Scaling Up Beyond Walls: Discovering New Revenue Streams

Completed Research

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Abstract

Disruptive technologies, such as analytics, cognitive, and Internet of Things (IoT), are currently trending and rapidly changing competitive landscapes, destroying organizations that are unable to adjust. As competition increases across industries, profit margins are shrinking forcing organizations to find creative solutions that require minimal investment. Our study describes how a large, established distribution organization adjusted beyond its core competencies to bootstrap a trailer advertising project, and subsequently co-created an analytics solution to scale up the project. We used grounded theory as the method, and absorptive capacity as the framework to analyze the results. We found that organizations need to embrace change and failure for a successful analytics implementation. This can be overcome by co-creating solutions with an analytics vendor. Our findings contribute to the literature on absorptive capacity and co-creation.

Keywords

Analytics, absorptive capacity, co-creation, case study, innovation, project scale up.

Introduction

Competing with new technologies has become the new norm across most industries, however investments in information technology (IT) can be very resource-intensive, leaving many organizations in a dilemma to keep up or die. Since financially unlimited organizations are rare, most typical organizations that intend to remain relevant need to find innovative and cost-efficient ways to earn a profit with the advantage offered by advanced technologies. Currently, data is a driver of growth and change in organizations, and disruptive technologies like analytics, cognitive, and internet of things (IoT) are increasingly being sought after for competitive advantage (The Economist 2017). For example, the Associated Press (AP) used a cognitive technology to expand coverage of corporate stories without having to increase the number of journalists, allowing current journalists to focus on more analytic and exclusive stories (Colford 2014). In addition, the use of IoT, an interconnection of machines and devices via sensors and the internet, is on the rise and is projected to boost corporate profits by 21% by the year 2022 (Elfrink 2013).

Prior research has demonstrated the role of IT as a strategic tool contributing to organizations’ productivity and performance (Bharadwaj et al. 1999; Brynjolfsson and Hitt 1996). However, its role is even more significant in the current era of digitization where organizations need to continually innovate to remain competitive (Brown and Eisenhardt 1997; Hagel and Singer 1999; Rayport and Sviokla 1995). The importance of external sources (i.e. consumers) to organizations’ innovation was highlighted by researchers back in the 1980s (von Hippel 1988), however it gained popularity in the management literature in the early
2000’s with the labels “co-creation,” defined as a joint, collaborative, concurrent, peer-like process of producing new value (Galvagno and Dalli 2014), and “open innovation,” defined as a practice where consumers serve as sources of ideas for new products or improvements of existing products (Chesbrough 2003).

Research on open innovation and co-creation has focused mainly on organizations innovating with their customers (Nambisan and Baron 2009; Xie et al. 2016), and organizations that offer similar products and services co-creating with each other in the form of a partnership alliance (Ceccagnoli et al. 2012; Han et al. 2012; Sarker et al. 2012). However, there is a dearth of studies related to innovation and co-creation between organizations that are not necessarily partners. Our research focuses on how a distribution company co-created with a technology vendor, to scale up an in-house project designed to create a new revenue stream by innovating in an area outside their core competence in a bid to remain competitive.

The distribution company’s historical method of stretching their razor thin profit margins, typical of their industry, was to find arbitrage opportunities, such as purchasing grocery items when prices drop and then selling when prices rise. Rather than continue operating in their comfort zone, they decided to create a new revenue stream by venturing into mobile advertising using existing assets – the sides of their tractor trailers. The goal of this new venture was to generate revenue with minimal investment, if any. They began with in-house experiments, which exposed them to new knowledge (i.e., analytics) and caused them to seek expert help from an analytics vendor to scale up (i.e. expand) the project - a decision which led to the co-creation of an innovative solution.

In the current research we discuss the trailer advertising project scale up process and the challenges that emerged, to answer the research question: How does an organization scale up an in-house project using analytics? The paper is structured as follows. First, we discuss the theoretical framework that helps explain our case. Then, we discuss our method and how we analyzed the data. Next, we describe our case and present our findings. Finally, we conclude with implications and contributions to research.

**Theoretical Framework**

We rely on absorptive capacity as a framework to explain how an organization scales up an in-house project using analytics. Organizations are always developing creative solutions to maintaining competitive advantage with available resources. One such strategy is to innovate with human capital by hiring new employees with a broad array of skills or training existing employees (Mowery and Oxley 1995), utilizing existing knowledge sources to search for valued related new knowledge, assimilating and applying new knowledge (Cohen and Levinthal 1990), or developing new problem-solving skills and capabilities (Kim 1998), Zahra and George (2002) build on the works of Cohen and Levinthal (1990), Mowery and Oxley (1995), and Kim (1998), to define absorptive capacity as “a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge to produce a dynamic organizational capability.”

Research on absorptive capacity has emphasized that an individual’s and an organization’s new knowledge search zone is usually related to their prior knowledge base, because only then can they recognize the value of the new knowledge, assimilate it, and apply it for competitive advantage (Cohen and Levinthal 1990). However, current technology has made sources of information such as the internet, social media, online training videos, printed and online e-books, experts in areas of interest, third-party vendors, and workshops, abundantly available and easily accessible. While, in the beginning, new knowledge unrelated to prior knowledge might be difficult to assimilate, and its value difficult to ascertain, accessibility to experts in areas of interest can shorten the learning curve and illuminate the value recognition.

Analytics knowledge is one area that is foreign to many organizations, especially among those outside the technology industry. Despite the hype of big data and analytics, not many organizations are able to scale the value of analytics to gain tangible business outcomes (Panetta 2017). The shortage of data scientists in the job market leaves little room for organizations, outside of consulting, with the luxury of hiring them as permanent employees, due to financial constraints (Davenport and Patil 2012). However, organizations who cannot afford to hire data scientists or experts in analytics as permanent staff can acquire analytics knowledge working with third-party analytics vendors. These vendors create a bridge between unrelated prior knowledge and new knowledge, thus affording organizations the opportunity to further develop their absorptive capacity.
One avenue to develop absorptive capacity is for analytics vendors and client organizations to co-create – collaboratively produce mutually valued outcomes (Grönroos and Voima 2013). During the co-creation process, both analytics vendors and client organizations are exposed to new knowledge as they interact, learning from each other and discovering their potential absorptive capacity, which can either be directly exploited as realized absorptive capacity or transformed into an acceptable form to fit the organization for competitive advantage (Zahra and George 2002).

Method

To investigate how an organization can use analytics to scale up an in-house project geared towards creating a new revenue stream outside its core competence, we conducted a single-case study of a large distribution company who went outside its comfort zone (i.e. grocery distribution) to launch a project in mobile advertising, and a technology vendor who co-created with the client to scale up the project. We utilized grounded theory approach (Urquhart 2013). Table 1 shows the data we have collected for over 2.5 years. We analyzed the data with QSR NVivo 11 using open coding, focused coding, and selective coding (Glaser and Strauss 1967).

We started our data analysis with no pre-conceived notions, allowing our research question to emerge from the data (Klein and Myers 1999; Walsham 1995). Our unit of analysis was the organization. We chose our case based on theoretical sampling, as we were interested in studying an organization that turned to analytics to scale up a project outside their core competence (Patton 1990). Data collection began in May 2015 and is still on-going. Access to site was gained through the executive in charge (EIC) of the special operations department – the business unit that launched the project. We were granted access to review status reports, organizational documents, conduct interviews, and observe meetings.

Interviews were conducted with employees from three business units (Special Operations, Information Systems, and Purchasing) in the distribution company and three business units (sales, cognitive solutions, and industry solutions) in the vendor company. We have copies of presentations, some internal emails related to the project, work statements, and over 100 single-spaced pages of field notes detailing the meetings and semi-structured interviews.

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Table 1: Data Collection Timeline

Case

Our case focuses on a large, established distribution company (SupplyCo) in the United States (US). The firm’s business model includes the purchase of over 100,000 items that consist mainly of grocery, confection, and cigarettes, storing them in warehouses, and then distribution of same to restaurants, department stores, and convenience stores across the US via 80 SupplyCo owned distribution centers nationwide. Although the business generates nearly $50 billion in annual sales they have very thin profit margins due to the distribution industry’s intense competition. This spurs firms like SupplyCo to look for innovative ways to remain competitive.

SupplyCo devised to expand its competitive horizon by creating a department specifically designated as the think-tank of the firm; the department would be tasked with the primary responsibility of exploring new business opportunities to exploit to generate additional revenue. In 2002, the special operations (SpecOps)
department was created following the persistence of one of the senior executives who is now EIC of SpecOps, to focus on special projects. The EIC was able to convince management to form the department by providing some examples of potential projects that could generate additional revenue and increase the profit margin of the firm. The argument was made to have a dedicated team not restricted by normal work structures, budget, and yearly targets like the other departments to enable the team to focus their energy on being true think-tanks. The EIC explained:

*It is a no-brainer, if I can spend $1 and make $1,000, we should do the project, I have an entire list of projects like this and I don’t have the time to get them done.*

In 2015, SpecOps began putting small graphics of products they carried on the side of their delivery trailers with no business ideas in mind. A few months later, the CEO of SupplyCo came up with the idea of selling the sides of the trailer to companies as mobile billboards. This idea marked the beginning of another special project for SpecOps. Although the idea of trailer advertising is not novel, as there are mobile billboard companies, nonetheless, it was a novel idea for a distribution company whose core competence is not advertising to consider trailer advertising as a means of generating additional revenue. SpecOps had no idea what they needed to monetize trailer advertising, therefore they began researching. The project manager in charge of the trailer advertising project explained:

*We used to put something, maybe the size of this table on a section of the trailer but the idea of using the entire sides of trailer came when our CEO said I think we should sell the side of these. That is where we got to researching about it and we found that we had about three million square feet of unused space on the side of our trailer that we could sell.*

While the prospects of generating additional revenue using already existing assets owned by the organization seemed lucrative, the results from the research gave them insights on some challenges involved with trailer advertising. These challenges included: lack of numbers in terms of number of people viewing the trailers, how to convince potential clients of the value in advertising their business on the mobile billboards, and tangible proof of the benefits that lie therein. These challenges and the limited staff base in the department caused the project to move slowly. SpecOps worked independently without involving other business units for about a year and a half because they were skeptical about the viability of the project. After about 18 months of researching and trying to come up with a business plan, the project manager succeeded in selling a 6-month advertising contract to an existing business client – Blu e-cigarette.

The idea to approach Blu for trailer advertising stemmed from the uncertain window of availability allowing e-cigarette companies to legally advertise their products. Since the legal ban on tobacco companies from advertising on television and billboard, e-cigarette companies are unsure how much longer they have before the ban is extended to them. Capitalizing on this uncertainty, SpecOps approached Blu and succeeded in closing a 6-month deal. This successful sale boosted the confidence of the project manager and the entire SpecOps team, spurring them to think of the options available to carry out a large-scale roll-out of the trailer advertising project. They knew they could not do it alone and needed help.

Prior to 2015, the EIC of SpecOps had begun learning about analytics and how other organizations were using it. They had tried to initiate an analytics project at the time, however it was not feasible, therefore they decided to explore the trailer advertising idea with an analytics vendor (TechCo) to determine its viability. The project manager for the trailer advertising project explained the reasons for seeking help from TechCo:

*Really what drove us to TechCo was… there are no numbers associated and it is a problem trying to sell it. How many people are seeing this? How do I convince a company that this is worthwhile? When I can’t give them any data on what it produces. We tried beforehand just approaching selling it to companies in different manners saying, “hey, this is how big we are. Here’s how many routes we run. Here’s how many miles we go. People are going to see it.”*

Although they had successfully sold advertising to Blu, the EIC was not convinced they could scale up the project and sell more advertising by merely telling potential advertisers that people will see the advertisements on their trailers based on how many miles and routes they cover. The SpecOps EIC explained:

*They (Blu) didn’t really care about the analytics and viewership but we knew we had to provide something.*
TechCo proposed for SpecOps to sign a contract to experiment with analytics in an *innovation hub* (lab), a dedicated space used to foster collaboration and innovation (Leifer, O’Connor, and Rice 2001), to use big data and analytics to find possible solutions for viewership of the trailer advertisements and ideas on scaling up the project. Although TechCo recommended the lab, they also emphasized that it was experimentation, which means not everything will work. This disclaimer, put forward by TechCo, was disconcerting for SpecOps because on one hand they were being encouraged to sign a multi-year contract to experiment, yet on the other hand the expectation was set for possible failure. SupplyCo does not have a budget for experimentation, however the EIC of SpecOps was able to make a case with senior management to experiment in the lab with the funds they had generated from the sale of trailer advertising to Blu.

TechCo and SupplyCo proceeded to kick off the lab with individual organizational goals (i.e., for TechCo to achieve a success story for analytics project, and SupplyCo to scale up the trailer advertising project and generate $10 million in revenue) and a collective goal (i.e., successfully create a trailer advertising analytics solution). The lab was to serve as a dedicated space for TechCo and SupplyCo to co-create an analytics solution for trailer advertising. TechCo adopted the lab model for analytics solutions after several failed attempts to launch analytics projects with clients in the past, including SupplyCo. Their previous model, which included tasking clients with the responsibility of gathering the data required for the project, and one-size fits all pricing, was impossible for clients outside the oil and gas industry and small companies to afford. In addition, it was characterized by lengthy project delivery timelines resulting in many stalled or unsuccessful projects.

Armed with lessons from their past failures co-creating analytics projects, TechCo intended to make this analytics co-creation a success. They encouraged SpecOps to involve the other business units before the lab kick-off, emphasizing that analytics did not just affect one business unit but the whole organization, therefore it was important to get other business units (i.e. IT, marketing and merchandising) involved early to aid the outcome of the project. Analytics projects in the lab were completed in two phases: proof of concept, and pilot phase. They offered t-shirt size pricing based on type of analysis and complexity of the project, as well as offered subsidy in the form of *innovation dollars*, thereby sharing in the cost and the risk of experimenting. The subsidy gave the client a discount towards the proof of concept phase and, if the phase was successful, the project moved to pilot with the client getting a discount toward the pilot equal to the cost of the proof of concept.

Despite the lessons learned from previous failures, there were still lessons to learn for both organizations from working in the lab. TechCo had set the expectation that data could be scraped from social media like Facebook, however they found out otherwise when they began experimenting in the lab. To obtain the viewership numbers, TechCo combined the use of pings from global positioning system (hereinafter GPS) of users’ mobile phones with the information source, the weather channel app (hereinafter TWC), they had acquired to gather demographic (i.e. age, gender, location, education and income) information. In addition to using this information as proof of viewership, TechCo also recommended the option of using the information to develop a tailored marketing strategy to the mobile phone users.

TechCo acknowledged that not all mobile phone users have smart phones or have their location feature turned on all the time, so they developed three multipliers to account for the non TWC users, which was 30% of the population in their trial market of Southern California. SupplyCo was unwilling to move the project to pilot after TechCo proved the viewership because of the cost involved and because of how many groceries they needed to sell to be able to afford it. TechCo did further testing and found out SupplyCo did not need to acquire more sensors for the trucks as they had envisioned at the beginning of the lab, and could instead use their existing fleet tracking system, PeopleNet, for the pings. SupplyCo’s IT department had previously informed TechCo that the routing system pinged every 30 minutes, which would not have served the purpose. However, TechCo found out that although the IT department only downloaded the PeopleNet data every 30 minutes, it pinged all the time, hence making it a cost-effective option for SupplyCo to scale up the project. SupplyCo was more willing to move the project to pilot after getting this feedback, and more so because Blu signed another 6-months extension in December 2017 for 55 trailers – an increase from the initial 10 trailers.
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Findings

Absorptive capacity served as a useful theoretical framework for explaining the scale-up of the trailer advertising project and we adapted Zahra and George (2002) to explain our findings. The framework consists of knowledge source and complementarity leading to absorptive capacity, moderated by activation triggers. Absorptive capacity starts out as potential where acquisition and assimilation of new knowledge takes place which could become realized utilizing social integration mechanisms. For absorptive capacity to be realized the new knowledge is either transformation to suit company’s structure and resources then it can be exploited for competitive advantage, or it is incompatible and will not exploited but discarded. The original model shows the relationship between absorptive capacity and competitive advantage moderated by regimes of appropriability, however we do not discuss this relationship because it was out of the scope of our collected data.

Knowledge Source and Complementarity- SpecOps management had many years of experience which gave them deep industry knowledge. In addition, the unique arrangement of the department, not confined to a rigid work structure and yearly targets, affords them the ability to seek new opportunities. The EIC of SpecOps is proactive in seeking new knowledge and does that by attending seminars and researching industry trends. Researching industry trends led the EIC to read about analytics and attend some seminars which exposed him to the capabilities of analytics. To successfully exploit the full capabilities of analytics, companies must be open to new ways of operating, which fit perfectly with the dynamic capabilities of SpecOps. The EIC kept this knowledge close, waiting for an opportunity to use it for a competitive advantage.

Activation Trigger- After 18 months of hard work internally and successfully selling their first 10 trailers advertisements to Blu, SpecOps realized the viability of the idea. They made this first sale by showing the client their distribution routes and inferring viewership along those routes. Inferring viewership was enough to satisfy Blu – a client who wanted to advertise as quickly as possible before possibly being banned by tobacco legislation. However, using managers’ intuition, SpecOps management determined that future potential clients would want viewership quantified. To scale up the project SpecOps needed to place a dollar figure on the amount of revenue that this system could generate, both for the client and for SupplyCo. Potential clients would want to know what they were getting per advertising dollar spent, and SupplyCo wanted to know if this project was worth investing money. SpecOps pegged this figure at an additional $10 million in new revenue. SpecOps looked inward and determined that they did not have the capability of answering these questions with internal resources, therefore the EIC sought expert help from TechCo to help solve the business problem.

Potential Absorptive Capacity- TechCo proposed a solution to the problem of quantifying the number of views for the trailer advertisements that involved placing sensors on the tractor-trailers, pinging mobile phone applications using their location-based services, and then inferring viewership of the mobile phone users within a certain radius (30 feet) of the advertisement. While this sounded like it would work, SpecOps challenged TechCo to explain how it would count people who entered the radius and viewed the advertisement yet exited before being counted by a ping. In addition, they questioned how this would count people who did not have the mobile phone application installed or location-based services turned on. TechCo co-developed solutions to these issues with SupplyCo, and the final concept consisted of multipliers used to infer views from these three subgroups of viewers. However, the project was still a concept at this point, and TechCo introduced new costs to operating the trailer advertising project where there was none before – there were no additional costs required to sell the unused space on the sides of their existing trailers. Hence, the reason why the concept remained a potential and would not be realized until TechCo took further actions.

Social Integration Mechanisms- TechCo used diverse sales techniques designed to invoke positive affect in clients. Before the project began, TechCo conducted free design thinking seminars, flew SpecOps executives out to meet and talk with a big-name client that was co-creating with TechCo and tour the facility, and wined and dined them at fancy restaurants all at TechCo’s expense. This was all used to create a buzz centered about making SpecOps see the potential in working with TechCo in the lab. The lab itself was conceived to socially integrate new knowledge into potential clients, which is accomplished with the setting. Due to the “neutral” shared location, power distances between the vendor and client are shortened, allowing actors to view each other as peers and opening lines of communication. In addition, because this site is not
on company grounds, employees may feel less pressure to conform and be more open to new knowledge and experience. In addition, employees may feel less distracted by normal day-to-day operations synonymous with being on company grounds. The innovation buzz was crucial in moving the analytics project beyond potential knowledge.

**Realized Absorptive Capacity** SupplyCo had a few goals when they first contacted TechCo – quantify trailer advertising viewership, and to generate an additional $10 million in new revenue. TechCo’s goal was to scope-up the project with novel capabilities that could be added to TechCo’s repertoire. TechCo was ambitious beyond the expected scope intended by SpecOps. This misalignment of goals created tensions that unfolded like that of a theatrical performance. On the front stage, both companies harmoniously worked toward the shared goal of quantifying number of views, while in the back-stage, TechCo tried to increase the scope while SupplyCo tried to keep costs down. These back-stage tensions stalled the project, and nearly ended up turning co-creation into co-destruction as both companies expended resources unnecessarily. When SpecOps began stalling, TechCo realized they had to change their strategy and they uncovered the true concerns of SpecOps - cost. TechCo then decided to shift their focus to uncover any possible cost savings. They found that SupplyCo had existing software (PeopleNet truck routing) that would work for the purposes of the project, eliminating the need to purchase additional sensors and the need for multipliers that inferred viewership. In addition, TechCo discounted the cost of moving forward with the pilot phase equal to the cost invested in the proof-of-concept. This reduced back-stage tensions, as the costs were now within the range of SpecOps’ affordable loss (i.e. profit from the sale of the first advertisement) which gave led to their commitment to continue to pilot.

Figure 1: Adapted from Zahra and George (2002) Model of ACAP

**Discussion**

In answering our research question, we found absorptive capacity to be a useful framework for explaining the scale-up process. The SpecOps department at SupplyCo reached beyond its core competence by experimenting to create a new revenue stream by launching the trailer advertising project (**Activation Trigger**). After making their first sale, SpecOps used their intuition to determine the need to quantify views to sell to future clientele. Having been exposed to analytics (**knowledge source**), and upon realizing that SupplyCo did not have the internal capabilities to scale the project (**Activation Trigger**), the EIC of SpecOps contacted an analytics vendor, TechCo, for assistance. TechCo sold SpecOps on the benefits of co-creation in an innovation hub, through a positive affect that we call the innovation buzz (**Social Integration Mechanism**). During the co-creation process, both companies pursued independent goals as well as the shared goal of quantifying trailer advertising views, which caused some issues as the project evolved and the scope increased due to additions and suggestions from both companies (**Potential**). Once the concept
was proven, the project stalled and TechCo had to uncover the true concerns of SupplyCo. TechCo was determined to make the sell, therefore they dug deeper and realized that SupplyCo could save money by using existing resources (Realized). In addition, SupplyCo had just recently sold another advertising contract to their first client, which gave them the funds to bootstrap the pilot phase. With lower costs, the necessary resources to move forward, and a proven concept, SpecOps agreed to move to pilot in hopes of creating a competitive advantage with a unique product with novel capabilities (Competitive Advantage).

We contribute to research on absorptive capacity by showing that an organization’s new knowledge search zone does not necessarily have to relate to their prior knowledge base before they can recognize the value of it, assimilate it, and apply it for a competitive advantage. In our case, SupplyCo’s core competence is grocery distribution, and the SpecOps department’s core competence is arbitrage opportunities. They were able to recognize the value of analytics through a culture of experimentation and openness to new ideas, and they were able to assimilate analytics knowledge through co-creation and social mechanism created by the technology vendor. In addition, we contribute to literature on co-creation by introducing the innovation buzz concept—the social mechanism which analytics vendors use to integrate analytics knowledge into client organizations, consisting of the positive affect created by sales tactics and co-innovation in a neutral collocated space.

We contribute to practice through four challenges that we hope practitioners can learn from. First, there is the challenge of understanding the business problem. The SpecOps department had limited success selling advertisements without viewership information, and they used intuition to determine that viewership was necessary. Verifying that this was a business problem worth exploring was a total company effort, however the functional managers were not involved right away. Understanding the business problem requires functional departments to emerge from their silos to communicate company-wide issues.

Next, there is the issue of funding experimentation. Companies normally take a cost perspective when deciding on whether to launch a new initiative. Unfortunately, due to the novelty of the project, and with analytics projects in general, a full-scale cost-benefit analysis was difficult to conduct. Fortunately for SpecOps, they had full support of SupplyCo management, so long as they bootstrapped the trailer advertising project using proceeds from the first sale made during the initial pilot phase.

Then, is the issue of obtaining total company involvement in all phases of development, which is of utmost importance because they are the ultimate recipients of the innovation. However, functional managers have their own individual goals, ideas, and motives. In our case, the IT department may have felt betrayed when SpecOps chose to use TechCo instead of developing in-house with them. In addition, the marketing department was concerned about company image and legal liability if a SupplyCo trailer had an advertisement of a negatively charged company or image. It was not until TechCo smoothed things over with the functional department managers that SpecOps had total company involvement.

Last, there is the issue of transferring ownership of the final product. While SpecOps has the capability of funding experimentation through profits from pilot phases, functional departments must have solid numbers before implementation, even if SpecOps has proven a concept. What matters most to functional managers is monetizing a concept. In our case, SpecOps stalled on moving forward to pilot with TechCo because they were not sure if they could monetize the proven concept until TechCo reduced the total cost of the project, improving the possible cost-benefit analysis used for the ultimate owner of the product.

This case was limited in that the data we collected did not address regimes of appropriability, and therefore is an adapted version of Zahra and George’s (2002) absorptive capacity framework. We let the theory emerge from the data, therefore we did not have an a priori goal of collecting data on specific parts of the absorptive capacity framework. Nonetheless, as the project is just starting pilot phase and data collection is ongoing, we are confident that absorptive capacity explains our case well. Another limitation to our study is related to the uniqueness of the SpecOps department. Many of the activation triggers that turned the analytics knowledge into potential knowledge for the company may stem from the culture of openness and experimentation that is embodied in the SpecOps department. A different outcome may have resulted with department that was not as receptive to this new knowledge.
Conclusion

As technology becomes more pervasive, it breaks down physical barriers and blurs industry boundaries, thus increasing competition. It is now more important for organizations to be agile as competitive landscapes are rapidly changing, and unknown competitors assisted with new technology may become tomorrow’s industry leaders (i.e., Uber and Airbnb). Organizations need to think beyond their core competencies and consider what the next “big thing” might be. This may be difficult for traditional organizations because foresight requires experimentation, which may not be feasible from a cost perspective. Analytics projects are best implemented in organizations with a culture that is open to change, and with a perspective of technology as a strategic asset rather than technology as a necessary cost. Organizations that develop these qualities will innovate to gain and maintain competitive advantage, while those that cannot adjust to the new norm of competing will perish.

REFERENCES


