration is likely to be the preferred design choice, while structural separation is likely to be preferred when the objective is to leverage the acquired firm's innovative capabilities. However, the findings of this study suggest that structural separation is not likely to be an alternative in acqui-hires. This is because the intention of the acquirer is not to rely on the acquired firm as an independent source of ongoing innovation but rather to recombine the acquired knowledge-based resources with its existing resources to drive organizational renewal and innovation. Moreover, the acqui-hired founder and his/her team need to have access to the acquirer's resources in order to be able to implement their ideas at the acquirer's scale. Puranam and colleagues (2009) also found that when the objective of the acquisition is to obtain a component technology as opposed to a standalone product, the acquirer is likely to opt for structural integration. However, they argued that the existence of common ground between the acquiring and acquired firms decreases the likelihood of integration by acting as an alternative means of achieving coordination. In contrast, the findings of this study indicate that acquirers are likely to integrate the acqui-hired teams into their business units that work on the same domain with the acqui-hired team. This is because the aim of the acquirer is to create internal competition rather than achieving coordination between the two teams.

Second, this study also contributes to the research stream that examines the relationship between post-acquisition integration and performance outcomes of technology acquisitions. Previous studies have examined the effects of integration on the

retention of key acquired employees in technology acquisitions and have found that integration is negatively associated with retention (Ranft and Lord, 2000). However, the findings of this study on acqui-hires suggest that it is not simply integration that influence acquisition outcomes but rather the lack of fit between the integration mode and the type of acquired firm's know-how. The findings of this study indicate that the lack of fit between disruptive know-how and focused integration is associated with the premature exit of acqui-hired founders from the acquiring firms. The main incentive for start-up founders to join an established firm through an acqui-hire is the ability to work on similar problems at a larger scale (Chatterji and Patro, 2014). However, the acqui-hired founders need their teams to stay together to develop new solutions and challenge the existing business units of the acquirer. Thus, when their teams are dismantled, acqui-hired founders are likely to be demotivated and tend to leave the acquiring firm even without waiting for their vesting period to end. On the other hand, there appears to be no relationship between the lack of fit between disruptive know-how and high status position and the premature exit of acqui-hired founders from the acquiring firms. This is interesting since prior literature provides strong support for the positive relationship between status and retention of key acquired employees in technology acquisitions (Ranft and Lord, 2000). The results suggest that something different is going on in acqui-hires; it is more likely that in these novel cases, the acqui-hired founders who are serial entrepreneurs tend to prematurely leave the acquiring firm regardless of whether or not they are assigned to high status positions.

Third, this study enhances our understanding of the emerging phenomenon of acqui-hiring. Acqui-hiring has been frequently employed especially by technology-based companies in Silicon Valley and has been well-documented in the popular press. Yet, it has not received much attention in the literature so far. Only recently, Coyle and Polsky (2013) and Chatterji and Patro (2014) have tried to explain this emerging phenomenon. However, they explain little how the acquired talent needs to be integrated and the factors that affect the performance outcomes of acqui-hires. To the best of my knowledge, my study is the first large-scale empirical study to analyze acqui-hires and provide insights into how acquirers need to integrate the acqui-hired talent to benefit from acqui-hires.

Fourth, the findings that show support for acquirers' harnessing acqui-hires' disruptive know-how build on the dynamic capabilities perspective – exemplifying how firms cope with change in high-velocity environments (Galunic and Eisenhardt, 2001;

Rothaermel and Hess, 2007), ways in which firms modify their resource base to generate new value-creating strategies (Eisenhardt and Martin, 2000; Helfat et al., 2007), and pursue proactive reconfiguration and strategic renewal (Agarwal and Helfat, 2009; Karim and Capron, 2016). By keeping acqui-hired teams intact and giving the founder high status, acquirers employ acqui-hires as a mechanism to overcome organizational inertia, drive future innovation, and create market change (Anand, Oriani, and Vassolo, 2010; Henderson and Cockburn, 1994; Iansiti and Clark, 1994). On the other hand, when the acquired firm's know-how is complementary to the acquirer, the acqui-hired team is likely to be dismantled and distributed to the various business units of the acquirer so that the complementary know-how can permeate throughout the acquiring firm.

4.6.2 Managerial Implications

It is worth considering the managerial implications of this research, as its primary purpose was to provide insights into an emerging phenomenon that is frequently employed by the biggest technology companies in the world. Traditionally, post-acquisition integration has been associated with the initial decision between complete absorption and preservation of autonomy. This study suggests that in acqui-hires, rather than deciding upon whether or not to integrate the acquired start-up, the acquirer should consider how to integrate the acquired talent. First, an acquirer needs to be aware that the characteristics of the acquired talent's know-how should determine the post-acqui-hire integration decisions. This paper identifies two integration modes and associates each with a particular type of acquired know-how. Second, the acquirer should also keep in mind that retention of the acqui-hired talent depends on the extent of fit between the type of acquired firm's know-how and post-acqui-hire integration decisions. Understanding the different acqui-hire integration modes and the outcomes they may generate will enable acquirers to plan the integration of their acqui-hires accordingly so as to realize their potential.

4.6.3 Limitations and Future Research Opportunities

This study has several limitations. First, I examined only the acqui-hires conducted by firms in technology industries, however, the acqui-hiring phenomenon is spreading to other talent-specific industries such as professional services. It would be interesting to see if the findings of this study are consistent with other non-technology markets. Second, this study was limited to examining acqui-hired employees whose placement in the acquiring firm I could track using online sources. Though I have

collected data on who I assume are the most important individuals at the acqui-hires through available data sources, a limitation is not having the full sample. Thus, if future studies could obtain from acquirers their full list of acqui-hired talent and placements, it would provide more power to the analyses.

Third, in examining the outcomes of acqui-hires, my analysis has been confined to studying the effect of post-acqui-hire integration decisions of acquirers, rather than studying the effect of acqui-hires. In future studies, it may be useful to analyze the effects of acqui-hires on performance outcomes. For instance, it would be interesting to examine the effect acqui-hires on acquiring firms' financial performance or innovation performance. Lastly, the outcome variable that I was able to observe was the retention (or lack of) of the acqui-hired founders. This was reasonable since the main aim of acqui-hires is to utilize the skills and know-how of the acquired human capital (Chatterji and Patro, 2014). Prior literature also highlights that retention of key acquired employees is of central importance in determining the success of technology acquisitions (Ranft and Lord, 2000). Future studies could use alternate measures such as new product launches (e.g., Puranam et al., 2006) in examining the outcomes of acqui-hires, however, this will require more granular data from acquirers at the business unit or product market level.

4.7 Conclusion

Extant research provides valuable insights into the antecedents and outcomes of post-acquisition integration in technology acquisitions. Yet, the insights from this domain can be partially extended to acqui-hires, which is a novel type of technology acquisition motivated by the future innovative opportunities that the acquired talent may generate. I have attempted to explain how acquirers need to integrate the acquired talent to be able to benefit from their acqui-hires building on the dynamic capabilities literature. The key implication for organizational renewal through acqui-hires is the importance of the type of acquired employees' know-how as a factor that determines the post-acqui-hire integration choices of acquirers. The findings of this study indicate that when an acqui-hired team which has disruptive know-how is not integrated through focused integration but rather dismantled following the acquisition, acqui-hired founders are likely to leave the acquirer within a year after the acquisition. Moreover, acquirers need to assign acqui-hired founders who have disruptive know-how to a high status position following the acquisition to be able to benefit from their proprietary know-how.

I hope that this study has added to our understanding of acqui-hires more generally, and specifically to the antecedents and outcomes of post-acqui-hire integration. I also hope that the findings encourage future research to further contribute to the understanding of how firms can create value from talent-oriented acquisitions as they reconfigure themselves.



Chapter 5

CONCLUSION

Acqui-hires constitute a distinct category of acquisitions because they primarily target the talented human capital of the acquired firm rather than its existing solutions, patented technologies or customer base. Despite its practical pervasiveness, acqui-hiring is a phenomenon which has received little attention in the academic literature so far. In this dissertation, I have attempted to provide a clear conceptual definition of an acqui-hire, put forward its differences from other technology acquisitions and shed light on its post-acquisition integration and value creation mechanisms. Below, I summarize the key findings and their implications for research and practice.

5.1 Key Findings

The objective of this dissertation is to provide a clearer understanding of the emerging phenomenon of acqui-hiring. To that end, the case study presented in Chapter 2 aims to establish a clear and consistent definition of acqui-hires building on extant research (Chatterji and Patro, 2014; Coyle and Polsky, 2013). In line with prior studies, I find that acqui-hires involve both the transfer of ownership of the assets of a start-up to the acquirer and the hiring of its founder and key employees by the acquirer. However, different from other technology acquisitions, in acqui-hires acquirers are most often not interested in the existing solutions of the acquired start-up as made evident by the immediate shutdown of the start-up's product following the acquisition. Moreover, what my case study reveals for the first time is that there is a continuum of technology acquisitions. While acquisitions that mainly target the product or the patented technologies of the acquired firm are referred to as traditional technology acquisitions, those that primarily target the talented human capital of the acquired firm are referred to as acqui-hires. In between, there are hybrid acquisitions that target both the product/technology and the talent of the acquired firm. A close examination of the cases reveals that hybrid acquisitions are also uniquely different from acqui-hires.

Another important finding of the case study research is that different from other technology acquisitions, the acquired firm is almost always integrated into the acquiring

firm in acqui-hires. However, different acqui-hire integration modes may exist. Finally, the case study research identifies team integration and the position of the acqui-hired founder following the acquisition as the two critical dimensions of acqui-hire integration. The case research offers clear indications that post-acquisition integration may have an influence on the value created via the acqui-hires.

In Chapter 3, I introduce a real options-based model that suggests acqui-hiring can be a strategic move that creates value for the acquirer depending on how the acqui-hire is structurally designed. I argue that acqui-hires can be of different types depending on the investment logic of acquirers, which is reflected in the pace of the acquirer's commitment into the acquired talent. I identify two different types of acqui-hires, namely growth acqui-hires and deferral acqui-hires, by drawing upon real options theory. I propose that while acqui-hiring a start-up presents the acquirer with a real option, the pace of the commitment of the acquirer into the acquired start-up determines whether the value generated by the option is growth or deferral based. I further identify the situations under which the value generated by one type of acqui-hire dominates the value generated via the other.

In Chapter 4, I shed light on the antecedents and outcomes of post-acqui-hire integration. Applying a dynamic capabilities framework, I find that when the know-how of the acquired start-up is disruptive to the acquirer's current technology or business model, it is likely that the acqui-hired team will be integrated as a whole into the disrupted business unit and the acqui-hired founder will be assigned to a high status position. I argue that this is because the acquirer wants to modify its existing resource base utilizing the acqui-hired employees' know-how and enable organizational renewal in response to the changes in the business environment. I also find that a lack of fit between acquired know-how type and integration mode is likely to lead to the premature exit of acqui-hired founders. However, I find no significant relationship between the lack of fit between acquired know-how type and position of the acqui-hired founder following the acquisition and the premature exit of acqui-hired founders from the acquiring firms. These findings highlight an interesting fact about the outcomes of acqui-hire integration: when the acquired start-up has disruptive know-how, acqui-hired founders are likely to leave the acquirer within a year after the acquisition if their team is dismantled, however, whether or not they are assigned to a high status position does not influence their exit decisions.

5.2 Theoretical Contributions

This dissertation makes a number of contributions to the real options literature, post-acquisition integration literature, and the dynamic capabilities literature. First, I contribute to the real options literature by examining the value creation logic of acqui-hires from a real options lens. Acqui-hiring is a form of human asset investment made by established firms under considerable uncertainty with the intention of generating future growth opportunities. Thus, real options theory offers key insights into value creation from acqui-hires. I also integrate organizational issues into real options theory by differentiating acqui-hires depending on how they are structurally designed and explaining the different sources of option value these different structural designs may generate. Unlike real options on tangible assets, e.g., physical plant and property, real options on knowledge-based assets are dependent on organizational structure and processes (Coff and Lavery, 2007). In this dissertation, I explain how the organizational processes of integration may affect the source of option value generated via an acqui-hire, a particular real option on knowledge-based assets. In doing so, I contribute to the understanding of the applicability of real options reasoning to knowledge-based assets which remains incomplete when examined in isolation from organizational issues. Moreover, the conceptual framework presented in Chapter 3 of this dissertation contributes to the discussion regarding growth and deferral options (Folta and O'Brien, 2004; Leiblein and Ziedonis, 2007). I argue that depending on the value of talent, market uncertainty, and the costs of realizing revenue streams from the know-how of the acquired talent, it is possible to assess the relative magnitudes of growth and deferral option value. I extend the research on growth and deferral options by shedding light on the trade-off between growth and deferral option value in the context of acqui-hires.

Second, I contribute to the post-acquisition integration literature. Prior studies on post-acquisition integration in technology acquisitions mostly focus on the coordination-autonomy dilemma and the knowledge transfer mechanisms (Graebner, 2004; Puranam et al., 2006, 2009; Puranam and Srikanth, 2007; Ranft and Lord, 2002). While these studies mainly examine whether or not to integrate the acquired firm into the acquirer's organization, I provide insights into how rather than whether or not to integrate the acquired knowledge-based resources. I highlight the disruptiveness of acquired firm's know-how as a key determinant of post-acqui-hire integration decisions. The findings of this study suggest that the primary motivation of acquirers in making post-acqui-hire

integration decisions is to effectively recombine new and existing human resources to undergo organizational change and respond to the changes that take place in the high-velocity environments they operate. I also contribute to the research stream that examines the relationship between post-acquisition integration and performance outcomes of technology acquisitions. There are a limited number of studies that empirically examine the relationship between integration mechanisms and performance outcomes of technology acquisitions (Paruchuri et al., 2006; Ranft and Lord, 2000). I extend the research in this stream by empirically examining how the lack of fit between acquired know-how type and post-acqui-hire integration decisions of the acquirer effects the exit decision of the acqui-hired founder from the acquirer.

Finally, this dissertation contributes to the dynamic capabilities literature. Dynamic capabilities view highlights reconfiguration as a key driver of organizational renewal and value creation (Karim and Capron, 2016; Teece, 2007). A substantial body of literature has examined reconfiguration, however, extant research on reconfiguration mainly focuses on traditional resources, activities and business unit structures (Karim and Capron, 2016). Thus, our understanding of how firms undergo reconfiguration through the recombination of new and existing human resources remains limited. I answer the call of Karim and Capron (2016) for research that examines how human capital is strategically redeployed within firms by conducting a large-scale empirical test on acqui-hires. The findings of this study suggest that established technology firms can develop the dynamic capability of reconfiguring their business units through effective integration of acqui-hires.

5.3 Practical Implications

Several managerial implications can be drawn from this dissertation. First, managers should be aware that acqui-hires are different from traditional technology acquisitions that target the technology, product or the customer base of the acquired firm and also different from hybrid acquisitions that target both the talent and the technology. Different from other technology acquisitions, human resource acquisition is the key strategic driver of acqui-hires. Thus, acqui-hires have their unique integration and value creation challenges. Understanding these challenges will enable managers of acquiring firms to better manage their acqui-hires.

Second, managers of large established firms should take into account the different sources of value acqui-hires may generate. This study suggests that acqui-hiring a start-up presents the acquirer with a real option, however, whether the option value generated by the acqui-hire is growth or deferral based depends on the pace of the commitment of the acquirer into the acquired start-up. Acquirers should determine the pace of their commitment into the acquired start-up by assessing the value of the acquired talent, market uncertainty, and the costs of realizing revenue streams from the know-how of the acquired talent. The model presented in Chapter 3 might be a template for assessing the value generation potential of acqui-hires, which would lead to better decision-making regarding acqui-hires in established technology firms.

Third, managers of acquiring firms should consider how to integrate the acquired talent rather than whether or not to integrate them in the case of acqui-hires. This study identifies team integration and the position of the acqui-hired founder following the acquisition as the two critical dimensions in acqui-hire integration. This is because effective integration along these dimensions may result in organizational change that will enable the acquirer to respond to the competitive threats and adapt to the changes in the high-velocity environments they operate. Managers of the acquiring firms must take into account the characteristics of the acquired talent's know-how when making post-acqui-hire integration decisions. Furthermore, acquiring firm's managers should also take into account the extent of fit between the type of acquired firm's know-how and integration mode to prevent premature exit of the acqui-hired founders.

5.4 Limitations and Future Research Avenues

This research has several limitations, which can be noted as possible future research avenues. First, in keeping with extant research I restrict my discussion to the acqui-hires in technology industries, where the acquirers are multi-business high-technology firms mainly based in Silicon Valley (Chatterji and Patro, 2014; Coyle and Polsky, 2013). While acqui-hires are most frequently observed in technology industries and in Silicon Valley (Chatterji and Patro, 2014; Coyle and Polsky, 2013), to the best of my knowledge there is no research looking into whether established high-technology firms in Europe, Japan or developing countries or established firms in industries other than technology acquire small companies with the intention of utilizing their talented human capital.

Similar studies on acqui-hires in industries other than technology and in other parts of the world would be valuable in generalizing the findings of this research.

Second, this dissertation dealt with the acqui-hiring phenomenon mainly through the acquirers' perspective, investigating the integration and value creation challenges of acqui-hires for the acquirers. Thus, another important domain for future research is the examination of the acqui-hiring phenomenon from the start-up's perspective. The reasons underlying the decision of the founder and the shareholders of a start-up to sell their company to an established firm may affect both the integration mode choice of the acquirer and the value generated through the acqui-hire. Future research could provide insights into the motivations underlying this decision and their effects on the acqui-hire integration modes. Similarly, venture capitalists are an integral part of acqui-hire deals (Coyle and Polsky, 2013). Thus, future research could also examine the role of venture capitalists in acqui-hires to contribute to our understanding of the acqui-hiring phenomenon.

Third, I have developed a real options-based theoretical model to explicate the value creation logic of acqui-hires, however, I have not tested the model empirically. Future studies can test the real options-based model by building on the propositions I have developed in Chapter 3. Another limitation of this research stems from the choice of premature exit of acqui-hired founders from the acquiring firms as a key outcome of acqui-hires. Although the founders of the acquired start-ups are most of the time the key drivers of acqui-hire deals and their retention is critical in creating value from acqui-hires (Chatterji and Patro, 2014), other measures such as new product launches or the financial performance of the acquiring firm can be used in examining the outcomes of acqui-hires.

In this dissertation, I mainly examined the integration and value creation challenges of acqui-hires, which involve post-deal processes. Building on extant research (Chatterji and Patro, 2014), and the findings of my case study research, I assumed that the primary motivation of acquirers in conducting acqui-hires is to gain access to the talented human capital of the acquired start-up. Yet, established firms may also have different motives such as killing the acquired start-up and eliminating a potential threat when conducting an acqui-hire. Future studies examining the underlying motivations of acquirers in conducting acqui-hires more in depth would contribute to our understanding of the phenomenon.

Other than being a novel acquisition type, *acqui-hiring* is also a novel hiring practice. It can be considered as an alternative to regular hiring processes through which firms recruit individual employees and also to poaching, i.e. hiring employees away from a competing firm (Gardner, 2002). Although one might argue that what differentiates *acqui-hiring* from other hiring practices is its focus on hiring a team as opposed to hiring individuals, teams as well as individual employees can be poached from start-up companies. Moreover, *acqui-hires* are significantly more expensive when compared to other hiring practices as they also involve buying the assets of acquired start-ups and compensating their investors (Coyle and Polsky, 2013). Coyle and Polsky (2013) discuss why firms go through the expense of *acqui-hiring* rather than just hiring the targeted employees of a start-up from a legal perspective. Future research may also examine why established firms prefer *acqui-hiring* over other hiring practices from strategic management and human resource management perspectives.

Finally, of particular interest for future research is examining *acqui-hiring* as part of a firm's innovation strategy. Prior literature highlights that a successful innovation strategy requires a careful combination of internal development and external knowledge sourcing (Arora, Belenzon, and Rios, 2014; Cassiman and Veugelers, 2006; Karim and Mitchell, 2004). As an alternative to traditional technology acquisitions in external knowledge sourcing, *acqui-hires* have the potential to contribute to the acquiring firm's innovation strategy. Thus, scholars can investigate how much emphasis firms should put on *acqui-hires* in trying to achieve the right balance between internal development and external knowledge acquisition. As an extension, *acqui-hiring* can also be linked to the acquiring firm's overall corporate strategy. Facebook, for instance, may not have become the social networking giant that it is today had it not been for its *acqui-hires* such as FriendFeed, through which it significantly improved its main platform, and Chai Labs, through which it ramped up its advertising revenue stream. On the other hand, *acqui-hiring* also became an integral part of Yahoo's corporate strategy after Marissa Mayer took over the CEO position in 2012. However, its numerous *acqui-hires* could not succeed in preventing the demise of the company. Apparently, there are many factors at play, which affect the overall contribution of *acqui-hires* to an acquiring firm's performance. In future studies, strategy scholars may attempt to unpack these factors in an effort to contribute to the understanding of the relationship between *acqui-hiring* and corporate strategy.

BIBLIOGRAPHY

- Adner R. 2002. When are technologies disruptive? A demand- based view of the emergence of competition. *Strategic Management Journal* **23**(8): 667-688.
- Agarwal R, Helfat CE. 2009. Strategic renewal of organizations. *Organization Science* **20**(2): 281-293.
- Ahuja G, Katila R. 2001. Technological acquisitions and the innovation performance of acquiring firms: a longitudinal study. *Strategic Management Journal* **22**(3): 197-220.
- Allison PD. 2009. *Fixed Effects Regression Models*. Sage: Newbury Park, CA.
- Amram M, Kulatilaka N. 1999. *Real Options: Managing Strategic Investment in an Uncertain World*. Harvard Business School Press: Boston, MA.
- Anand J, Oriani R, Vassolo RS. 2010. Alliance activity as a dynamic capability in the face of a discontinuous technological change. *Organization Science* **21**(6): 1213-1232.
- Anand J, Singh H. 1997. Asset redeployment, acquisitions and corporate strategy in declining industries. *Strategic Management Journal* **18**(S1): 99-118.
- Arikan AM, Capron L. 2010. Do newly public acquirers benefit or suffer from their pre-IPO affiliations with underwriters and VCs?. *Strategic Management Journal* **31**(12): 1257-1289.
- Arikan AM, McGahan AM. 2010. The development of capabilities in new firms. *Strategic Management Journal* **31**(1): 1-18.
- Arora A, Belenzon S, Rios LA. 2014. Make, buy, organize: The interplay between research, external knowledge, and firm structure. *Strategic Management Journal* **35**(3): 317-337.
- Barden JQ. 2012. The influences of being acquired on subsidiary innovation adoption. *Strategic Management Journal* **33**(11): 1269-1285.

- Barkema HG, Schijven M. 2008. Toward unlocking the full potential of acquisitions: The role of organizational restructuring. *Academy of Management Journal* **51**(4): 696-722.
- Bascle G. 2008. Controlling for endogeneity with instrumental variables in strategic management research. *Strategic Organization* **6**(3): 285-327.
- Beckman CM, Haunschild PR, Phillips DJ. 2004. Friends or strangers? Firm-specific uncertainty, market uncertainty, and network partner selection. *Organization Science* **15**(3): 259-275.
- Bergh DD. 2001. Executive retention and acquisition outcomes: A test of opposing views on the influence of organizational tenure. *Journal of Management* **27**(5): 603-622.
- Bhattacharya M, Wright PM. 2005. Managing human assets in an uncertain world: Applying real options theory to HRM. *The International Journal of Human Resource Management* **16**(6): 929-948.
- Birkinshaw J. 2001. Strategies for managing internal competition. *California Management Review* **44**(1): 21-38.
- Birkinshaw J, Lingblad M. 2005. Intrafirm competition and charter evolution in the multibusiness firm. *Organization Science* **16**(6): 674-686.
- Boeker W, Karichalil R. 2002. Entrepreneurial transitions: factors influencing founder departure. *Academy of Management Journal* **45**(4): 818-826.
- Bozeman B, Mangematin V. 2004. Editor's introduction: Building and deploying scientific and technical human capital. *Research Policy* **33**(4): 565-568.
- Bryce DJ, Winter SG. 2009. A general interindustry relatedness index. *Management Science* **55**(9): 1570-1585.
- Cannella AA, Hambrick DC. 1993. Effects of executive departures on the performance of acquired firms. *Strategic Management Journal* **14**(S1): 137-152.
- Cao Q, Gedajlovic E, Zhang H. 2009. Unpacking organizational ambidexterity: Dimensions, contingencies, and synergistic effects. *Organization Science* **20**(4): 781-796.

- Capron L, Dussauge P, Mitchell W. 1998. Resource redeployment following horizontal acquisitions in Europe and North America, 1988-1992. *Strategic Management Journal* **19**(7): 631-661.
- Capron L, Mitchell W. 1998. Bilateral resource redeployment and capabilities improvement following horizontal acquisitions. *Industrial and Corporate Change* **7**(3): 453-484.
- Cassiman B, Colombo MG, Garrone P, Veugelers R. 2005. The impact of M&A on the R&D process: An empirical analysis of the role of technological-and market-relatedness. *Research Policy* **34**(2): 195-220.
- Cassiman B, Veugelers R. 2006. In search of complementarity in innovation strategy: Internal R&D and external knowledge acquisition. *Management Science* **52**(1): 68-82.
- Certo ST, Busenbark JR, Woo HS, Semadeni M. 2016. Sample selection bias and Heckman models in strategic management research. *Strategic Management Journal* **37**(13): 2639-2657.
- Chatterji A, Patro A. 2014. Dynamic capabilities and managing human capital. *The Academy of Management Perspectives* **28**(4): 395-408.
- Choi S, McNamara G. 2018. Repeating a familiar pattern in a new way: The effect of exploitation and exploration on knowledge leverage behaviors in technology acquisitions. *Strategic Management Journal* **39**(2): 356-378.
- Christensen CM. 1997. *The Innovator's Dilemma*. Harvard Business School Press: Boston, MA.
- Cloodt M, Hagedoorn J, Van Kranenburg H. 2006. Mergers and acquisitions: Their effect on the innovative performance of companies in high-tech industries. *Research Policy* **35**(5): 642-654.
- Coff RW, Laverty KJ. 2007. Real options meet organizational theory: Coping with path dependencies, agency costs, and organizational form. *Advances in Strategic Management* **24**(1): 333-361.

- Cohen J, Cohen P, West SG, Aiken LS. 2002. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences (3rd ed.)*. Lawrence Erlbaum Associates: Mahwah, NJ.
- Cohen WM, Levinthal DA. 1990. Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly* **35**: 128-152.
- Coleman JS. 1988. Social capital in the creation of human capital. *American Journal of Sociology* **94**: S95-S120.
- Colombo MG, Grilli L. 2005. Founders' human capital and the growth of new technology-based firms: A competence-based view. *Research Policy* **34**(6): 795-816.
- Colombo MG, Rabbiosi L. 2014. Technological similarity, post-acquisition R&D reorganization, and innovation performance in horizontal acquisitions. *Research Policy* **43**(6): 1039-1054.
- Coyle JF, Polsky GD. 2013. Acqui-hiring. *Duke Law Journal* **63**(2): 281-346.
- Desyllas P, Hughes A. 2010. Do high technology acquirers become more innovative?. *Research Policy* **39**(8): 1105-1121.
- Dewar R, Werbel J. 1979. Universalistic and contingency predictions of employee satisfaction and conflict. *Administrative Science Quarterly* **24**: 426-448.
- Dierickx I, Cool K. 1989. Asset stock accumulation and sustainability of competitive advantage. *Management Science* **35**(12): 1504-1511.
- Dixit AK, Pindyck RS. 1994. *Investment Under Uncertainty*. Princeton, NJ: Princeton University Press.
- Eisenhardt KM. 1991. Better stories and better constructs: The case for rigor and comparative logic. *Academy of Management Review* **16**(3): 620-627.
- Eisenhardt KM, Graebner ME. 2007. Theory building from cases: Opportunities and challenges. *Academy of Management Journal* **50**(1): 25-32.
- Eisenhardt KM, Martin JA. 2000. Dynamic capabilities: What are they?. *Strategic Management Journal* October-November Special Issue **21**: 1105-1121.

- Elenkov DS, Judge W, Wright P. 2005. Strategic leadership and executive innovation influence: An international multi-cluster comparative study. *Strategic Management Journal* **26**(7): 665-682.
- Ellis KM, Reus TH, Lamont BT, Ranft AL. 2011. Transfer effects in large acquisitions: How size-specific experience matters. *Academy of Management Journal* **54**(6): 1261-1276.
- Ernst H, Vitt J. 2000. The influence of corporate acquisitions on the behaviour of key inventors. *R&D Management* **30**(2): 105-120.
- Fazio RH, Olson MA. 2003. Implicit measures in social cognition research: Their meaning and use. *Annual Review of Psychology* **54**(1): 297-327.
- Feeser HR, Willard GE. 1990. Founding strategy and performance: A comparison of high and low growth high tech firms. *Strategic Management Journal* **11**(2): 87-98.
- Finkelstein S. 1992. Power in top management teams: Dimensions, measurement, and validation. *Academy of Management Journal* **35**(3): 505-538.
- Finkelstein S, Halebian J. 2002. Understanding acquisition performance: The role of transfer effects. *Organization Science* **13**(1): 36-47.
- Florin J, Lubatkin M, Schulze W. 2003. A social capital model of high-growth ventures. *Academy of Management Journal* **46**(3): 374-384.
- Folta TB. 1998. Governance and uncertainty: The tradeoff between administrative control and commitment. *Strategic Management Journal* **19**(11): 1007-1028.
- Folta TB, Johnson DR, O'Brien J. 2006. Uncertainty, irreversibility, and the likelihood of entry: An empirical assessment of the option to defer. *Journal of Economic Behavior and Organization* **61**(3): 432-452.
- Folta TB, O'Brien JP. 2004. Entry in the presence of dueling options. *Strategic Management Journal* **25**(2): 121-138.
- Foote DA, Folta TB. 2002. Temporary workers as real options. *Human Resource Management Review* **12**(4): 579-597.
- Galunic DC, Eisenhardt KM. 2001. Architectural innovation and modular corporate forms. *Academy of Management Journal* **44**(6): 1229-1249.

- Gardner TM. 2002. In the trenches at the talent wars: Competitive interaction for scarce human resources. *Human Resource Management* **41**(2): 225-237.
- Geron T. 2016. Acquihires from 2005 to today: From hype to pragmatism. *Exitround.com*. <https://exitround.com/acquihires-from-2005-to-today-from-hype-to-pragmatism>
- Gimeno J, Folta TB, Cooper AC, Woo CY. 1997. Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly* **42**: 750-783.
- Glaser BG, Strauss AL. 2009. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Transaction Publishers.
- Govindarajan V. 1988. A contingency approach to strategy implementation at the business-unit level: Integrating administrative mechanisms with strategy. *Academy of Management Journal* **31**(4): 828-853.
- Govindarajan V, Kopalle PK. 2006. Disruptiveness of innovations: Measurement and an assessment of reliability and validity. *Strategic Management Journal* **27**(2): 189-199.
- Graebner ME. 2004. Momentum and serendipity: How acquired leaders create value in the integration of technology firms. *Strategic Management Journal* **25**(8- 9): 751-777.
- Graebner ME, Eisenhardt KM. 2004. The seller's side of the story: Acquisition as courtship and governance as syndicate in entrepreneurial firms. *Administrative Science Quarterly* **49**(3): 366-403.
- Graebner ME, Heimeriks KH, Huy QN, Vaara E. 2017. The process of postmerger integration: A review and agenda for future research. *Academy of Management Annals* **11**(1): 1-32.
- Grant RM. 1996a. Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science* **7**(4): 375-387.
- Grant RM. 1996b. Toward a knowledge- based theory of the firm. *Strategic Management Journal* **17**(S2): 109-122.
- Greene WH. 2000. *Econometric Analysis*. Prentice Hall: Upper Saddle River, NJ.

- Haleblian J, Kim JY, Rajagopalan N. 2006. The influence of acquisition experience and performance on acquisition behavior: Evidence from the US commercial banking industry. *Academy of Management Journal* **49**(2): 357-370.
- Hambrick DC, Cannella AA. 1993. Relative standing: A framework for understanding departures of acquired executives. *Academy of Management Journal* **36**(4): 733-762.
- Haspeslagh PC, Jemison DB. 1991. *Managing Acquisitions: Creating Value through Corporate Renewal (Vol. 416)*. Free Press: New York.
- Haupt R, Kloyer M, Lange M. 2007. Patent indicators for the technology life cycle development. *Research Policy* **36**(3): 387-398.
- He ZL, Wong PK. 2004. Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis. *Organization Science* **15**(4): 481-494.
- Helfat CE, Finkelstein S, Mitchell W, Peteraf M, Singh H, Teece D, Winter SG. 2007. *Dynamic Capabilities: Understanding Strategic Change in Organizations*. Blackwell: Malden, MA.
- Henderson R, Cockburn I. 1994. Measuring competence? Exploring firm effects in pharmaceutical research. *Strategic Management Journal* **15**(S1): 63-84.
- Hitt MA, Hoskisson RE, Ireland RD, Harrison JS. 1991. Effects of acquisitions on R&D inputs and outputs. *Academy of Management Journal* **34**(3): 693-706.
- Hsu DH. 2006. Venture capitalists and cooperative start-up commercialization strategy. *Management Science* **52**(2): 204-219.
- Hsu DH. 2007. Experienced entrepreneurial founders, organizational capital, and venture capital funding. *Research Policy* **36**(5): 722-741.
- Huber GP, Power DJ. 1985. Retrospective reports of strategic-level managers: Guidelines for increasing their accuracy. *Strategic Management Journal* **6**(2), 171-180.
- Huselid MA. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal* **38**(3): 635-672.

- Iansiti M, Clark KB. 1994. Integration and dynamic capability: Evidence from product development in automobiles and mainframe computers. *Industrial and Corporate Change* **3**(3): 557-605.
- Jansen KJ. 2004. From persistence to pursuit: A longitudinal examination of momentum during the early stages of strategic change. *Organization Science* **15**(3): 276-294.
- Jemison DB, Sitkin SB. 1986. Corporate acquisitions: A process perspective. *Academy of Management Review* **11**(1): 145-163.
- Jennings DF, Seaman SL. 1994. High and low levels of organizational adaptation: An empirical analysis of strategy, structure, and performance. *Strategic Management Journal* **15**(6): 459-475.
- Jick TD. 1979. Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly* **24**(4): 602-611.
- Karim S. 2006. Modularity in organizational structure: The reconfiguration of internally developed and acquired business units. *Strategic Management Journal* **27**(9): 799-823.
- Karim S, Capron L. 2016. Reconfiguration: Adding, redeploying, recombining and divesting resources and business units. *Strategic Management Journal* **37**(13): E54-E62.
- Karim S, Kaul A. 2015. Structural recombination and innovation: Unlocking intraorganizational knowledge synergy through structural change. *Organization Science* **26**(2): 439-455.
- Karim S, Mitchell W. 2000. Path- dependent and path- breaking change: Reconfiguring business resources following acquisitions in the US medical sector, 1978–1995. *Strategic Management Journal* **21**(10- 11): 1061-1081.
- Karim S, Mitchell W. 2004. Innovating through acquisition and internal development: A quarter-century of boundary evolution at Johnson & Johnson. *Long Range Planning* **37**(6): 525-547.
- Karim S, Williams C. 2012. Structural knowledge: How executive experience with structural composition affects intrafirm mobility and unit reconfiguration. *Strategic Management Journal* **33**(6): 681-709.

- Katz R, Allen TJ. 1982. Investigating the Not Invented Here (NIH) syndrome: A look at the performance, tenure, and communication patterns of 50 R&D project groups. *R&D Management* **12**(1): 7-20.
- Kester WC. 1984. Today's options for tomorrow's growth. *Harvard Business Review* **62**: 153-160.
- Kim J, Finkelstein S. 2009. The effects of strategic and market complementarity on acquisition performance: Evidence from the US commercial banking industry, 1989–2001. *Strategic Management Journal* **30**(6): 617-646.
- Kogut B, Zander U. 1992. Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science* **3**(3): 383-397.
- Kotha R, Zheng Y, George G. 2011. Entry into new niches: The effects of firm age and the expansion of technological capabilities on innovative output and impact. *Strategic Management Journal* **32**(9): 1011-1024.
- Kutner MH, Nachtsheim CJ, Neter J. 2004. *Applied Linear Regression Models (4th ed.)*. McGraw-Hill: New York, NY.
- Lane PJ, Lubatkin M. 1998. Relative absorptive capacity and interorganizational learning. *Strategic Management Journal* **19**(5): 461-477.
- Larsson R, Finkelstein S. 1999. Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization. *Organization Science* **10**(1): 1-26.
- Lechner C, Floyd SW. 2012. Group influence activities and the performance of strategic initiatives. *Strategic Management Journal* **33**(5): 478-495.
- Leiblein MJ, Ziedonis AA. 2007. Deferral and growth options under sequential innovation. *Advances in Strategic Management* **24**(1): 225-245.
- Lin L, Kulatilaka N. 2007. Strategic growth options in network industries. *Advances in Strategic Management* **24**(3): 177-198.
- Makri M, Hitt MA, Lane PJ. 2010. Complementary technologies, knowledge relatedness, and invention outcomes in high technology mergers and acquisitions. *Strategic Management Journal* **31**(6): 602-628.

- March JG. 1991. Exploration and exploitation in organizational learning. *Organization Science* **2**(1): 71-87.
- McDonald R, Siegel D. 1986. The value of waiting to invest. *Quarterly Journal of Economics* **101**: 707-727.
- McGrath RG. 1997. A real options logic for initiating technology positioning investments. *Academy of Management Review* **22**(4): 974-996.
- McGrath RG. 1999. Falling forward: Real options reasoning and entrepreneurial failure. *Academy of Management Review* **24**(1): 13-30.
- Mehrwald H. 1999. *Das "Not-invented-here" Syndrom in Forschung und Entwicklung*. Berlin: Springer.
- Miller KD, Folta TB. 2002. Option value and entry timing. *Strategic Management Journal* **23**(7): 655-665.
- Myers SC. 1977. Determinants of corporate borrowing. *Journal of Financial Economics* **5**(2): 147-175.
- Nohria N, Garcia- Pont C. 1991. Global strategic linkages and industry structure. *Strategic Management Journal* **12**: 105-124.
- Nosek BA, Hawkins CB, Frazier RS. 2011. Implicit social cognition: From measures to mechanisms. *Trends in Cognitive Sciences* **15**(4): 152-159.
- Nyberg AJ, Ployhart RE. 2013. Context-emergent turnover (CET) theory: A theory of collective turnover. *Academy of Management Review* **38**(1): 109-131.
- Pablo AL. 1994. Determinants of acquisition integration level: A decision-making perspective. *Academy of Management Journal* **37**(4): 803-836.
- Paruchuri S, Nerkar A, Hambrick DC. 2006. Acquisition integration and productivity losses in the technical core: disruption of inventors in acquired companies. *Organization Science* **17**(5): 545-562.
- Portes A. 1998. Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology* **24**: 1-24.
- Puranam P, Singh H, Chaudhuri S. 2009. Integrating acquired capabilities: When structural integration is (un)necessary. *Organization Science* **20**(2): 313-328.

- Puranam P, Singh H, Zollo M. 2006. Organizing for innovation: Managing the coordination-autonomy dilemma in technology acquisitions. *Academy of Management Journal* **49**(2): 263-280.
- Puranam P, Srikanth K. 2007. What they know vs. what they do: How acquirers leverage technology acquisitions. *Strategic Management Journal* **28**(8): 805-825.
- Ranft AL, Lord MD. 2000. Acquiring new knowledge: The role of retaining human capital in acquisitions of high-tech firms. *The Journal of High Technology Management Research* **11**(2): 295-319.
- Ranft AL, Lord MD. 2002. Acquiring new technologies and capabilities: A grounded model of acquisition implementation. *Organization Science* **13**(4): 420-441.
- Rothaermel FT, Hess AM. 2007. Building dynamic capabilities: Innovation driven by individual-, firm-, and network-level effects. *Organization Science* **18**(6): 898-921.
- Sakhartov AV, Folta TB. 2014. Resource relatedness, redeployability, and firm value. *Strategic Management Journal* **35**(12): 1781-1797.
- Schilke O, Hu S, Helfat CE. 2018. Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research. *Academy of Management Annals* **12**(1): 390-439.
- Schweiger DM, Denisi AS. 1991. Communication with employees following a merger: A longitudinal field experiment. *Academy of Management Journal* **34**(1): 110-135.
- Sears J, Hoetker G. 2014. Technological overlap, technological capabilities, and resource recombination in technological acquisitions. *Strategic Management Journal* **35**(1): 48-67.
- Shan W, Walker G, Kogut B. 1994. Interfirm cooperation and startup innovation in the biotechnology industry. *Strategic Management Journal* **15**: 387-394.
- Sitkin SB. 1992. Learning through failure: The strategy of small losses. *Research in Organizational Behavior* **14**: 231-266.

- Taylor A. 2010. The next generation: Technology adoption and integration through internal competition in new product development. *Organization Science* **21**(1): 23-41.
- Teece DJ. 2007. Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal* **28**(13): 1319-1350.
- Teece DJ. 2012. Dynamic capabilities: Routines versus entrepreneurial action. *Journal of Management Studies* **49**(8): 1395-1401.
- Teece DJ, Pisano G, Shuen A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal* **18**(7), 509-533.
- Teece DJ, Rumelt R, Dosi G, Winter S. 1994. Understanding corporate coherence: Theory and evidence. *Journal of Economic Behavior and Organization* **23**(1): 1-30.
- Tong TW, Reuer JJ. 2006. Firm and industry influences on the value of growth options. *Strategic Organization* **4**(1): 71-95.
- Trigeorgis L. 1993. Real options and interactions with financial flexibility. *Financial Management* **22**(3): 202-224.
- Trigeorgis L, Reuer JJ. 2017. Real options theory in strategic management. *Strategic Management Journal* **38**(1): 42-63.
- Tushman ML, Anderson P. 1986. Technological discontinuities and organizational environments. *Administrative Science Quarterly* **31**: 439-465.
- Vassolo RS, Anand J, Folta TB. 2004. Non-additivity in portfolios of exploration activities: a real options-based analysis of equity alliances in biotechnology. *Strategic Management Journal* **25**(11): 1045-1061.
- Venkatraman N. 1989. The concept of fit in strategy research: Toward verbal and statistical correspondence. *Academy of Management Review* **14**(3): 423-444.
- Wang H, Lim SS. 2008. Real options and real value: The role of employee incentives to make specific knowledge investments. *Strategic Management Journal* **29**(7): 701-721.

- Wassmer U, Li S, Madhok A. 2017. Resource ambidexterity through alliance portfolios and firm performance. *Strategic Management Journal* **38**(2): 384-394.
- Watts RJ, Porter AL. 1997. Innovation forecasting. *Technological Forecasting and Social Change* **56**(1): 25-47.
- Weinstock DS. 1982. Using the Herfindahl Index to measure concentration. *Antitrust Bulletin* **27**: 285-301.
- Yin, R. 1994. *Case Study Research: Design and Methods*. Beverly Hills.
- Zenger TR. 1994. Explaining organizational diseconomies of scale in R&D: Agency problems and the allocation of engineering talent, ideas, and effort by firm size. *Management Science* **40**(6): 708-729.
- Zollo M, Reuer JJ. 2010. Experience spillovers across corporate development activities. *Organization Science* **21**(6): 1195-1212.
- Zollo M, Singh H. 2004. Deliberate learning in corporate acquisitions: Post-acquisition strategies and integration capability in US bank mergers. *Strategic Management Journal* **25**(13): 1233-1256.

Appendix A

Semi-structured Interview Protocol for the Acquiring Firm's Managers

- I. Introduce myself and describe my research and its objectives.
- II. Learn about the interviewee's role in the acquiring firm.
- III. Ask the following questions.
 - 1) How did [acquiring firm] decide to acquire [target firm]? What was the underlying motivation for the deal?
 - 2) Can you describe the deal negotiation process?
 - 3) What was the role of [target firm]'s investors in the process?
 - 4) Were all employees of [target firm] hired by [acquiring firm]?
 - 5) What happened after the acquisition? Can you describe the post-acquisition integration process?
 - 6) What were the factors that affect [acquiring firm]'s integration decisions?
 - 7) Were there any problems during the integration process?
 - 8) After the acquisition did [target firm]'s team work on their previous projects or [acquiring firm]'s existing projects?
 - 9) Is there a new product/project that [target firm]'s team developed after joining [acquiring firm]?
 - 10) Were there any people from the [target firm]'s team who left [acquiring firm] after the acquisition?
 - 11) (If the answer to question 10 is yes) Why do you think they left?
 - 12) (If the answer to question 10 is yes) Was there anything [acquiring firm] could do to prevent them from leaving?
 - 13) Would you say that the acquisition of [target firm] contributed to [acquiring firm]'s market value?
 - 14) How would you define an acqui-hire?
 - 15) Do you think that the acquisition of [target firm] by [acquiring firm] was an acqui-hire?

The questions were left open ended and the conversation was generally allowed to proceed in the direction the interviewees wished to take it.

Semi-structured Interview Protocol for the Target Firm Founders and

Employees

- I. Introduce myself and describe my research and its objectives.
- II. Learn about the interviewee's role in the target firm and current position in the acquiring firm.
- III. Ask the following questions.
 - 1) How did [target firm] get acquired by [acquiring firm]? Can you describe the process?
 - 2) What was the role of [target firm]'s investors in the process?
 - 3) Were all employees of [target firm] hired by [acquiring firm]?
 - 4) What happened after the acquisition? Can you describe the post-acquisition integration process?
 - 5) Were there any problems during the integration process?
 - 6) After the acquisition did you work on your previous projects or [acquiring firm]'s existing projects?
 - 7) Is there a new product/project that [target firm]'s team developed after joining [acquiring firm]?
 - 8) Were there any people from the [target firm]'s team who left [acquiring firm] after the acquisition?
 - 9) (If the answer to question 8 is yes) Why do you think they left?
 - 10) (If the answer to question 8 is yes) Was there anything [acquiring firm] could do to prevent them from leaving?
 - 11) Would you say that the acquisition of [target firm] contributed to [acquiring firm]'s market value?
 - 12) How would you define an acqui-hire?
 - 13) Do you think that the acquisition of [target firm] by [acquiring firm] was an acqui-hire?

The questions were left open ended and the conversation was generally allowed to proceed in the direction the interviewees wished to take it.

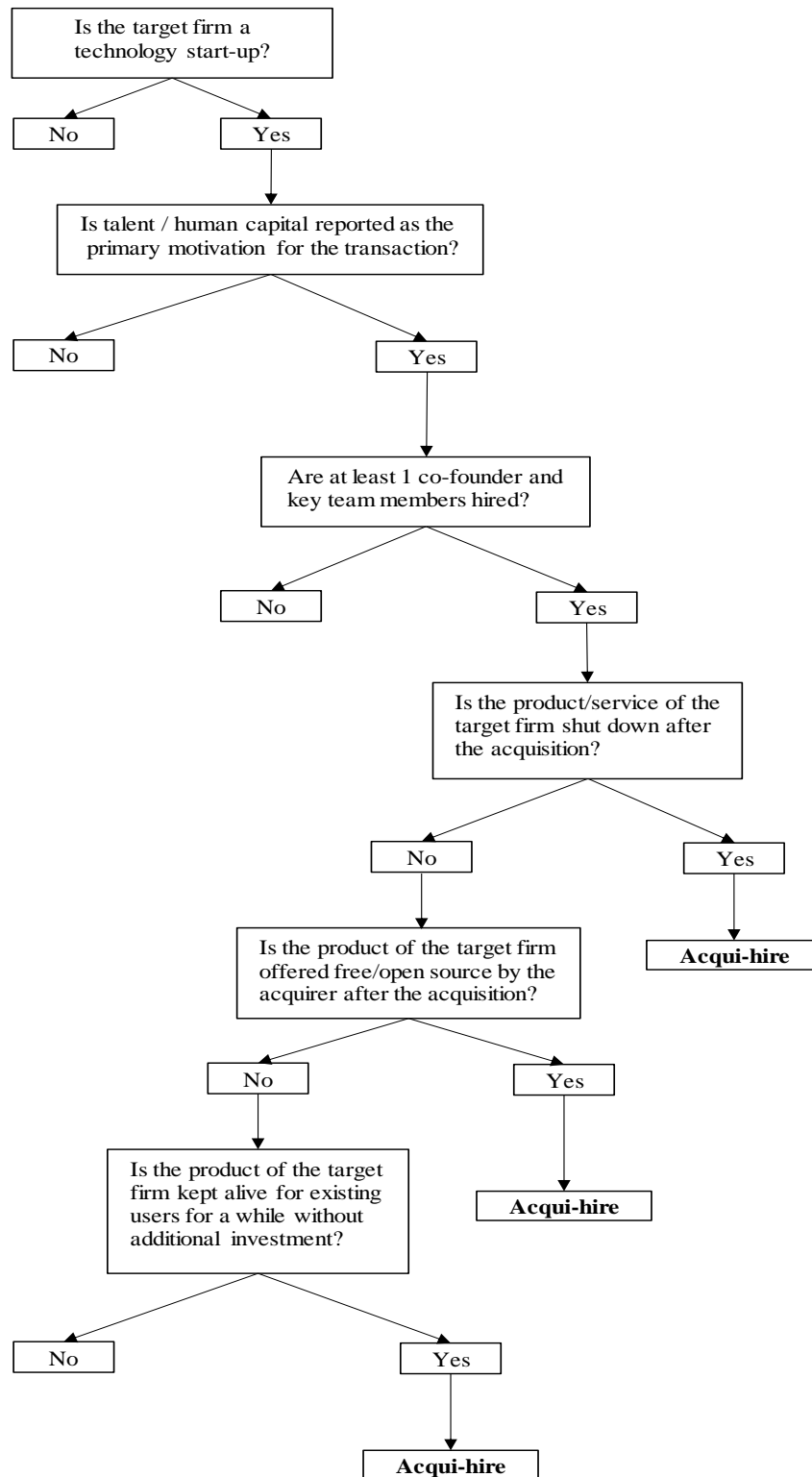
Semi-structured Interview Protocol for the Target Firm's Investors

- I. Introduce myself and describe my research and its objectives.
- II. Learn about the interviewee's involvement in the target firm.
- III. Ask the following questions.
 - 1) How did [target firm] get acquired by [acquiring firm]? Can you describe the process?
 - 2) What was the role of [target firm]'s investors in the process?
 - 3) What do you think was the motivation of [acquiring firm] for the deal?
 - 4) What happened after the acquisition? Can you describe the post-acquisition integration process?
 - 5) Would you say that the acquisition of [target firm] contributed to [acquiring firm]'s market value?
 - 6) How would you define an acqui-hire?
 - 7) Do you think that the acquisition of [target firm] by [acquiring firm] was an acqui-hire?

The questions were left open ended and the conversation was generally allowed to proceed in the direction the interviewees wished to take it.

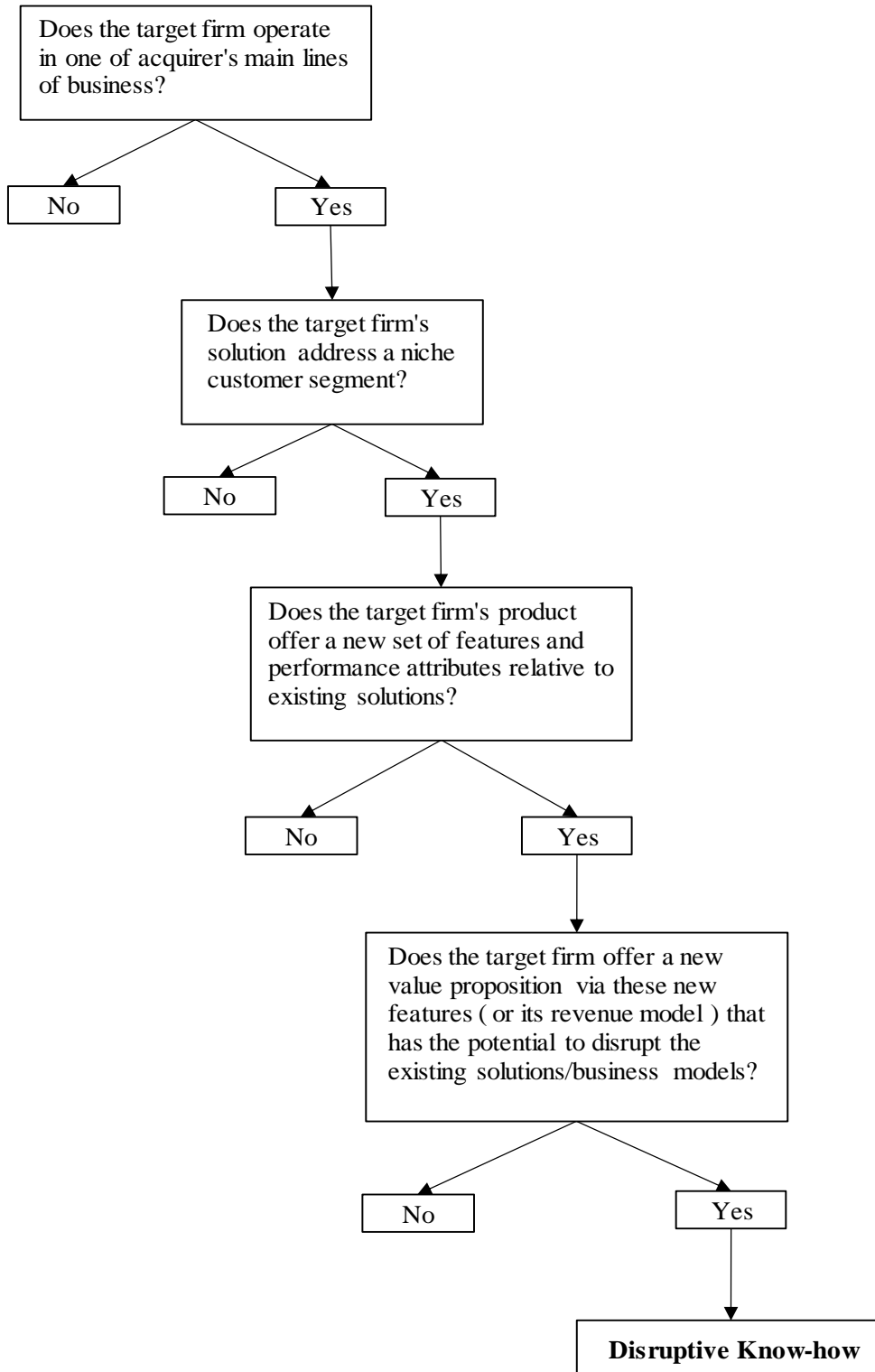
Appendix B

Decision Tree to Determine Whether an Acquisition is an Acqui-hire or Not



Appendix C

Decision Tree to Determine Whether the Target Firm's Know-how is Disruptive or Not



Appendix D

Quotes on Acqui-hires

Acquirer	Target	Quotation	Source
Google	Appjet	Google confirmed this: "Appjet, the company behind EtherPad, is a team of highly-talented entrepreneurs with deep expertise in real-time Web collaboration," said a Google spokesperson via e-mail. "Google and Appjet have a shared vision of how Web collaboration can benefit users, and we're excited to have the Appjet team contribute to the success of Google Wave."	https://www.informationweek.com/google-buys-appjet-to-power-wave/d/d-id/1085335
Google	SayNow	"Google adds to its voice messaging talent with SayNow purchase" The purchase is likely more of a talent buy than a move for future integration."	https://thenextweb.com/google/2011/01/25/google-adds-to-its-voice-messaging-talent-with-saynow-purchase/
Google	Remail	"Google has just picked up Y Combinator incubated startup reMail, bringing its talented founder Gabor Cselle on board the Gmail team. Google might take the opportunity to use Mr. Cselle to build a similar application inside of the Gmail team, but it seems more likely that this acquisition is more a talent grab than a product purchase."	https://thenextweb.com/us/2010/02/17/google-acquires-email-startup-remail-founder-join-gmail/
Google	Labpixies	"Google bought LabPixies for the talent to add to its Israeli R&D center, and to create better apps across both Web and mobile platforms."	https://techcrunch.com/2010/04/27/labpixies-google-25-million/
Google	Planr	"The two person startup is more a Google Me-related talent acquisition than anything else."	https://techcrunch.com/2010/09/28/google-planr/

Appendix D

Google	fflick	<p>“So today we're excited to announce we've acquired Fflick, a talented team that analyzes social media data to surface great content and the discussions around it. We were impressed by the technical talent, design instincts and entrepreneurial spirit of the Fflick team. As part of YouTube, the Fflick team will help us build features to connect you with the great videos talked about all over the web, and surface the best of those conversations for you to participate in.”</p>	<p>https://youtube.googleblog.com/2011/01/share-and-share-like-weve-acquired.html</p>
Google	Pushlife	<p>Google Canada spokeswoman Wendy Rozeluk said in a statement Monday that Google is happy to welcome the PushLife team to its office in downtown Kitchener. "We believe that the PushLife team's deep understanding of immersive applications and user interface design will help us build innovative mobile products," she added.</p>	<p>https://www.cbc.ca/news/technology/google-buys-toronto-startup-pushlife-1.989385</p>
Google	Sparkbuy	<p>“The site closed today as part of the purchase; the three person team will continue on with Google. We're thrilled that Sparkbuy will be joining Google. They have built an impressive comparison shopping site that is simple in design yet powerful for consumers, and we think their expertise, vision and energy will be a great addition to our Kirkland office.”</p>	<p>https://searchengineland.com/google-buys-sparkbuy-comparison-shopping-site-now-closes-team-remains-78237</p>
Google	Postrank	<p>A Google spokesperson gave us this statement: “We're always looking for new ways to measure and analyze data, and as social analytics become increasingly important for online businesses, we're excited to work with the PostRank team to make this data more actionable and accountable. They have developed an innovative approach to measuring web engagement, and we think they can help us improve our products for our users and advertisers.”</p>	<p>https://techcrunch.com/2011/06/03/google-acquires-postrank-an-analytics-service-for-the-social-web/</p>
Google	Dealmap	<p>“We are impressed with what the Dealmap team has accomplished and excited to welcome them to Google,” Google said in an e-mailed statement to DealBook. “We've been thrilled with the early success of our commerce offerings, and we think they can help us build even better products and services for consumers and merchants.”</p>	<p>https://dealbook.nytimes.com/2011/08/01/google-acquires-the-dealmap/</p>

Appendix D

Google	Socialgrapple	<p>“Social graph analytics startup SocialGrapple has announced that its team is heading to Google. It's unclear if this is an IP acquisition or just a talent play, but we've reached out to Google for confirmation.</p> <p>Update: Google has confirmed that founder Andrey Petrov is joining the company, so it appears that this is just a talent acquisition.”</p>	https://techcrunch.com/2011/10/10/team-from-twitter-analytics-startup-socialgrapple-heads-to-google/
Google	Apture	<p>“We were impressed by the Apture team’s approach to enhancing the web browser experience, and we think their expertise will complement the Chrome team’s efforts in this area.”</p>	https://techcrunch.com/2011/11/10/google-buys-contextual-rich-news-browsing-startup-apture-to-beef-up-chrome/
Google	Cleversense	<p>“The Clever Sense team is at the forefront of developing a recommendation engine that connects the online and offline worlds by delivering personal and sophisticated information to users at the right time, the right place and within the right context. By combining their technology and expertise with our team and products, we’ll be able to provide even more people with intelligent, personalized recommendations for places to eat, visit and discover.”</p>	https://techcrunch.com/2011/12/13/google-acquires-clever-sense-creator-of-local-recommendations-app-alfred/
Google	Milk	<p>The Real Reason Google Bought Kevin Rose And Milk: It Needs Designers</p> <p>“Milk had a very strong design focus. That’s why it bought Kevin Rose and the other people at Milk.”</p>	https://www.businessinsider.com/google-snubbed-three-ios-superstars-when-it-bought-milk-2012-3
Google	Sparrow	<p>“A Google spokesperson also told us: The Sparrow team has always put their users first by focusing on building a seamlessly simple and intuitive interface for their email client. We look forward to bringing them aboard the Gmail team, where they’ll be working on new projects.”</p>	https://www.theverge.com/2012/7/20/3172222/google-buys-sparrow-mail
Google	Flutter	<p>“We’re really impressed by the Flutter team’s ability to design new technology based on cutting-edge research. We look forward to supporting and collaborating on their research efforts at Google.”</p>	https://techcrunch.com/2013/10/02/google-acquires-yc-backed-flutter-a-gesture-recognition-technology-startup/

Google	Flexycore	Google has confirmed the purchase, citing FlexyCore's strong team and "expertise in building software to optimize Android device performance". In fact, the startup's team has already been integrated with Google's Android team, while the acquisition has been a year in the making, having started last September and been concluded earlier this month, apparently. That's quite a protracted acquisition, even by the slowest of European standards, and especially for what looks in-part like an acqui-hire.	https://techcrunch.com/2013/10/22/google-flexycore/
Google	Rangespan	Google buys Rangespan, grabbing retail and big data smarts "Rangespan employees will become part of Google's shopping team and strive to bolster services for consumers and retailers, a Google spokesperson wrote in an email to VentureBeat."	https://venturebeat.com/2018/12/19/google-lens-now-recognizes-over-1-billion-products/
Google	Appetas	Google acquires restaurant website builder Appetas Google has bought restaurant website builder Appetas, closing down the service so staff can work on "new endeavors." By snapping up the company, Google has not only secured itself additional talent, but will have a better chance of competing against local services such as Yelp and Foursquare and improving localized services.	https://www.zdnet.com/article/google-acquires-restaurant-website-builder-appetas/
Google	Directr	"Terms of the deal weren't disclosed, but the pieces fit together like that of a smaller purchase/acquihire: the Directr product will live on (now free) under its own branding, but the team behind it is joining YouTube's video ad team."	https://techcrunch.com/2014/08/06/google-acquires-directr-an-app-for-shooting-short-films-on-your-phone/
Google	Jetpac	Google acquires Jetpac, a photo startup with artificial-intelligence smarts "The team was skilled in deep learning, which is an area Google has done plenty of work on, but it certainly could use more talent and ideas for ways to implement image-recognition technologies as plenty other companies, including Microsoft and Baidu, beef up their own deep-learning operations."	https://venturebeat.com/2014/08/15/google-acquires-jetpac-a-photo-startup-with-artificial-intelligence-smarts/

Google	Gecko Design	<p>“Google has acquired Gecko Design, a firm operating out of Los Gatos, Calif., to help with its Google X special projects laboratory. Gecko design gives Google some significant product design chops to help bring new hardware to market, with both manufacturing and industrial design expertise. Early rumors had pegged Google as shopping around for Jawbone or other wearable device makers, but it’s possible the company decided instead to target a design partner used by these startups instead of the startups themselves (it’s very common for companies, especially young ones, to outsource parts of their product design process).”</p>	<p>https://techcrunch.com/2014/08/22/google-acquires-gecko-design/</p>
Google	Vision Factory & Dark Blue Labs	<p>Google's DeepMind Acqui-Hires Two AI Teams In The UK, Partners With Oxford “It is acqui-hiring the two academic teams of founders, seven people in all, behind Dark Blue Labs and Vision Factory, two deep learning startups based in the UK, and it is also partnering with Oxford University, which had spun out the two startups, to build out wider research efforts further in the area of AI.”</p>	<p>https://techcrunch.com/2014/10/23/googles-deepmind-acqui-hires-two-ai-teams-in-the-uk-partners-with-oxford/</p>
Google	Granata Decision Systems	<p>Google AcquiHires Granata Decision Systems “Craig and Tyler’s success is an excellent example of what can be achieved when innovative ideas are transformed into reality by the kind of support UTEST provides during critical early stages of development,” said Dr. Peter Lewis, interim vice-president of Research ad U of T. “We’re thrilled to see them take their next steps with Google.”</p>	<p>https://techvibes.com/2015/01/23/google-acquiHires-granata-decision-systems-2015-01-23</p>
Google	Odysee	<p>The app will be shut down effective February 23, with the team behind it joining Google+ to “continue to focus on building amazing products that people love.”</p>	<p>https://techcrunch.com/2015/02/08/google-odysee/</p>
Google	Toro	<p>“But the people behind it have a lot of experience developing and pushing apps, so it is possible that this is simply about buying experience and expertise.”</p>	<p>https://www.cmswire.com/cms/mobile-enterprise/google-acquires-facebook-marketing-firm-toro-028224.php</p>

Google	Apportable	Google 'acqui-hires' Apportable, investing in OS flexibility for developers The transaction was an "acqui-hire," and accordingly, Google has retained Apportable founders Collin Jackson and Ian Fischer as software engineers, along with 11 members of the Apportable team.	https://www.fiercewireless.com/developer/google-acquires-apportable-here-s-what-you-need-to-know
Google	Pulse.io	“To expand its mobile capabilities, Google has acquired app performance startup Pulse.io. Moving forward, Pulse’s team will focus on incorporating its technologies into the Google ecosystem. Though the company will no longer be enhancing its product with new features, it will remain available to existing customers, along with support.”	http://www.iamwire.com/2015/05/google-acquires-app-performance-startup-pulse-io/117294
Google	Pixate	“Native mobile application prototyping service Pixate has been acquired by Google. The team will be working with Google’s design group, according to a blog post. As a result of this deal, Pixate will be making its Studio product free and is “dramatically” reducing the cost of its cloud service.”	https://venturebeat.com/2015/07/21/google-acquires-pixate-a-y-combinator-backed-mobile-app-prototyping-tool/
Google	Oyster	Google is resistant to the notion that it bought Oyster. But sources said it will end up paying investors, who put a reported \$17 million into the company, for the right to hire some of its staff. In other words, this is an "acquire."	https://www.recode.net/2015/9/21/11618788/oyster-books-shuts-down-team-heads-to-google
Google	Digisfera	Google has acquired Digisfera, a startup focused on panoramic images. Digisfera's employees will be joining the Street View team at Google "to continue building great experiences using 360° photography."	https://venturebeat.com/2015/10/17/google-acquires-360-degree-photography-startup-digisfera-to-beef-up-street-view/
Google	GreenBorder	The whole "green border" thing might simply be a ruse: the company may have acquired the company not for its software but for the expertise of its programmers. This explanation seems the most likely. A representative from Google told InfoWorld that the buyout was "primarily a talent acquisition for us; they have a small team of engineers that we were really impressed with. The idea is that these guys have great expertise in the security domain that can provide obvious benefits to Google, its users, and its advertisers." Security is an important part of any online application, and Google Office could benefit from the knowledge that GreenBorder provides.	https://arstechnica.com/information-technology/2007/05/google-goes-green-buys-greenborder-security-company/

Appendix D

Facebook	Parakey	“Facebook’s first-ever acquisition will bring Blake Ross and Joe Hewitt, Mozilla’s founders, into the Facebook team.”	https://www.ft.com/content/54748202-3653-11dc-ad42-0000779fd2ac
Facebook	Friendfeed	“But the biggest win here for Facebook is the FriendFeed team, which includes an all-star cast of ex-Googlers.”	https://techcrunch.com/2009/08/10/facebook-acquires-friendfeed/
Facebook	Octazen Solutions	Spokesperson Larry Yu described the buy as a “talent acquisition,” saying Octazen’s two employees have joined Facebook as engineers. As he put it in a company statement on the acquisition he sent via email: “We’ve admired the engineering team’s efforts for some time now and this is part of our ongoing effort to add experienced, accomplished technical talent to help drive the company forward in its efforts to be the central way for people to connect and share information.”	https://gigaom.com/2010/02/19/facebook-acquires-contact-importing-startup-octazen/
Facebook	Divvyshot	“Buying Divvyshot is a talent acquisition for Facebook. Founder Sam Odio and the two other Divvyshot team members will be joining Facebook and working on Facebook Photos, which is the largest photo-sharing service in the world.”	https://techcrunch.com/2010/04/02/facebook-buys-up-divvyshot-to-make-facebook-photos-even-better/
Facebook	Sharegrove	“The purpose of the buyout is to bring the engineering talent behind Sharegrove to the Facebook team.”	https://mashable.com/2010/05/26/facebook-acquires-sharegrove/#VI9hvQ6.Tqq0
Facebook	Hotpotato	“Facebook, fresh from announcing its entry into the location game (our ongoing coverage), and Hot Potato this morning confirmed the acquisition, which is clearly a move by the social networking juggernaut to bring in more talent rather than expanding its product line.”	https://techcrunch.com/2010/08/20/facebook-buys-hot-potato/
Facebook	Chai Labs	“BoomTown also claims that the acquisition was made for Chai Labs’s talent, not necessarily for its products or services.”	https://mashable.com/2010/08/15/facebook-chai-labs/#s5aqMCxwL5qM
Facebook	Nextstop	“It looks like Nextstop has a really tiny staff, maybe just three people, so this appears to be hiring through acquisition.”	https://www.businessinsider.com/facebook-buys-nextstop-2010-7

Facebook	Drop.io	<p>Facebook Acquires Drop.io, Nabs Sam Lessin</p> <p>“New York-based file sharing site Drop.io has just posted the breaking news of its acquisition by Facebook on its company blog. This looks like it is the latest in a series of talent acquisitions by the social giant. As this has all the markings of an acqui-hire, founder Sam Lessin will be joining the Product Management organization at Facebook.”</p>	<p>https://techcrunch.com/2010/10/29/facebook-acquires-drop-io-nabs-sam-lessin/</p>
Facebook	Daytum	<p>Facebook Acq-Hires Yet Another Startup: Daytum</p> <p>“Right now is a great time to create a startup. Even if your company isn’t wildly successful (<i>yet</i>), you can sell it to Facebook, as New York-based Daytum just did.”</p>	<p>https://www.adweek.com/digital/facebook-acq-hires-yet-another-startup/</p>
Facebook	Sofa	<p>Facebook Buys Sofa, A Software Design Team That Will Help Make Facebook More Beautiful</p> <p>“The talent acquisitions continue for Facebook. The social network has just bought the software design company Sofa, we’ve learned.”</p>	<p>https://techcrunch.com/2011/06/09/facebook-sofa/</p>
Facebook	Digital Staircase	<p>Facebook Acq-hires Mobile Video And Image Editing App Developer Digital Staircase</p> <p>“It looks like Facebook has just acq-hired mobile video and image app developer Digital Staircase, according to a blog post on the startup’s site. According to Facebook, Digital Staircase’s team will be joining the social network but Facebook has not acquired any of the technology assets from the startup.”</p>	<p>https://techcrunch.com/2011/1/07/facebook-acquires-mobile-video-and-image-editing-app-developer-digital-staircase/</p>
Facebook	Strobe	<p>Facebook Acquires Team Behind HTML5 App Platform Strobe; SproutCore Lives On</p> <p>“As expected, this is mostly a talent acquisition. A Facebook spokesperson says: We’re excited to confirm that we’ve completed a talent acquisition for Strobe Corp., a mobile app development startup based in San Francisco. Founder and CEO Charles Jolley will join our mobile engineering team, and we’re looking forward to the major impact the Strobe team will undoubtedly make at Facebook.”</p>	<p>https://techcrunch.com/2011/1/08/facebook-acquires-html5-app-delivery-network-strobe-sproutcore-lives-on/</p>
Facebook	GazeHawk	<p>Facebook Acquires Team Behind Eye Tracking Startup GazeHawk</p> <p>“Facebook has acquired eye tracking service GazeHawk for the team behind the technology, according to Brian Krausz, co-founder of GazeHawk.”</p>	<p>https://www.businessinsider.com/facebook-acquires-gazehawk-for-talent-2012-3</p>

Facebook	Tagtile	<p>Facebook acquires mobile loyalty reward startup Tagtile</p> <p>“Facebook has acquired mobile loyalty reward startup Tagtile for an undisclosed sum. After Instagram, Facebook has returned to its usual types of acquisitions: it's mainly about the talent.”</p>	<p>https://www.adweek.com/digital/facebook-acquires-mobile-loyalty-startup-tagtile/</p>
Facebook	Lightbox	<p>Facebook acquires mobile photo sharing startup Lightbox</p> <p>Facebook has acquired mobile photo sharing startup Lightbox for an undisclosed sum. Unlike the Instagram acquisition, this is like all of Facebook's other buys: it's all about the employees.</p> <p>"The Lightbox team has incredible experience developing innovative mobile products that people love," a Facebook spokesperson said in a statement. "We look forward to welcoming this world-class team of engineers to Facebook."</p>	<p>https://www.zdnet.com/article/facebook-acquires-mobile-photo-sharing-startup-lightbox</p>
Facebook	Bolt Peters	<p>Facebook Acq-Hires Part Of Design Firm Bolt Peters To Beef Up User Research Team</p> <p>“Knowing how users react to Facebook’s product changes is crucial to the site making the right moves, so today it closed an acq-hire of part of design research firm Bolt Peters — specifically its leading man CEO Nate Bolt and several other employees from the six person consultancy. Those coming over will be joining Facebook’s design team that’s headed by Kate Aronowitz.”</p>	<p>https://techcrunch.com/2012/05/24/facebook-bolt-peters/</p>
Facebook	Spool	<p>Facebook’s Latest Acqui-Hire: Spool, The “Instapaper On Steroids”</p> <p>“Facebook has acquired the team behind Spool, the mobile content-caching startup that launched in September 2011 at TechCrunch Disrupt. This looks like a pure talent acquisition — it doesn’t appear that any of the technology Spool built will be integrated into Facebook, and the company has already shut down its service.”</p>	<p>https://techcrunch.com/2012/07/14/facebooks-latest-acqui-hire-spool-the-instapaper-on-steroids/</p>
Facebook	Acrylic Software	<p>Facebook Acqui-Hires Mac and iOS Developer Acrylic Software</p> <p>Acrylic Software’s founder Dustin MacDonald says that Facebook did not acquire the company’s apps though and that Wallet and Pulp “will continue to remain available for download and purchase in their current form.” The team will move to San Francisco.</p>	<p>https://techcrunch.com/2012/07/20/facebook-acqui-hires-mac-and-ios-developer-acrylic-software/</p>

Appendix D

Facebook	Threadsy	Facebook just made what appears to be another "acqui-hire," with the purchase of Threadsy, a TechCrunch Disrupt startup that went on to make a marketing tool called Swaylo.	https://techcrunch.com/2012/08/24/facebook-threadsy/
Facebook	Storylane	"Terms of the acquisition weren't disclosed, but the young company and its newborn baby of a product weren't the target of the deal- the staff was. He said Facebook isn't taking over the Storylane product, meaning this is a talent acquisition."	https://venturebeat.com/2013/03/08/facebook-acquires-storylane-a-brand-new-bloggingsharing-platform/
Facebook	Hot Studio	Facebook Hires The Team At Design Firm Hot Studio To Build Tools For Brands "An employee at Hot Studio has tweeted saying he's been told that this is Facebook's largest talent acquisition ever."	https://techcrunch.com/2013/03/14/facebook-acquires-hot-studios/
Facebook	Spaceport	Facebook Acquires Team From HTML5 Game Platform Spaceport.io, Which Will Keep Running The Spaceport team including Ben Savage (not the actor from Boy Meets World) could help Facebook build better cross-platform mobile experience for itself and its third-party developers. Facebook tells me "Ben Savage and the Spaceport team are a talented group of mobile engineers. We look forward to building products that people love together."	https://techcrunch.com/2013/04/23/facebook-acquires-part-of-team-from-html5-game-platform-spaceport-io-but-co-founder-will-keep-running-it/
Facebook	Teehan Lax	Facebook acquires top members of influential design firm Teehan+Lax A source close to the matter called this a "talent deal," also known as an acquihire. Following this deal, we're told Teehan+Lax is "winding down their current contracts."	https://venturebeat.com/2015/01/16/members-of-influential-design-shop-teehanlax-jump-ship-for-facebook/
Facebook	Endaga	Facebook 'Acqui-Hires' Community Cellular Network Provider Endaga "Facebook's latest acqui-hire is aimed at bolstering its push to connect everyone in the world to the Internet."	https://www.adweek.com/digital/endaga/
Twitter	Values of n	Twitter Acquires 'Values of n', Adds Rael Dornfest To The Team "The primary goal of the acquisition appears to have been to bring Rael Dornfest to the Twitter team."	https://techcrunch.com/2008/11/24/twitter-acquires-values-of-n-adds-rael-dornfest-to-the-team/

Twitter	Cloudbopper	“Twitter has made another acquisition-hire, buying Cloudbopper, a two person operation. Since it's mostly picking up two new employees through the acquisition, not a big business, we doubt it was much.”	https://www.businessinsider.com/twitter-acquires-sms-company-cloudbopper-2010-4
Twitter	Fluther	Twitter acquires team behind QandA service Fluther “Twitter has just announced that it has acquired the team responsible for question and answer service Fluther. The acquisition is a talent grab and does not include Fluther.com, a service that is something of a cross between Quora and Google’s Aardvark, connecting users asking questions to those who can answer them.”	https://thenextweb.com/twitter/2010/12/21/twitter-acquires-qa-service-fluther/
Twitter	Bagcheck	Twitter Buys Bagcheck for Engineering Talent The acquisition of Bagcheck appears to be mostly motivated by a decision to snatch up the engineering half of the two-man co-founder team. "Sam Pullara is a rare talent with a deep appreciation for connecting people with their interests," Twitter's representative says.	https://mashable.com/video/crosshelmet-smart-motorcycle-helmet-future-ar/
Twitter	Julpan	Twitter Acquires Some Serious Search Talent At Julpan “Twitter recently opened a New York office and the purchase of Julpan will give them a solid base of engineering talent in Silicon Alley.”	https://observer.com/2011/09/twitter-acquires-some-serious-search-talent-at-julpan/
Twitter	Whisper Systems	“Since none of the Whisper Systems’ products are even out of beta, it’s likely that Twitter was more attracted to talent in this particular acquisition. The microblogging social network probably intends to improve security of its own products when used on Android and other platforms.”	https://venturebeat.com/2011/11/28/twitter-buys-whisper-systems/
Twitter	Summify	“This sounds like a talent acquisition on Twitter’s part — in other words, the main purpose of the acquisition was probably hiring the Summify team. Some of Summify’s feature have been immediately disabled, it’s no longer accepting new users, and in a few weeks, Summify says it will shut down the current product entirely. Meanwhile, the startup will be moving from Vancouver to San Francisco to work out of the Twitter office.”	https://techcrunch.com/2012/01/19/twitter-acquires-summify/

Appendix D

Twitter	Posterous	“Blogging and sharing company Posterous has announced via its company blog that it has been snagged by Twitter in an apparent 'acqui-hire', with Twitter interested mostly in the people, not the product.”	https://thenextweb.com/insider/2012/03/12/twitter-has-acquired-shortform-blogging-company-posterous/
Twitter	Hotspots.io	Then again, the details of the Hotspots product may not matter, since it sounds like Twitter is more interested in hiring the team (specifically to help with revenue) than acquiring the technology. A Twitter spokesperson just emailed me to confirm the deal: “We’re excited that the team at Hotspots.io is joining Twitter to work on the revenue engineering team.”	https://techcrunch.com/2012/04/16/twitter-acquires-hotspots-io/
Twitter	Cabana	Twitter Acqui-Hires Mobile App Development Platform Cabana, Shuts It Down “Reeve Thompson, Jeremy Gordon and their team have created a product that makes it easier for people to build rich mobile apps. At Twitter, they will join our platform team and build tools to help third-party developers create new experiences on Twitter.”	https://techcrunch.com/2012/10/16/twitter-acqui-hires-mobile-app-development-platform-cabana-shuts-its-down/
Apple	Redmatica	It appears the company only has a few employees. So, if Apple were to buy Redmatica, we would like to think of it as an “acqui-hire.”	https://9to5mac.com/2012/05/30/apple-acquires-italian-audio-software-company-redmatica/
Apple	Particle	“While the reason behind the deal remains unknown, Apple likely wants the web talent from Particle.”	https://www.cultofmac.com/196308/apple-buys-particle-a-small-html5-web-development-company/
Apple	Catch.com	Apple Reportedly Acquires Note-Taking App Catch, BroadMap Talent “As for Catch, 9to5Mac says it’s working on iOS software. Its app resembles Google Keep, and if Apple is looking to build out better functionality in Reminders, Notes and its audio recording apps, this is likely a good team to have in pursuit of that goal.”	https://techcrunch.com/2013/12/23/apple-reportedly-acquires-note-taking-app-catch-broadmap-talent/
Apple	Acunu	“A preponderance of evidence suggests Apple performed an "acqui-hire" of key Acunu employees in late 2013, though an exact timeline is currently unknown. From the end of 2013, and moving into early 2014, at least seven software engineers, including founding CEO and CTO Tim Moreton, left Acunu and are now working for Apple in some capacity.”	https://appleinsider.com/articles/15/03/25/apple-acquires-big-data-analytics-firm-acunu

Apple	Broadmap	Apple acquired mapping firm BroadMap's talent, location-infused Evernote competitor Catch "BroadMap has expertise and technologies that could assist Apple is improving the data it has for its Maps app on iOS and OS X."	https://9to5mac.com/2013/12/23/apple-likely-acquired-mapping-firm-broadmap-location-infused-evernote-competitor-catch/
Apple	Spotsetter	"The deal, we understand, was mainly about acquiring the technology and the talent of the two founders, ex-Google Maps engineer Stephen Tse and Johnny Lee (whose LinkedIn profiles also now point to their move to Apple)."	https://techcrunch.com/2014/06/06/spotsetter-a-social-search-engine-for-places-acquired-by-apple/
Apple	Booklamp	"BookLamp's tech and talent could help Apple improve its iBooks service with better recommendations, search, and categorization."	https://techcrunch.com/2014/07/25/apple-booklamp/
Apple	Concept.io (Swell)	"With Swell, Apple is adding a team of experienced entrepreneurs to its team, which should help its struggling Podcast app considerably, if not transform it into something totally new."	https://techcrunch.com/2014/07/28/apple-to-buy-swell-for-30-million-per-report/
Apple	Perceptio	"Along with Perceptio's technology, Apple acquired cofounders and artificial intelligence researchers Nicolas Pinto and Zak Stone, who earned PhDs from Harvard and MIT, respectively."	https://appleinsider.com/articles/15/10/05/apple-buys-machine-learning-firm-perceptio-smartphone-ai
Apple	Union Bay Networks	"It is unknown at this time how Apple plans to incorporate Union Bay Networks into its business model, though the publication believes the purchase to be a so-called "acqui-hire" for talent as at least five former employees have switched their LinkedIn profiles to reflect current employment at Apple."	https://appleinsider.com/articles/14/11/03/apple-to-open-engineering-operation-in-seattle-possible-acquisition-of-cloud-computing-startup-union-bay-networks
Apple	FoundationDB	"FoundationDB's story isn't a new one. Instead, it's yet another a cautionary tale about putting too much faith in unproven companies offering proprietary software that could go away at any time-especially when a behemoth like Apple swoops in to buy it up. Often, such acquisitions are purely to hire new talent or integrate a startup's technology into a new or existing product. In FoundationDB's case, it's unlikely that Apple wants to get into the business of selling enterprise database software."	https://www.wired.com/2015/03/apple-pulls-plug-tech-company-runs/

Appendix D

LinkedIn	ChoiceVendor	From the sound of it, LinkedIn is buying the company mostly for its team. At least that's what I read in LinkedIn CEO Jeff Weiner's supporting quote: "Our acquisition of ChoiceVendor is right in line with our top priority to build a world-class team at LinkedIn. We've admired the work that Yan-David, Rama, and the talented ChoiceVendor team have done for some time now and are excited to have them join us, especially given their highly relevant work experience."	https://techcrunch.com/2010/09/23/linkedin-choicevendor/
LinkedIn	IndexTank	Now that good engineers are notoriously hard to find and, in the San Francisco Bay Area, even harder to hire, LinkedIn's purchase of IndexTank could well be largely an acq-hire move. "The IndexTank acquisition brings an infusion of great search technology and talent to LinkedIn, and will help our internal teams build even better search products and experiences for our members."	https://gigaom.com/2011/10/11/linkedin-acquires-search-engine-startup-indextank/
Yahoo	Dapper	"Both Yahoo and Google have been working on optimizing contextual display ads for quite some time, and this recent acquisition is Yahoo's attempt to harness the talent at Dapper, which has also figured out a realtime bidding feature for ads."	https://techcrunch.com/2010/10/05/yahoo-dapper/
Yahoo	Stamped	"The acquisition was purely for talent: Stamped's nine-person team- of which five are ex-Google employees- will be joining a large mobile product team Yahoo plans to establish in New York under the leadership of Stamped's three co-founders, we're told. Stamped's iPhoneand web app will both be discontinued by the end of the year."	https://mashable.com/2012/10/25/yahoo-acquires-stamped/
Yahoo	OnTheAir	"Like Stamped, Yahoo is acquiring OnTheAir not for the product itself, but for the talent behind it. OnTheAir's CEO Josh Schwarzapel told Mashable that the startup's five-person team will be joining forces with Yahoo's mobile division in San Francisco to begin working on undisclosed projects. OnTheAir will no longer continue to exist as a standalone product."	https://mashable.com/2012/12/04/yahoo-acquires-ontheair/#K_LNOWcjLGqh

Appendix D

Yahoo	Jybe	The standalone Jybe app will be closed down as part of the acquisition, which seems mostly to be about getting the five member team (all ex-Yahoo!) back in the Yahoo! fold, but Bhattacharjee said that "the technology will live on inside Yahoo! as one of the core pieces that is used to do personalization for various things."	https://techcrunch.com/2013/03/20/yahoo-acquires-jybe/
Yahoo	Summly	"Clearly, Yahoo CEO Marissa Mayer wanted to hire D'Aloisio. She has been making a lot of small acquisitions like Summly. She wants to bring young, fresh, mobile-focused talent to Yahoo."	https://www.businessinsider.com/yahoo-buys-summly-2013-3
Yahoo	MileWise & GoPollGo	"Yahoo announced the acquisitions of both MileWise and GoPollGo Thursday. Both startups will be shutting down their services and joining Yahoo's mobile teams- Five people from MileWise will be reporting to Robby Stein's mobile office in New York, while GoPollGo's three founders will join Yahoo's mobile group in Sunnyvale, Calif., a spokesperson for Yahoo said."	https://mashable.com/2013/05/09/yahoo-acquires-milewise-gopollgo/#dzlj2FyNLPqk
Yahoo	Loki Studios	Yahoo on Friday acquired Loki Studios, according to an announcement on the location-based gaming company's website. Terms of the deal were not disclosed, but this appears to be another acqui-hire, meaning Yahoo is more interested in the firm's employees than the actual firm. "Today we welcomed Loki Studios to the Yahoo! mobile team," a Yahoo spokesperson told TNW in a statement. "Their experience in community and location-based mobile services is impressive and we're excited to have them on the team."	https://thenextweb.com/insider/2013/05/10/yahoo-acquires-location-based-mobile-gaming-company-loki-studios/
Yahoo	Incredible Labs	"Incredible Labs, the startup behind mobile personal assistant app Donna, has been acquired. Five of the seven members of the team will join Yahoo, and Donna will be shut down."	https://techcrunch.com/2014/01/30/incredible-labs-donna-yahoo/
Yahoo	Snip.it	The size of the deal, along with the immediately effective shut-down of the service, points to this being a standard "acqui-hire" situation.	https://techcrunch.com/2013/01/22/yahoo-buys-snip-it-10-million/

Appendix D

Shopify	Select Start Studios	“The S3 acquisition brings in top talent that will rapidly deliver on our mobile strategy, and produce several new mobile product offerings this year.”	https://www.prweb.com/releases/2012/2/prweb9153932.htm
Hubspot	Performable	Acquisition adds innovative functionality and top talent “The acquisition brings sophisticated 'middle of the funnel' marketing functionality to the HubSpot platform, meaning it will enhance businesses ability to turn more visitors into leads and customers. The acquisition also adds top product development, user experience, and engineering talent, starting with veteran entrepreneur David Cancel who will become HubSpot's Chief Product Officer.”	https://www.hubspot.com/blog/bid/16943/HubSpot-Acquires-Marketing-Automation-Company-Performable
Workday	Upshot	Workday acqu-hires Upshot, the startup that won controversial \$1M Salesforce hackathon prize “The Upshot acquisition, which went down in February, has given Workday engineers who are skilled in natural-language processing (NLP). Such technology can come in handy for many of Workday’s applications, including the ability to predict retention risk based on what people say about their skills, roles, and job titles, Dan Beck, senior vice president for technology products at Workday, told VentureBeat in an interview. The team can help Workday build NLP into applications beyond its Talent Insights app, as well as applications for projects, procurement, accounts payable, and accounts receivable, Beck said.”	https://venturebeat.com/2015/07/14/workday-acqu-hires-upshot-the-startup-that-won-controversial-1m-salesforce-hackathon-prize/
Square	80/20	A Square spokesperson said of the acquisition: "80/20 is an amazingly talented design team. Their experience designing beautiful products for some of the most well-known technology companies in the world will be a huge asset to Square."	https://techcrunch.com/2012/10/01/square-makes-its-second-acquisition-buys-design-firm-8020-opens-new-york-office/
Square	Viewfinder	Given the team's background, this deal appears to be one that's more acqui-hire in nature, than one about the technology the team at Viewfinder had developed, which had involved a unique photo-sharing application which was part utility, part social network. Square says of Viewfinder that the team “is incredibly talented, having built an app that blends beautiful design and highly technical engineering to create personal, human experiences.” This, the company says, is what Square is also about, and the co-founders will now help Square continue to build its mobile applications.	https://techcrunch.com/2013/12/03/square-acquires-ex-googler-team-behind-viewfinder-to-help-grow-its-nyc-presence/

GoDaddy	Canary Calendar	<p>GoDaddy Acqui-Hires Founders Of Smart Calendaring App Canary</p> <p>“GoDaddy is again expanding its team focused on serving the needs of small business owners with the acquisition of a smart calendaring service called Canary. The deal for Canary is more of an acqui-hire, than acquisition, as GoDaddy has no intentions of bringing the Canary application into its current product lineup.”</p>	<p>https://techcrunch.com/2014/07/10/godaddy-acqui-hires-founders-of-smart-calendaring-app-canary/</p>
TripAdvisor	CruiseWise	<p>“TripAdvisor's acquisition of CruiseWise is great news for TripAdvisor subsidiary Cruise Critic, which is a leading cruise news and cruise-information site, but is hampered by an outdated user interface and bulletin-like forum technology. This acqui-hire will enable TripAdvisor to finally modernize Cruise Critic, a project that's probably been on the agenda for years.”</p>	<p>https://skift.com/2013/05/02/tripadvisor-acquires-cruise-online-booking-site-cruisewise/</p>
Zynga	MyMiniLife	<p>Zynga Adds Talent with Acquisition of MyMiniLife</p> <p>“Major social game developer Zynga recently acquired young social virtual world developer MyMiniLife, and it is already using some of the company’s technology in FarmVille. The MyMiniLife team has already joined Zynga’s 400-odd staff and is primarily focused on helping grow Zynga’s virtual worlds.”</p>	<p>https://www.adweek.com/digital/zynga-adds-talent-with-acquisition-of-myminilife/</p>
Zynga	Serious Business	<p>“Zynga, the heavily-funded social gaming company, today announced that it has signed an agreement to acquire Serious Business, fellow creators of social games on Facebook. The terms of the agreement were not disclosed, but it appears to be more of a strategic purchase to bring in more experienced social game development talent.”</p>	<p>https://techcrunch.com/2010/02/11/zynga-serious-business/</p>
Zynga	JamLegend	<p>Music Gaming Startup JamLegend Acquired By Zynga</p> <p>Earlier today we wrote about music games startup JamLegend joining the deadpool. JamLegend aimed to compete against biggies Rock Band and Guitar Hero and was shut down today after three years so the team could “move on to new ventures.” We’ve just confirmed that the team will actually be moving to gaming giant Zynga in a talent acquisition.</p>	<p>https://techcrunch.com/2011/04/19/music-gaming-startup-jamlegend-acq-hired-by-zynga/</p>

Zynga	Wild Needle	Zynga Picks Up Mobile Gaming Startup Wild Needle In A Talent Deal “Zynga has picked up the team behind Wild Needle, a female-focused casual games company that was backed by Playdom co-founder Rick Thompson.”	https://techcrunch.com/2012/05/14/zynga-picks-up-mobile-gaming-startup-wild-needle-in-a-talent-deal/
HP	Euclayptus Systems	“According to Bill Hilf, senior vice president of product, services, and strategy for HP's cloud business, who will report to Mickos, the acquisition provides a needed leader for the company's cloud operation and additional engineering talent needed to expand and hone the company's cloud software and services—technology that provides a means of building and hosting large online software applications.”	https://www.wired.com/2014/09/hp-eucalyptus/
Intuit	Elastic Intelligence	Intuit acqui-hires Elastic Intelligence team for 'DIY' app builders “Intuit reps confirmed on Friday that the intent was to enlist the talent at Elastic Intelligence for improving and adding to its own cloud services suite.”	https://www.zdnet.com/article/intuit-acqui-hires-elastic-intelligence-team-for-diy-app-builders/
Intuit	Level Up Analytics	In a statement, Intuit described the deal as an "acqui-hire," its fifth this year. The company did not provide the names of the other consulting firms. The Level Up Analytics team will help build products on top of Intuit's collective data of more than 45 million customers that ranges from individual purchases and spending habits to business inventories, transactions, and trends.	https://techcrunch.com/2013/10/23/intuit-acquires-level-analytics-a-consulting-firm-with-a-specialty-in-data-analytics/
Digi International	Utiligent	But there is no question that for Digi, it was less a decision to acquire and more a version of “acqui-hire” to bring Jennings on board.	http://tcbmag.com/opinion/playbook/columns/playbook-the-second-time-s-the-charm-october-2011

Cisco	Collaborate.com	<p>“The press-release, er, blog post at Cisco makes no mention of WebEx Social, and it reads more like an acquire: Today, I am pleased to announce Cisco’s acquisition of Collaborate.com to help capture this market transition in mobility and cloud. Collaborate’s skilled team of cloud and mobile software developers has created a mobile collaboration application that provides unified document sharing, task management and team communication capabilities, enabling today’s mobile workforce to collaborate with team members on projects.</p> <p>Together, Cisco and Collaborate plan to provide a comprehensive solution that enables the mobile workforce to work smarter and more efficiently from virtually anywhere. Collaborate’s cutting-edge technology and strong engineers as part of Cisco’s Collaboration Technology Group will help accelerate Cisco’s innovation in Collaboration.”</p>	<p>https://gigaom.com/2013/12/21/cisco-acquires-collaborate-com-but-not-a-peep-about-webex-social/</p>
Cisco	Assemblage	<p>“Today, I am pleased to announce Cisco’s acquisition of Assemblage to help us capture the ongoing market transitions of mobility, cloud and the Internet of Everything (IoE). Assemblage has built a talented team of web developers to deliver the tools and the infrastructure to enable simple, real-time collaboration through the browser to any device, without the need for downloads, plugins, or installations. With this acquisition, Assemblage brings a strong team of engineers with deep web development expertise to Cisco’s Collaboration Technology Group (CTG), enabling Cisco to accelerate innovation and develop simple, easy to use, next generation collaboration solutions. In addition, Assemblage’s experience integrating with third party cloud ecosystem applications like Box and Google shows a close alignment to Cisco’s collaboration strategy and our commitment to simplicity and interoperability.</p> <p>We are excited to welcome Assemblage to our collaboration team. Together, Cisco and Assemblage will provide simple, easy-to-use solutions that help employees work smarter together from virtually anywhere.”</p>	<p>https://blogs.cisco.com/news/cisco-announces-acquisition-of-assemblage</p>
Adobe	Thumb Labs	<p>Adobe Acqui-hires Thumb Labs To Make Mobile Apps For Behance And Its New Creative Cloud</p> <p>“The news follows on from Adobe’s acquisition of another New York-based design startup, Behance, a platform for designers and others in the creative industries to share their work, which Adobe picked up in December 2012 reportedly for around \$150 million. Earlier this month, Adobe put the Behance acquisition into context when it announced</p>	<p>https://techcrunch.com/2013/05/22/adobe-acqui-hires-thumb-labs-to-make-mobile-apps-for-behance-and-its-new-creative-cloud/</p>

		<p>a massive push on its Creative Cloud strategy, with social/community features powered by Behance.</p> <p>Verdi tells TechCrunch that Thumb Labs will see out existing contracts it has with other clients, but as of May 31, it will focus its efforts exclusively on making mobile apps for Behance.”</p>	
Adobe	Ideacodes	<p>Adobe Acqui-hires Creative Consultancy Ideacodes, Names Co-Founders As Creative Directors Of Creative Cloud</p> <p>Adobe just announced that it has acqui-hired Ideacodes, a San Francisco-based creative consultancy that specializes in “the design and user experience of smart application, digital product and networked communities.” Ideacodes’ co-founders Emily Chang and Max Kielser will join Adobe as creative directors of Creative Cloud. According to Adobe’s Jeff Veen, “The Ideacodes team will help us realize our goal of making Creative Cloud indispensable for creatives worldwide.”</p>	<p>https://techcrunch.com/2013/05/28/adobe-acquires-creative-consultancy-ideacodes-names-co-founders-as-creative-directors-of-creative-cloud/</p>
Symantec	PasswordBank	<p>“Symantec spokesperson Ellen Hayes confirmed the deal and provided the following statement. Symantec will use PasswordBank’s expertise in single sign on technology to extend Symantec’s functionality in secure sign on for web or cloud applications and further enhance its identity and context aware security, a key strategic initiative.”</p>	<p>https://www.zdnet.com/article/symantec-acquiring-passwordbank-for-single-sign-on-services/</p>
Citrix	Octoblu	<p>“Right after the acquisition, it was speculated that it was an “acqui-hire” so that Citrix could gain the services of Geir Ramleth, who was a co-founder and Citrix proponent back in his days at Bechtel.”</p>	<p>https://www.brianmadden.com/opinion/Octoblu-is-true-blue-Citrix-now-What-can-they-do-with-it</p>
Citrix	Caymas Systems	<p>Citrix already has some technology similar to Caymas', and seems to want its employees' expertise, Uppal says. "They wanted to see how they could add a great team with our capabilities to help their application delivery infrastructure out of their Application Networking product group here in Santa Clara," he says.</p>	<p>https://www.networkworld.com/article/2291172/network-security/citrix-buys-caymas-nac-assets.html</p>

Salesforce	ChoicePass	ChoicePass acquired by Salesforce: Staff hired, site shuttered “It comes as part of Salesforce's aggressive social capability boosting through no other than acquisitions and acqui-hirings; as is often the case, it's the staff rather than the product that corporate giants find interest in.”	https://www.zdnet.com/article/choicepass-acquired-by-salesforce-staff-hired-site-shuttered/
Salesforce	Thinkfuse	Salesforce.com Hires The Thinkfuse Team And Shuts It Down “The Thinkfuse team will head to Salesforce.com and shut down its service on July 25, according to a post from the Thinkfuse founders.”	https://www.businessinsider.com/salesforcecom-hires-the-thinkfuse-team-and-shuts-it-down-2012-6
Salesforce	MinHash	“While the MinHash product may no longer work after that point, the company's tech and team of four engineer employees- co-founders Jayesh Govindarajan and Naren Chittar, as well as Anuprit Kale and Edgar Velasco- are all coming over to Salesforce, where it looks like they may be rebuilding a version of the product to work there, as part of the company's search and data science teams.”	https://techcrunch.com/2015/12/14/salesforce-has-acquired-an-ai-startup-called-minhash-to-build-out-its-marketing-analytics/
Oracle	Stack Engine	“Oracle is seeking container talent that can build new things. It's also likely Oracle is at least as interested in the team as it is in the specific technology created by that team.”	https://www.infoworld.com/article/3017922/application-virtualization/3-reasons-why-oracle-bought-stackengine.html
Microsoft	LiveLoop	Microsoft buys, shuts down a tiny startup "Microsoft is excited to welcome the talented team from LiveLoop to help build great collaboration across Office applications, as part of our strategy and vision to reinvent productivity," a Microsoft spokesperson said in an email.	https://www.businessinsider.com/microsoft-buys-shuts-down-a-tiny-startup-2015-3
Microsoft	Talko	The company says today the acquisition, whose terms were not disclosed, involves the Talko technology and the team. Talko employees will now join Skype, while Talko itself is being shut down. According to Microsoft's announcement about the acquisition, the Talko technology and the talent joining Skype will be used to help “deliver great new features and capabilities” in both Skype and Skype for Business.	https://techcrunch.com/2015/12/21/microsoft-buys-ray-ozzies-communications-startup-talko-team-will-join-skype/

Box	Airpost	According to a blog post from Airpost co-founder and CEO Navid Nathoo, Airpost will be closing operations as of Mar. 1, 2015. The Airpost team will be joining Box, and, as TechCrunch notes, the wording of Nathoo's announcement makes the deal seem like an "acqui-hire."	https://www.datacenterknowledge.com/archives/2015/02/23/box-buys-airpost-a-startup-that-brings-visibility-into-corporate-clouds
Criteo	AdQuantic	We can confirm that Criteo has acquired AdQuantic, a spokesperson writes. "The talented team at AdQuantic will be a great addition to our staff and we are excited to bring them on board. They will join Criteo with immediate effect."	https://techcrunch.com/2014/04/10/criteo-buys-adquantic/
VMWare	MomentumSI	While this is a relatively small deal for VMware, sources told CRN it's an important "acqui-hire" that brings the kind of technological expertise the vendor needs to tell a better hybrid cloud story to customers.	https://www.crn.com/news/cloud/300074831/vmware-acquires-professional-services-firm-to-boost-cloud-migration-devops-expertise.htm
Nokia	Cellity	Nokia Buys Social Addressbook Startup Cellity For The Team "Nokia won't be continuing Cellity's Addressbook 2.0 service, but it stands to reason the team will build similar functionality from scratch for future Nokia phones. Or perhaps they will work on new projects. The team will become part of Nokia's Services division in Berlin, which also houses other startup acquisitions Plazes and bit-side."	https://techcrunch.com/2009/07/24/nokia-buys-social-addressbook-startup-cellity-for-the-team/
Groupon	Pelago	Groupon Acq-Hires "Whrrl" Maker Pelago And CEO Jeff Holden, An Ex-Amazon Exec Groupon just made another acquisition: It is buying Pelago, the company behind Whrrl, one of the original, Foursquare-like location-based services. Pelago CEO Jeff Holden will oversee Groupon product development -- his mobile experience will be especially helpful for Groupon's forthcoming "Groupon Now" mobile app -- and many Pelago team members will get jobs at Groupon.	https://www.businessinsider.com/groupon-acq-hires-whrrl-maker-pelago-and-ceo-jeff-holden-an-ex-amazon-exec-2011-4

Groupon	Crowdmass	<p>Groupon, Crowdmass deal all about the talent Groupon paid only a “symbolic” amount to buy Melbourne-based group buying site Crowdmass, the company’s Australian chief said this afternoon, with the acquisition being more about sourcing good employees than buying the company’s business assets.</p>	<p>https://www.theaustralian.com.au/business/business-spectator/groupon-crowdmass-deal-all-about-the-talent/news-story/4ce2c74f214171c2352b040a1c005997</p>
Groupon	Kima Labs	<p>"Kima Labs has developed popular apps that make mobile transactions easier, more fun and more of a possibility for merchants. We're excited by the team's ability to create technology that consumers love, and we believe they'll be strong assets in our pursuit to change the way people shop."</p>	<p>https://techcrunch.com/2012/02/18/groupon-on-a-buying-spree-buys-mobile-payment-specialist-kima-labs/</p>
Groupon	Uptake	<p>A source told All Things D that the deal is more of an "acqihire" of Uptake, meaning that Uptake's 20 person team will likely be merged into Groupon's operations. “Groupon has acquired Uptake and we’re excited to continue to build the Palo Alto engineering team with an all-star roster of startup founders and engineers,” a Groupon spokesperson said in an email to VentureBeat.</p>	<p>https://venturebeat.com/2012/02/28/in-its-third-acquisition-this-month-groupon-buys-uptake/</p>
Groupon	Ditto	<p>The winding down of Ditto also indicates that for Groupon, this may have been mostly about bringing on talented employees through an "acqui-hire." Hiring good engineers and designers is tough these days, and Groupon has been on a shopping spree of sorts when it comes to mobile and location apps, so this looks like a smart deal all-around.</p>	<p>https://techcrunch.com/2012/04/16/groupon-acquires-ditto-me-the-social-recommendation-and-planning-app/</p>
Groupon	MashLogic	<p>Groupon acqui-hires MashLogic, will shutter Britely plugin this weekend “The company has apparently acqui-hired MashLogic, a five-year-old Palo Alto startup that makes the Britely contextual browser plugin. The browser plugin fad didn't pan out too well for most involved, but the MashLogic team certainly gained relevant experience that Groupon is hoping they can put to use in the local commerce vertical.”</p>	<p>https://pando.com/2013/02/11/groupon-acquihires-mashlogic-will-shutter-brightly-plugin-this-weekend/</p>

Groupon	Campfire Labs	<p>Groupon Makes A Small Acquisition, Buying The Social Search Experts At Campfire</p> <p>“Groupon has acquired stealthy startup Campfire Labs, TechCrunch reports. The acquisition is for talent. The founders, former GoogleSakina Arsiwala and social search expert Naveen Koorakula, are married. Campfire Labs was reportedly building a social networking service to improve engagement. Groupon is a pretty social service itself, so adding anyone with expertise in social is a smart move.”</p>	<p>https://www.businessinsider.com/groupon-acquires-campfire-labs-2011-12</p>
Groupon	Mertado	<p>Groupon acquires social commerce company Mertado</p> <p>“Deals giant Groupon has acquired Mertado, a social shopping company that helps customers discover new products. This is the second talent-based acquisition the company has made in the past month, as it announced the purchase of ‘stealth’ start-up Campfire Labs just a few weeks ago – which was yet to launch. According to reports, Groupon was primarily interested in Mertado’s expertise in the social commerce space, including the launch of Mertado TV, which combined video content with products. This talent land grab feels like the slow and steady rise of panic; an attempt to bring smart people in that might be able to change the path of a sinking ship before its too late.”</p>	<p>https://econsultancy.com/groupon-acquires-social-commerce-company-mertado/</p>
Qualcomm	Euvision Technologies	<p>“Qualcomm have announced the acquisition of Euvision Technologies, an image recognition specialist, which the US giant may be planning to bolster its image and visual recognition services. Image recognition has been an important area for Google and Facebook, which have also been buying up technology and talent in this arena.”</p>	<p>https://www.androidheadlines.com/2014/09/qualcomm-buy-imaging-software-specialist-eurovision.html</p>
EMC	Graphite Systems	<p>EMC purchase of Graphite Systems was a wetware buy</p> <p>“Storage behemoth needed Graphite's people to put lead in DSSD's pencil EMC’s purchase of Graphite Systems was a wetware acquisition, a simple acquihire, according to sources close to the matter. EMC didn’t want the hardware or the software: it wanted the wetware – the people – because what they were developing was so similar to DSSD’s own technology of an ultra-fast, solid state storage array working as a shared resource in accessing servers’ memory address spaces.”</p>	<p>https://www.theregister.co.uk/2015/10/01/graphite_systems_was_an_acquahire_a_wetware_buy/</p>

Appendix E

Quotes on Team Integration

Acquirer	Target Firm	Quotation	Source
Google	Appjet	Google Buys AppJet To Power Wave "Google and Appjet have a shared vision of how Web collaboration can benefit users, and we're excited to have the Appjet team contribute to the success of Google Wave."	https://www.informationweek.com/google-buys-appjet-to-power-wave/d/d-id/1085335
Google	Saynow	Google Buys SayNow to Boost Google Voice "SayNow will work closely with the Google Voice team, but we don't have any specific plans to announce at this time," a Google spokesperson told eWEEK. "We are impressed by the services they have already built, and we look forward to working together to expand our voice-based technologies that better connect people."	http://www.eweek.com/cloud/google-buys-saynow-to-boost-google-voice
Google	Plink	Google Buys Mobile Visual Search Startup Plink "The company's two founders, PhD students Mark Cummins and James Philbin, will work on Google Goggles and help enhance the search giant's visual search applications."	https://techcrunch.com/2010/04/12/google-buys-mobile-visual-search-startup-plink/
Google	Fflick	"As part of YouTube, the Fflick team will help us build features to connect you with the great videos talked about all over the web, and surface the best of those conversations for you to participate in."	https://youtube.googleblog.com/2011/01/share-and-share-like-weve-acquired.html
Google	Pushlife	PushLife says that as a result of the acquisition, it will be "eventually discontinuing" its service as it integrates into Google's engineering team in Canada.	https://gigaom.com/2011/04/11/419-google-buys-pushlife-for-25-million-a-piece-in-its-mobile-music-strateg/

Appendix E

Google	Dealmap	Google Acquires Dealmap “The terms of the deal were not disclosed, but the Dealmap team will join Google’s commerce and local initiatives group.”	https://dealbook.nytimes.com/2011/08/01/google-acquires-the-dealmap/
Google	SocialGrapple	“Google has acquired Twitter statistics startup SocialGrapple, a move suggesting the search titan is looking to boost its Google+ analytics tracking abilities.”	https://venturebeat.com/2011/10/10/google-acquires-socialgrapple/
Google	Apture	Google Buys Contextual Rich News Browsing Startup Apture To Beef Up Chrome “The Apture team, which is composed of ten employees, will be joining the Google Chrome team improve user experience. Google says that Apture’s plug-ins and white-label technology will be shut down within next month or so.”	https://techcrunch.com/2011/11/10/google-buys-contextual-rich-news-browsing-startup-apture-to-beef-up-chrome/
Google	Cleversense	“Terms of the deal were not disclosed, but the Clever Sense team will be joining Google’s local services division immediately, the home to the business directory and reviews service Google Places.”	https://techcrunch.com/2011/12/13/google-acquires-clever-sense-creator-of-local-recommendations-app-alfred/
Google	Milk	Google Acquires Milk, Digg Founder Kevin Rose To Work On Google+ “Google acquired Milk because it wanted Kevin Rose and his team to help with Google+. That’s the official story. And why wouldn’t it be? Google is going all-in for social, and Kevin Rose is a legend in the social media world.”	https://www.pmg.com/blog/google-acquires-milk-digg-founder-kevin-rose-work-google/
Google	Meebo	Google buys Meebo to bolster Google+ “Google buys Meebo to bolster Google+. In a statement, the company said the Meebo team would be working on its Google+ product: We are always looking for better ways to help users share content and connect with others across the Web, just as they do in real life. With the Meebo team's expertise in social publisher tools, we believe they will be a great fit with the Google+ team. We look forward to closing the transaction and working with the Meebo team to create more ways for users to engage online.”	https://www.cnet.com/news/google-buys-meebo-to-bolster-google/

Appendix E

Google	Sparrow	“Our source couldn't specify a timeline, but the goal is to get the Paris-based Sparrow team in-house on the main Mountain View campus in California. In an email to users, Dom Leca explained that Sparrow products won't be receiving new features, and the team will be joining the Gmail team.”	https://www.theverge.com/2012/7/20/3172365/sources-google-sparrow-25-million-gmail-client
Google	Wavii	“The 25-person-strong team, including founder Adrian Aoun, will be moving down from Seattle to join Google's Knowledge Graph division.”	https://techcrunch.com/2013/04/23/google-buys-wavii-for-north-of-30-million/00:00
Google	Directr	Details of the deal were not disclosed, but Directr is a relatively small operation, having only raised \$1.7 million in funding. The company will integrate into YouTube's video ads division."Our small band of scrappy film lovers set out 2 years ago to help regular folks make great video. Today, we are incredibly excited to take the next step on that journey and announce that we are joining the video ads team at YouTube," Directr wrote in a blog post announcing the deal.	https://mashable.com/2014/08/06/google-acquires-directr-small-business-video-marketing/#iEPONfb2o5qr
Google	Jetpac	“Google just acquired the team behind Jetpac, an app that utilizes public Instagram data to determine things like the happiest or drunkest city. Google will most likely use the Jetpac team to improve search around location information using photo data.”	https://techcrunch.com/2014/08/15/google-buys-jetpac-to-give-context-to-visual-searches/
Google	Dark Blue Labs & Vision Factory	“Google DeepMind will be working with two of Oxford's cutting edge Artificial Intelligence research teams. We are thrilled to welcome these extremely talented machine learning researchers to the Google DeepMind team and are excited about the potential impact of the advances their research will bring.”	https://europe.googleblog.com/2014/10/teaming-up-with-oxford-university-on.html
Google	Odysee	Google acquires photo platform Odysee The team behind photo backup and sharing mobile platform Odysee is set to join Google+ after the search giant acquired the San Jose-based company for an undisclosed amount."We are excited to share that the Odysee platform team will be joining the Google+ team," the company wrote on its website.	https://www.zdnet.com/article/google-acquires-photo-app-odysee/
Google	Toro	“A Google spokesperson confirmed the news and said Toro will be joining the mobile ads team.”	https://techcrunch.com/2015/02/24/google-acquires-toro/

Google	Divshot	Google Acquires Divshot To Join Its Firebase Team, Will Shut Down In December Google has acquired Divshot, an HTML5 web-hosting platform that it says is “tailored for performance and developer productivity.” It will shut down on December 14, 2015, and will be joining the Firebase team.	https://techcrunch.com/2015/10/13/google-acquires-divshot-to-join-its-firebase-team-will-shut-down-in-december/
Google	Pixate	Google has acquired mobile app prototyping firm Pixate to bolster its design team. “Google has beefed up its design team with the acquisition of the app prototyping firm.”	https://www.zdnet.com/article/google-buys-mobile-ui-design-firm-pixate-makes-its-software-free/
Google	Digisfera	Google acquires panorama startup to give Street View a boost Digisfera said on its website it was “excited to join the Street View team at Google to continue building great experiences using 360-degree photography.”	https://finance.yahoo.com/news/google-acquires-panorama-startup-street-101541749.html
Google	Fly Labs	Google Acquires Fly Labs To Join Its Google Photos Team “Today, Google acquired Fly Labs to join its Google Photos team. The company aimed to help people edit videos and photos and it sported 3 million downloads over the past 18 months. Their suite of apps (Tempo, Fly and Crop) will be made available for the next three months. You’ll still be able to use them, but there will be no more updates.”	https://techcrunch.com/2015/11/06/google-acquires-fly-labs-to-join-its-photos-team/
Google	Apture	“The Apture team, which is composed of ten employees, will be joining the Google Chrome team improve user experience. Google says that Apture’s plug-ins and white-label technology will be shut down within next month or so.”	https://techcrunch.com/2011/11/10/google-buys-contextual-rich-news-browsing-startup-apture-to-beef-up-chrome/
Facebook	Parakey	“Facebook, the Internet’s leading social utility, today announced that it has acquired Parakey, a startup run by Blake Ross and Joe Hewitt, co-founders of Mozilla Firefox, an open-source and non-profit web browser. Ross and Hewitt will join Facebook’s team to work on the development of Facebook Platform and the company’s website.”	https://newsroom.fb.com/news/2007/07/facebook-acquires-startup-parakey/
Facebook	Sharegrove	“ShareGrove also noted that staff would be joining Facebook’s engineering team - this looks like a talent acquisition.”	https://www.adweek.com/digital/facebook-acquires-private-conversations-site-sharegrove/

Appendix E

Facebook	Chai Labs	“Given that Facebook’s Open Graph search is essentially a semantic search engine, Facebook could simply be looking to ramp up the company’s internal search team.”	https://www.adweek.com/digital/facebook-acquires-chai-labs/
Facebook	Daytum	Facebook Acq-hires Data Organization Startup Daytum “Facebook has just made a talent acquisition out of Daytum, a two-person New York-based data collection and organization startup. The app itself will remain live, but founders Ryan Case and Nicholas Felton will be joining the product design team at Facebook.”	https://techcrunch.com/2011/04/27/facebook-acq-hires-daytum/
Facebook	Acrylic	In a post today, Dustin MacDonald of Acrylic said that the entire team would be moving to San Francisco "in the coming weeks" to join Facebook's design team.	https://www.theverge.com/2012/7/20/3172479/facebook-hires-acrylic-software-team
Twitter	Cloudhopper	“Cloudhopper's Joe Lauer and Kristin Kanaar will be added to Twitter's mobile team.”	https://techcrunch.com/2010/04/23/twitter-buys-cloudhopper-to-bolster-its-sms-service/
Twitter	Dabble DB	Twitter Buys Startup To Give Its Analytics Team (And Paid Business Accounts) A Boost Twitter has acquired Dabble DB, a data analytics startup perhaps best known for its "Trendly" tool. The company's founders -- Avi Bryant, Andrew Catton, Luke Andrews, and Ben Matasar, will join Twitter's analytics team, Bryant writes on his blog.	https://www.businessinsider.com/twitter-buys-startup-to-give-its-analytics-team-and-paid-business-accounts-a-boost-2010-6
Twitter	AdGrok	Starting today, the AdGrok team will start working full-time on Twitter's "revenue engineering team." AdGrok will shut down its services on June 30, after which its product will not be available.	https://mashable.com/2011/05/31/twitter-acquires-adgrok/#IsHmZ0.X5Eq8
Twitter	Backtype	“BackType will be joining Twitter’s platform team, where they will be developing tools for Twitter's publisher partners.”	https://techcrunch.com/2011/07/05/twitter-acquires-social-analytics-startup-backtype/

Appendix E

Twitter	Summify	“Cristian and Mircea and their team of three engineers will join our Growth team and explore ways to help people connect and engage with relevant, timely news.”	https://venturebeat.com/2012/01/19/twitter-summify/
Twitter	Dasient	Twitter Acquires Online Security Firm Dasient To Beef Up Malware Protection The move appears to be largely a talent purchase, and Dasient will be bringing their “technology, tools, and team” to the revenue engineering team at Twitter, effective immediately.	https://www.adweek.com/digital/twitter-buys-dasient/
Twitter	Zeropush	“It’s akin to an acquihire: ZeroPush cofounders Adam Duke and Stefan Natchev will both work on Fabric, Twitter’s mobile development platform.”	https://technical.ly/philly/2015/10/23/zeropush-acquired-twitter/
Twitter	Mitro	Mitro announced Thursday that it is joining Twitter in its New York office and will be “focusing on a variety of geo-related projects.”	https://www.cnet.com/news/twitter-acquires-password-security-startup-mitro/
Apple	Redmatica	Apple buys Redmatica startup for Music boost “News from Italy today has Apple purchasing music app developer Redmatica, with intentions being to push additional next-level power to their own Logic Pro and GarageBand.”	https://www.slashgear.com/apple-buys-redmatica-startup-for-music-boost-30230861/
Apple	Novauris	Speech Recognition Pioneer Novauris Bought By Apple, Team Now Works On Siri “The acquisition apparently took place last year, but had not been announced. At Apple as of last fall, the team is now working on improving Siri, the speech-based virtual assistant technology that comes pre-installed on Apple’s mobile devices.”	https://techcrunch.com/2014/04/03/speech-recognition-pioneer-novauris-bought-by-apple-team-now-works-on-siri/
Apple	FoundationDB	“The database technology could find a place supporting any number of Apple’s different businesses, with the technology used to support online dating, gaming, analytics, and online marketplaces. Given Apple’s recent push to boost adoption of iCloud services via iPhones, iPads, and Macs, Apple could put the database technology to use supporting iTunes, the App Store, or perhaps even the rumoured Apple TV online streaming service.”	https://www.zdnet.com/article/apple-acquires-nosql-database-maker-foundationdb/

LinkedIn	Refresh.io	We are going to be exploring the different ways we can use the ideas they have into a number of different LinkedIn products, a spokesperson for LinkedIn said in an interview. "We're looking to take their smarts and add them to a number of products and come up with a number of insights to make LinkedIn even more valuable."	https://techcrunch.com/2015/04/02/linkedin-buys-refresh-io-to-add-more-predictive-insights-to-its-products/
Yahoo	GhostBird Software	Yahoo buys PhotoForge and KitCam developer to bolster Flickr's photo editing features "Yahoo is taking on yet another acquisition as it seeks to reinvigorate itself and — in this case — Flickr as well. GhostBird software has just announced that it will be joining the Flickr team after being purchased by Yahoo."	https://www.theverge.com/2013/6/12/4424130/yahoo-acquires-ghostbird-software-improve-flickr
Yahoo	Admivate	"This acquisition is part of our efforts to invest further in our ad tech platforms-Apt, Genome, and Right Media-and make buying easier for advertisers and agencies. Admivate's personalization technology accelerates our capabilities in mobile advertising, and we gain an exceptionally talented technical team. Admivate's engineers will join our Yahoo! display advertising team in Sunnyvale."	https://techcrunch.com/2013/07/17/yahoo-acquires-admivate/
Yahoo	Tomfoolery	Yahoo Has Closed The Tomfoolery Acquisition, Will Shut Down Anchor, Team To Work For Bonforte "All four co-founders — CEO Kakul Srivastava, chief product officer Sol Lipman, VP of platform Simon Batistoni and VP of mobile Ethan Nagel — will be joining Yahoo SVP Jeff Bonforte to work on products in Yahoo's Communications division. Current products in the division include Yahoo Mail, Messenger, Groups, Contacts, Calendar, covering both the mobile and desktop versions."	https://techcrunch.com/2014/01/28/yahoo-tomfoolery-bonforte/
Cisco	Assemblage	"As terms of the acquisition deal, Assemblage's engineers will join Cisco's Collaboration Technology Group. Cisco said it hopes the Assemblage employees can help it make new collaboration products that also integrate with third-party cloud applications like Box and Google."	https://venturebeat.com/2014/06/27/cisco-buys-cloud-collaboration-startup-assemblage/

Appendix E

Adobe	Thumb Labs	Thumb Labs, the New York-based digital agency that developed Behance's official mobile apps, has announced that it is joining Adobe full time to work with the Behance team. The terms of this deal were not disclosed, but Thumb Labs called it a "talent acquisition" - an acqui-hire, if you can stand the term.	https://thenextweb.com/insider/2013/05/22/adobe-scoops-up-thumb-labs-the-agency-behind-behances-official-mobile-app-in-a-talent-acquisition/
Salesforce	MinHash	“By acquiring the company, Salesforce is securing a number of data science specialists, which could end up working on the firm's Sales cloud platform, which is designed to increase sales leads and generation for clients.”	https://www.zdnet.com/article/salesforce-snaps-up-marketing-virtual-assistant-firm-minhash/
VMWare	MomentumSI	“MomentumSI, founded in 1997 and based in Austin, Texas, has deep expertise in moving customers' on-premise computing to VMware-based public clouds, as well as Amazon Web Services, Microsoft Azure and the Google Cloud Platform, according to its website. VMware is integrating the MomentumSI team into its professional services organization, where it will help customers deploy hybrid clouds, the spokesperson said.”	https://www.crn.com/news/cloud/300074831/vmware-acquires-professional-services-firm-to-boost-cloud-migration-devops-expertise.htm
Nokia	Dopplr	The Dopplr team will be incorporated into Nokia's Services unit, where it will provide "know-how in creating internet-based communities and showing their journeys, experiences and tastes collectively on the web", Nokia said in a statement.	https://www.zdnet.com/article/nokia-buys-social-travel-firm-dopplr/