Exploration of Acquisition Based Dynamic Capabilities Underpinning a Reinvention of Business Models in Technology-Related M&A Process

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ABSTRACT
The purpose of the current paper is to examine how multiple dynamic capabilities might be aligning in M&A process and complement the reinvention of a business model of merging company in the technology-enabled industry. Our primary theoretical contribution is emerging conceptual model of research that bridges acquisition based dynamic capabilities framework with a business model canvas together and illustrates how acquisition based dynamic capabilities underpin a reinvention of building blocks of business models in M&A processes. The presented conceptual model encourages practitioners to grasp an exact relationship between micro-foundations of each perspective. Overall, the paper deepens the conversation at the nexus of dynamic capabilities and reinvention of a business model in pursuing a new customer value proposition in M&A process. Keywords: dynamic capabilities, business model, merger and acquisition, customer value proposition.

1. INTRODUCTION
A focal firm’s growth strategies and performance in the technology-enabled domain are greatly influenced by the integrative type of strategies: collaborative (alliances, networks, joint ventures) or consolidative (mergers, acquisitions), to foster the innovation and to deliver new customer value propositions. In recent years, collaborative and consolidation strategies have received a great attention in strategic management literature. Researchers in strategic management argue that the performance outcome of a specific growth strategy is usually affected by the dynamic capabilities and business models [1,2,3]. However, dynamic capabilities in merger and acquisition are complex events in the process of sustain competitive advantage of merging business for which we have an incomplete understanding, in part because researchers have tended to consider an only explanation of them. Thus, two research questions of this paper are as follows. What trigger off acquisition based dynamic capabilities, particularly in technology advanced M&A? How acquisition based dynamic capabilities support a reinvention of building blocks of business models? Capturing valuable insights from the dynamic capabilities framework [4] and business model canvas [2], this paper aims to integrate two theoretical perspectives in the cohesive conceptual model. The paper discusses how a focal firm deals with the commercialization of innovation by means of dynamic capabilities to sense a new demand, capture new resources and partnerships, transform channels and customers’ relationship and deliver a new customer value proposition, particularly, by means of acquiring of new technologies, advanced an engineering team and new users’ base. That’s what Microsoft did with LinkedIn at the end of 2016. This case study of LinkedIn acquisition by Microsoft was selected due to following reasons. Firstly, this empirical literature is still at an early stage and opportunities abound to dig deeper into the linkages between dynamic capabilities (DC), a reinvention of business models and long-run firm performance. “The research paradigm of dynamic capabilities is still relatively new. Accordingly, illuminating case studies are likely to yield powerful insights” [5, p.1400]. Secondly, the paper digs deeper in the acquisition based DC in M&A to develop a contemporary integrated practical illustration on how dynamic capabilities and building blocks of business models are interrelated in successful M&A process in ICT industry, for our educational purposes. The main contribution of the paper is an emerging conceptual model of research that integrates acquisition based dynamic capabilities frameworks [4] and business model canvas [2] together and, thereby, illustrates how acquisition based dynamic capabilities underpinning a reinvention of business models in technology-related M&A process.

2. LITERATURE REVIEW
The recent scientific discussion in the field of strategic management broadly favors the idea of dynamic capabilities in order to overcome potential rigidities of organizational capability building [6]. Teece et al. [7] define dynamic capabilities as "the ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments". What's more, dynamic capabilities can usefully be thought of as belonging to three clusters of activities and adjustments: identification and assessment of an opportunity (sensing); mobilization of resources to address an opportunity and to capture value from doing so (seizing); and continued renewal of core competencies (transforming) to deliver new customer value proposition [4].

Acquisition based dynamic capabilities.
There are only a few pieces of research on specific dynamic capabilities that have been identified and studied involve merger and acquisition. Teece argues that it might be “because assets are bundled together often tightly linked inside incumbent firms, it may be difficult to obtain assets in the desired configurations through asset purchase or sale in mergers and acquisitions” [4]. However, by Eisenhardt and Martin [8], practice with homogeneous acquisitions (i.e., those in the related markets) was positively associated with the accumulation of tacit and explicit knowledge about how to execute acquisitions and achieve superior acquisition performance. Making strategically important investment choice on M&A, dynamically capable management team need such managerial capabilities as sensing and shaping, seizing and reconfigurations (transforming) as well as reinvention and implementation new business model [9].
The business model of merging company.
In recent year, the business models have received increasing attention of strategy researchers. The selection/design of business models is a key micro-foundation of dynamic capabilities - the sensing, seizing, and reconfiguring skills that the business enterprise needs if it is to stay in synch with changing market [10]. From the point of view of Johnson et al. [11] a business model consists of four main elements, the synthesis of which delivers value: customer value proposition; profit formula; key resources and key processes. Osterwalder and Pigneur [2] with real 470 business practitioners from 45 countries extended a number of elements and developed Business Model Canvas with nine building blocks: customer segment, value proposition, channels, customer relationship, revenue stream, key resources, key activities, key partners, cost structure. Christensen et al. argue that “we must be able to describe exactly what we are buying. The best way to do that, we’ve found, is to think of the target in terms of its business model” [12, p.2]. An acquirer can buy another firm’s business model, operate it separately, and use it as a platform for transformative growth [12]. Per the authors, there is far more growth potential in purchasing other companies’ business models than in purchasing their resources [12]. However, the reinvention of business models of acquirers (particularly in technology advanced M&A of ICT) still an open area for research due to following reasons. Johnson at al. [11] gave brilliant ideas on a reinvention of business models and their building blocks for focal companies, but still, a question remains, what capabilities are needed in a reinvention of business models in M&A process? Pursuing scientific rigor and helping practitioners to re-invent of their business model, Amit & Zott [13] integrated dynamic capabilities with business model design process but what about re-invention of building blocks of business models in M&A process? To re-invent building blocks of business models, Kim and Mauborgne [14] recommended to apply “four steps framework: eliminate, reduce, increase and create”; namely, to eliminate and to reduce an elements of business model thereby to eliminate and to reduce expenses as well as increase and/or create as a new some elements of business model thereby to increase a revenue stream and to create a new customer value proposition [2]. However, it is a silence about what dynamic capabilities are needed for that.

3. RESEARCH DESIGN AND METHODOLOGY

This proposed research seeks to explore how acquisition based dynamic capabilities underpinning a reinvention of business models in technology-related M&A. In this research, two stages of research work will be involved. The first stage is deductive case study research. Deductive case studies use existing theory to investigate a focused phenomenon. In the course of the case study, the existing theory of DC is tested and may be either be confirmed or falsified [15]. The paper relied on an extensive archival search that included financial statements, annual reports, internal documents, industry publications, and CEO statements to get at a micro-level understanding, that really boosts our data and the better understanding of the micro-foundations of DC and building blocks of business models of acquirers and targets. The author didn’t interview executives of two company due to the availability of actual interviews as a secondary data sources as CEO interviews on YouTube.com. As objects of research, the author selected the companies that are especially active and successful in Information and Communication Technology Industry: Microsoft and LinkedIn. The aim of the deductive case study of Microsoft’s acquisition of LinkedIn in the end of 2016 is to explicate the relationship between acquisitions based dynamic capability and reinvention of acquirer business model and, thus, sustained competitive advantage. The second stage involves a demonstration of the development process of the new conceptual model of research by using integrating deductive case study's finding and literature research outcomes, thus a micro foundation of acquisition based dynamic capabilities and reinvention of building blocks of business models. Having analyzed case studies, the author defined two research questions as follows: what trigger off acquisition based dynamic capabilities, particularly in technology advanced M&A? How acquisition based dynamic capabilities support a reinvention of building blocks of business models? This empirical research helps to fill a gap in the literature which is primarily 75% theoretical and only 25% empirical – focusing on proving the existence of dynamic capability [16]. Yin differentiates three different purposes for which case studies can be employed and in our research, it is a descriptive case study which is intended to purely describe a phenomenon of DC to answer “how” questions [17]. The research questions are phenomenon-driven and according to Eisenhardt and Graebner, it is appropriate using a single case if a phenomenon-driven research question is subject to an investigation [18]. Ultimately, each case can be viewed as a discrete experiment that could be repeated [17]. Regarding research investigating one single case, Siggelkow notes that it “can be a very powerful example” [19]. The paper answers the research questions by analyzing deductive (descriptive) case study research that helps an outsider understand a role of micro-foundations of acquisition based dynamic capabilities in re-invention of building blocks of business models of acquirers. Regarding the presentation of evidence, due to the rich amount of data that is piled up during a case studies research, Eisenhardt and Graebner state that there is no strict norm as in deductive (large-scale) studies when presenting results [18]. To illustrate dynamic capabilities as concrete examples of them, the author has adopted a conceptual frame developed by Teece [20] demonstrating how each of Apple’s major product introductions reflected aspects of the major categories of dynamic capabilities. The conceptual framework helps to unravel data that author has collected in search of the micro-foundations of acquisition based dynamic capabilities.

4. DATA ANALYSIS AND INTERPRETATION

Overview
Teece argues that individual corporate histories and illuminative case studies yield powerful insights in dynamic capabilities research. “Empirical studies are appearing that provide support for the framework. These often take an in-depth case study approach” [5, p.1400].
Microsoft’s Acquisition of LinkedIn in 2016
In December 2016, Microsoft completed the acquisition of LinkedIn.com, for which they paid more than $26 billion. LinkedIn’s more than 400 million professional users were the demographic Microsoft need to help grow its Office products and services. LinkedIn’s users also offered opportunities for Microsoft to develop its cloud and customer relationship management initiatives [21]. The acquisition benefitted LinkedIn by providing the company with capital and opportunities to be incorporated into Microsoft’s Office products and service. LinkedIn’s acquisition by Microsoft is one which involves combining and aligning dynamic capabilities and business models and that would ultimately help to complement and to develop new customer value proposition. In this respect, Microsoft would use LinkedIn’s technology and integrate it into its software to provide their users the ‘ultimate professional experience’.

First research question: what trigger off acquisition based dynamic capabilities, particularly, in technology advanced M&A?
The research has explored selected dynamic capabilities of target’s company and acquirer’s company. The answers to first research question are given in table 1 and table 2. The author has identified two triggers of acquisition based dynamic capabilities of technology advanced M&A. First triggers are weak transformation capabilities of both companies: Microsoft’s a delayed entry into mobile ecosystems and huge operating losses of LinkedIn. Second triggers are similarities and complementarities of dynamic capabilities of an acquirer and a target. Both companies were successful to sense emerging market demands, to seize opportunities by developing products and platforms, keeping leading positions. Thereby, dynamic capabilities of sensing and seizing of two companies are quite similar. However, companies weren’t always successful in transformation or reshaping resources. One of Microsoft’s weaknesses is a low mobile presence. For instance, despite Nokia acquisition and Surface tablet introduction, Microsoft continues behind iOS and Google mobile ecosystems. In contrast, LinkedIn provided a mobile-based assess to professional users' database. LinkedIn successfully runs a social network on mobile devices with the high mobile presence (60% of users). However, LinkedIn net losses have been sharply increased from $15.7 million in 2014 to $166 million in 2015. Therefore, Microsoft can provide resources for future LinkedIn development and at the same time can develop their own mobile ecosystem.

Table 1. Dynamic capabilities of Microsoft before acquisition of LinkedIn

<table>
<thead>
<tr>
<th>Products</th>
<th>Sensing</th>
<th>Seizing</th>
<th>Transforming</th>
<th>Result in</th>
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<tbody>
<tr>
<td>Office Software</td>
<td>Willingness to improve efficiency in producing various text documents and work with the database.</td>
<td>Development and of software tools, which allowed to produce documents, presentations, calculation, spreadsheets, and e-mails.</td>
<td>Microsoft Office software pack increased from 5 programs to 12 programs as of the year 2016. Integration into cloud satisfies customer needs in the creation of various types of documents and management of databases.</td>
<td>Microsoft earns more than 20 billion USD annually on Office software. Despite the competition, Office software is much more preferred then open source free of charges products of competitors.</td>
</tr>
<tr>
<td>Mobile ecosystem</td>
<td>Microsoft had a weak position in the mobile ecosystem in comparison with Apple, Google, and Facebook.</td>
<td>Acquisition of Nokia in 2013, the launch of the Surface tablet.</td>
<td>Surface tablet introduction. Skype applications, including applications for Apple products.</td>
<td>Despite Nokia acquisition and Surface tablet introduction, Microsoft is behind iOS and Google mobile ecosystems.</td>
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Source: Developed by author

Table 2. Dynamic capabilities of LinkedIn before acquisition

<table>
<thead>
<tr>
<th>Product</th>
<th>Sensing</th>
<th>Seizing</th>
<th>Transforming</th>
<th>Result in</th>
</tr>
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<tbody>
<tr>
<td>LinkedIn Social Network</td>
<td>There was a need to connect companies, employees and job seekers.</td>
<td>LinkedIn was developed as the professional social network. LinkedIn allows satisfying professional business needs in recruiting, job advertisements, users’ connections and online communicate by means of the network.</td>
<td>A single platform that unifies companies, employees and job seekers. Developed tools, which allow recruiters to search talents in advanced, effective way. Advertisement services with the audience of more than 400 million of professionals. Acquisition of Bright.com in 2014, a data science firm matching jobs’ descriptions and resumes.</td>
<td>The company expects to earn 3.6-3.7 billion $, with approximately 65% coming from services for recruiters. However, LinkedIn generated $3 billion in revenue had a net loss $166 million in the 2015 year!</td>
</tr>
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</table>

Source: Developed by author

Second research questions: How acquisition based dynamic capabilities support a reinvention of building blocks of business models?
Having analyzed both Microsoft and LinkedIn’s business models in depth, the research answered second research questions: what acquisition based dynamic capabilities of Microsoft are needed to integrate a business model of LinkedIn, as shown in table 3. The acquisition based dynamic capabilities helped Microsoft to reinvent of building blocks of business model are as follows. Microsoft
sensed new customers’ segments for their business: mobile users in developed and emerging economies and new key activities that should be developed: professional networking service and mobile apps products. Microsoft seized new key (idiiosyncratic) resources by acquiring LinkedIn engineering team, users’ base, and a key partners’ network. Hence, Microsoft reconfigured new customers’ relationship and channels by researching clients (including businesses) interests and needs and by adding of mobile apps. Therefore, Microsoft transformed their customer value proposition, delivering new value to the clients of both companies and capturing new value for shareholders. The acquisition of LinkedIn will help Microsoft beef up the ability to generate high-quality leads, run marketing campaigns with improved ROI and offer deep customer insights. As results, Microsoft can change cost structure potentially by eliminating CAPEX or reducing their OPEX on new technologies and apps’ development as well as potentially increase revenue streams form mobile professional users and can result in a new competitive advantage.

<table>
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<tr>
<th>Building blocks of business model</th>
<th>Microsoft business model</th>
<th>LinkedIn business model</th>
</tr>
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</table>
| **Key partners**                 | Strong relationships with suppliers; maintaining supply chain operations without disruption | • Key technology partners  
• Content provider |
| **Key activities**               | • Developing operating systems, ERP systems and other software | • Professional Network Service  
• Platform development |
| **Key resources**                | • Cloud infrastructure and engineering talent  
• Number of users  
• Committed, loyal and highly qualified employees  
• Brand and reputation | • Platform for business-oriented advertising  
• Leader position in Professional Network Services  
• Database of users’ professional information: 433 million members across the world Engineering team |
| **Value propositions**           | • Empowering people to achieve more; focus on staying agile, innovative, open and purpose-driven | • Connecting people to make them more productive and successful in business  
• Mobile-based presence |
| **Customer relationship**        | • Expanding the number of users with pre-installed software and operating systems | • Researching clients (including businesses) needs and professional interests |
| **Channels**                     | • Distributors of software, operating systems  
• Website, search engine | • Running social network on computers and mobile device. High mobile presence (60% of users)  
• Platform and mobile app |
| **Customer segments**            | • Individual consumers  
• All type of organizations  
• Business users | • Recruiters  
• Advertisers  
• Business users  
• Mobile users |
| **Revenue streams**              | • MS makes money with software, licensing, cloud service and hardware | • LinkedIn makes money with Premium subscriptions, Marketing solutions, and Hiring solutions  
• Mobile advertising with targeting options |
| **Cost structure**               | • R&D  
• Product development  
• Marketing costs | • R&D  
• Product development  
• Platform improvement |

*Source: Developed by author*

Acquiring LinkedIn is also a defensive play by Microsoft; it keeps LinkedIn out of the hands of Google, Amazon, Salesforce and other potential business-focused rivals. Joining their idiosyncratic resources and aligning their dynamic capabilities, Microsoft and LinkedIn complement customer value propositions of each other and help to sustain competitive advantage in a mobile ecosystem. “A large part of LinkedIn’s activities is mobile based. Microsoft’s weak position in mobile ecosystems could dramatically undermine LinkedIn’s longer-term opportunities. If Microsoft...
underestimates the mobile dimension for LinkedIn, the future for LinkedIn could be very questionable. Users are fickle and there is no loyalty to outdated social media platform" [22, p.1]

5.0 DISCUSSION AND CONCLUSION.

When the paper explored dynamic capabilities and business models of Microsoft and LinkedIn, the author found the acquisition enabled a series of strategic innovations to integrate Microsoft products with LinkedIn functionality and vice-versa. Dynamic capabilities of companies are aligning and allowing them to improve existing products by sharing engineers’ experience, advanced technologies, and broad users’ base. LinkedIn is an attractive platform for Microsoft to sell additional business services/apps such as Microsoft Dynamics products. Microsoft sees a future where everyone’s LinkedIn profile connects with all their productivity apps and automatically syncs information between Office apps [23]. LinkedIn contributed nearly $1 billion in revenue to Microsoft's most recent quarter in 2017 [24]. Microsoft wants to use LinkedIn as a database of professional information and distribution channel for its software systems. LinkedIn gains additional financing and access to millions of people who could potentially join its network [25]. Therefore, two research questions have been answered empirically. Besides contributing to dynamic capabilities view on competitive advantages by adding fresh insights about successful acquisition practice in technological domains, the research core contribution is in the emergent theoretical framework for the reinvention of a business model in merger and acquisition process as shown in Fig. 1.

<table>
<thead>
<tr>
<th>Acquisition based dynamic capabilities of acquiring organization:</th>
<th>Micro-foundations of selection, sensing, and shaping</th>
<th>Micro-foundations of identification and seizing</th>
<th>Micro-foundations of reconfiguration and transforming</th>
<th>Result in sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designing new building blocks of the business model of acquiring organization:</td>
<td>Sensing new key activities</td>
<td>Identification and seizing new key resources</td>
<td>Transforming channels</td>
<td>Result in new revenue streams</td>
</tr>
<tr>
<td></td>
<td>Shaping new customers’ segments</td>
<td>Identification and seizing new key partners</td>
<td>Transforming customers’ relationship</td>
<td>Result in new cost structure</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Reconfiguration of new customers value proposition</td>
<td>Sustain new competitive advantages</td>
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**Figure 1.** The conceptual model of research: bridging together acquisition based dynamic capabilities and reinvention of a business model. *Source:* Developed by author

The conceptual model integrates dynamic capabilities and business model perspectives in the new theoretical framework that encourage practitioners to grasp an exact relationship between micro-foundations of each perspective. Thereby, the conceptual model makes it possible to view the model from a business model canvas. How acquisition based dynamic capabilities support a reinvention of building blocks of business models? There are three sets of acquisition based dynamic capabilities: (sensing, and shaping) is contributing to select new key activities and new customer segments; thereby contributing to an acquirer to shape emerging market demand and new technologies. The second set of acquisition based dynamic capabilities (seizing) is supporting an acquirer’s company to obtain new key idiosyncratic resources and to extend a partnership’s networks. The third set of acquisition based dynamic capabilities (reconfiguration or transforming) is contributing an acquirer’s company to transform new customer relationships and promotion channels and thus, to deliver new customer value proposition. Thereby, an acquiring company would result in a new cost structure by eliminating and reducing capital expenditure and operating expenses, due to an economy of scope, and would generate new revenue streams by increasing and creating new key activities [14]. That's what Microsoft did with LinkedIn in the end of 2016 as shown in table 4. "In the enterprise market, Microsoft wants to create a new platform for work that makes it easier for employees to collaborate and get things done. LinkedIn, with its profiles, groups, and connections, is ideal", said TJ Kiett, a senior analyst with research firm Forrester [26].

**Table 4.** Bridging perspectives together: reinvention of business model and micro-foundations of acquisition based dynamic capabilities

<table>
<thead>
<tr>
<th>Reinvestment of business model of Microsoft</th>
<th>Micro-foundations of acquisition based dynamic capabilities of Microsoft</th>
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<tbody>
<tr>
<td>Selection, sensing and shaping new activities and new customer’s segments</td>
<td>One of Microsoft weakness is low mobile presence, in contrast, LinkedIn is the high mobile presence. Social network for business is not saturated niche of the social market. LinkedIn will help Microsoft accelerate shift to enterprise</td>
</tr>
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</table>

ISSN: 1690-4524 SYSTEMICS, CYBERNETICS AND INFORMATICS VOLUME 16 - NUMBER 5 - YEAR 2018 5
| Identification and seizing new resources and new partnership | Microsoft as the maker of Windows software attempts to put itself at the center of people's business lives. Acquisition of LinkedIn with a wide professional network and a mobile access to users' professional data is leveraging mobility of LinkedIn products and assess to wide professional network with users' professional data and quality of Microsoft products. |
| Reconfiguration and transforming new customer relationship, new channels, and new customer value proposition. Result in new cost structure and new revenue stream | Joining the idiosyncratic resources and aligning dynamic capabilities, Microsoft and LinkedIn complement customer value propositions of each other and help to sustain competitive advantage in a mobile ecosystem. Reconfiguration of Microsoft's and LinkedIn’s core competencies is delivered revenue stream by customized, tailored and targeted B2B advertising. The acquisition of LinkedIn also help Microsoft beef up ability to generate high-quality leads, run marketing campaigns with improved ROI and offer deep customer insights. |

When it comes to limitations of the research, due to a limitation of the number of submitted pages, the author has provided only one evidence from M&A practice in technological domain. However, having carried out several studies on acquisition based dynamic capabilities and re-invention of business models, namely, successful acquisitions of WhatsApp by Facebook in mid of 2014 and Samsung’s acquisition of Harman International Industries in November 2016; author found very similar convincing empirical answers corresponded to developed research questions. The author suggests a further empirical testing of the presented methodology and further development of a theoretical model.

5. REFERENCES