A Game changer: exploring and exploiting cloud computing

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Even Fortune 500 firms can disappear quickly because many of them fall into an exploitation trap. Examples show that certain organizations – that manifest ambidextrous features – can avoid the exploitation trap. But, how do they manage it? The Authors tracked the digital transformation of a Fortune 500 company in order to understand the strategic and organizational challenges and solutions to becoming resilient and prosperous. A cutting-edge example is shown in the paper about how an industry leader can exploit traditional industry while exploring and exploiting new ones and their markets at the same time. The Authors found that shaping an industry needs strong top-down leadership, and strong alignment between markets, strategy, and the configuration of the firm.

Keywords: ambidexterity, change management, cloud computing, exploration, exploitation

1. Introduction

Digital transformation is reshaping every industry. Today is the era of the fourth industrial revolution. Exploration of new ideas and territories has never been so popular, but exploiting existing businesses is also crucial. The trade-off between exploration and exploitation has been known for 25 years (March 1991), and the real challenge of management is to find the right balance between the two (Raisch et al. 2009)

Many firms are exploratory in the early stages of their lifecycles, but become exploiters in the later stages (Hortoványi 2012, Szabó 2014). As they become incumbent, they adapt themselves to the norms and rules of an industry which in turn decreases the future ability of adaptation. That is the reason why so many firms fall into an exploitation trap and are unable to get out of it. Only a few firms are able to remain exploratory and as such, shape an industry. These ones are those who are able to remain resilient. These firms also transform along with the new era and become ambidextrous.

Ambidextrous organizations are not only able to find the right balance between exploration and exploitation, but even more, they are able to drive internal organizational changes effectively. As an impact of the fourth industrial revolution, the average life cycle of products is becoming shorter (Xu et al. 2018). In this environment, finding the right balance between exploration and exploitation can be even more difficult, therefore understanding how the firm can become ambidextrous is a current area of interest.

In this paper, a cutting-edge example shows how an industry leader can exploit the traditional on-premise IT industry and large customers market and explore and exploit the new cloud computing industry and SME market.

2. Theoretical background

2.1. The exploitation trap

As industries evolve many of them become predictable and unchangeable. The adaptation to the environment is very important, but the constant adaptation to existing factors decreases future ability of adaptation. According to Burgelman (1991) the change carried out in the strategy is always smaller than the change happening in the environment, therefore the alterations mainly concern the peripheries of the strategy, and there is no change to the core areas. Hence during reorientation, companies facing competition tend rather to strengthen their already existing activities instead of looking for new ones. This adaptation paradox leads to exploitation trap for many successful incumbent companies.

Child (1972) pointed out that the view which says that the organizational structure is unambiguously determined by the environmental factors, technological level, and other external factors is not correct. The decision makers of the company actively contribute to the manipulation of their own environment, in order to achieve the goals, they have set. They either ignore the changes happening in the environment, or they alter the organization. In this interpretation, the proactive behavior of the company is determined by the leader or dominant coalition.

Contradicting Child's view, Burgelman (1991) represents the view that strategy is based on the current technology, economic, and cultural factors, and adapting to these, while the task of the leader is to create such a strategy that enables the organization to attain further success. Therefore, the organizational structure defines the competencies of the organization and determines its aims. The strategy consists of technical, economic, and cultural regulations. These regulations serve the purpose of maintaining the character of the organization. He uses the theory of population ecology for strategy building. During selection, the participants on different levels perceive strategy differently, therefore, variations appear. The objectives set in the strategy cannot be achieved without internal selection systems.

Thus, the primary task of top management is managing the administrative tools (strategic planning, control system, incentive systems), developing cultural (behavioral norms) mechanisms and selection systems.

However, exploitation can be an effective strategy short term. Oh et al. suggested that in high tech industries (on-premise and cloud software belongs to this category) exploitation of existing markets with improved products is a more effective strategy to achieve sales growth than bringing new products to existing markets, and or targeting new markets with improved products (Oh et al. 2015).

2.2. Managing change

Change is a continuous phenomenon both nowadays and throughout history, but the pace of change seems to be accelerating. Change is an unavoidable result of innovations, whose effect and impact are often unimaginable and underestimated by many people, included those individuals and organizations, too, from whom the

innovation derives. Managers want to govern this process better and more proactively, but there are still several unanswered questions (Schendel–Hitt 2007):

- How can and has to be change consciously (actively) managed, while one enterprise innovates, and perceives the innovations in the industry?
- How can the effect of innovations be tracked (e.g.: in case of organizational structure and business model)?
- What are the primary tasks in the preparation of the enterprise for the changes?
- What change forms are reasonable and effective?
- What obstacles might change run into and how can these obstacles be avoided or how can we overcome them?

Managers and employees at different levels of the hierarchy can have different view of the necessity of the change and its substance. Lower level managers' understanding of the situation and their emotions about the change can be dissimilar to top managers' perceptions and intention (Vuori–Huy 2016).

Change management is a consciously managed activity, during which the enterprise gets from one configuration to another. The recognition of strategic changes, and finding an adequate answer to these, present the members of the change management team with an especially hard task. The corporate environment presupposes the continuous revision of strategy and operations, which has a significant effect on the stakeholders of the organization. During the change management processes, the proper combination of strategies, the creation of the favorable reception of changes and the delivery of the results are critical factors.

The start and the maintenance of change is not an easy task, because for this the (artificial) maintenance of creative tension is needed in the organization. In order to maintain creative tension, vision has to be utilized, learning has to be directed, and planning has to be given power (Mintzberg et al. 1998). Hindering factors in recognition of the necessity of changes and in the creation of a sense of urgency (Kotter 1999):

- the absence of a major and visible problem or crisis,
- too much happy talk from senior management,
- low overall performance standards,
- performance measurement system focusing on wrong metrics,
- abundant resources,
- operating in silos with organizational structures that force employees to focus on narrow functional goals, and the underestimation of the power of denial, which turns a blind eye to problems
- not aware of how suppliers and customers actually view performance,
- low confrontational culture.

According to Clemmer (1995) changing and managing are precluding concepts, and changes don't have to be controlled manually, but the frameworks have to be set, along which change is to proceed. Change can be ignored, resisted, reacted to, exploited, or induced, and the necessary frameworks and configurations have to be developed accordingly.

During change, it is important, that it is very difficult to change everything at the same time, and it is not advisable either. Based on the recommendation of Mintzberg et al. (1998) we look for the best among the new and keep the most useful among the old. The change strategy of Dickhout et al. (1995) is much more pragmatic than this general recommendation:

- Evolutionary/institutional building: line managers direct the continuous change,
- Jolt and refocus: change of the management is necessary,
- Follow the leader: cutting the side-activities in order to have fast results,
- Multifront focus: fast results stabilize the organization, which can be followed by a multifront focus, changing many factors at the same time,
- Systematic redesign: ad hoc workgroups, but planned change,
- Unit-level mobilizing: the incorporation of the ideas of middle management and the workers.
- Changes can be induced top-down or bottom-up. Example for the top-down induced change is the drama of Tichy–Sherman (1993) in three acts, during which the prologue is the development of the new global playing field, and the acts are the processes of the organization: (1) awakening, (2) envisioning and (3) rearchitecting. The epilogue refers to the stability of changes that history repeats itself.

Kotter (1995: 61, 1999) gives more detailed guidance for the implementation of top-down changes:

- Establish a Sense of Urgency
- Form a Powerful Guiding Coalition
- Create a Vision
- Communicate that Vision
- Empower Others to Act on the Vision
- Plan for and Create Short-Term Wins
- Consolidate Improvements and Keep the Momentum for Change Moving
- Institutionalize the New Approaches

Beer et al. (1990) examined, why change programs aren't productive. They found the problem in starting change from too high above. Successful changes were typically started by a local manager, which was supported by the top management in order to achieve success. The successful elements were spread throughout the whole firm:

- the common diagnosis of business problems helps the commitment to change,
- common vision,
- consensus and resources,
- expansion of revitalization (as a possibility),
- cultivation,
- monitor the revitalization and correct the mistakes.

a.) Ambidexterity

A company can be successful in its existing operational areas and can exploit them. When solving crises, the successful embracement of new possibilities has a key role, without necessarily causing the destruction of existing areas. Companies meet a lot of "creative destruction" (Schumpeter, 1942) ideas during their explorative activities; however the real challenge for them is not the pure implementation of these ideas, but the successful running and construction of the existing and new fields at the same time. Summarizing the concept of ambidexterity, it ensures success for a company in its existing fields (exploiting) and in its new business fields (exploring) at the same time.

The topic of ambidextrous organizations is becoming increasingly popular among researchers who deal with strategy. The key question is its joint treatment of efficiency (exploitation) and effectiveness (exploration) (Tushman and O'Reilly (1996; 2002), O'Reilly–Tushman 2004, Raisch et al. 2009, Gibson–Birkinshaw 2004).

The ambidextrous organizations are able to manage successfully their existing activities and new products, services, and processes at the same time. The ambidextrousness can be realized in several organizational structures, in functional, cross-functional, spinout or ambidextrous structures, too (O'Reilly–Tushman 2004). Organizational ambidexterity has a positive impact on overall corporate performance (O'Reilly–Tushman 2013, Junni et al. 2013), on revenue growth (Lee et al. 2003, Venkatraman et al. 2006), on innovation (Burgers et al. 2009, Tushman et al. 2010) and can improve the company's survivability (Kauppila 2010, Yu–Khessina 2012).

The majority of enterprises struggle to find the balance between efficiency and innovation. The enterprises can gain efficiency in the short term if they replace their costly and unforeseeable activities with cheap routine processes. Though this exchange is extremely dangerous because the organization loses its long term ability to adapt. The more routine processes there are, the less flexible the organization will be. Therefore, sometimes based on strategic consideration, disturbance needs to be created artificially in the organization wishing to maintain creative tension (Raisch et al. 2009).

The trigger of creative tension might be the open business model in which the innovations come from inside as well as from outside of the traditional organizational boarders. At the same time, there is the possibility to spin off those innovations that are not realizable in the parent organization, but are viable/profitable otherwise (Chesbrough 2002; 2006).

b.) Exploiting: The traditional way of using IT

The traditional way of using Information Technology (IT) systems within companies was 'buy and build your own'. The company purchases and installs hardware and software elements to run the business applications required to support the company's business. Hardware elements include servers and storage; software elements include operating systems, security solutions, database, and middleware software and business applications. The hardware is usually installed within the premises of the company in the server room(s), hence the name of the model: on-premise (on-prem) computing.

c.) Exploring: The new way of using IT

The development of high-speed networks, virtualization and other distributed software solutions at the beginning of the 21st century allowed companies to use IT differently. Companies don't need to have servers on their premises anymore; they can use IT services from remote servers as a utility. It is not necessary to store the data or run the business applications by themselves; they can use external providers for that and access the services through the internet. This model is called 'Cloud computing' (Sultan–van de Bunt-Kokhuis 2012).

Cloud computing is a very broad term and includes different services. Usually, 3 major service levels are differentiated in cloud computing (DaSilva et al. 2013):

- Infrastructure as a service (IaaS)
- Platform as a service (PaaS)
- Software as a service (SaaS)

The expected benefits of cloud computing are cost reduction, reduction of ICT employees, increased flexibility, increased mobility and information access, and less ITC focus overall (Caldarelli et al. 2017).

Cloud models have become very popular over the last few years. In 2017, the total size of the public cloud computing market was around 130 billion U.S. dollars worldwide. (<u>www.statista.com</u>, 2018). New vendors have appeared on the market and grown their business significantly. Some of the leading cloud providers: Amazon (Amazon Web Services), Salesforce.com, Workday, Dropbox.

The traditional on-prem software companies have also realized the potential in cloud computing and started to re-position themselves as cloud providers. Microsoft, SAP, IBM, and Oracle are all actively investing in cloud solutions and growing their cloud business.

d.) Research gap and research questions

The IT Services and the Software industries are predictable. The malleability of the IT services industry is less than that of the Software industry, but even less than the malleability of the Internet Software and Services industry. The challenge of the Internet Software and Services industry is its unpredictability (Reeves et al. 2012).

Exploiting predictable markets and industries are essential for the incumbents, but it may lead to exploitation trap. As the industry declines, these firms could disappear. How can an incumbent firm escape from exploitation trap?

Exploring new markets and industries may contribute to the longevity of the firm, but can be painful and costly in the short term. In many cases, it is even uncertain. How can an established firm drive industry changes by exploring and exploiting new markets and industries?

Only a few firms are shaping the cloud computing industry, those who are resilient and powerful enough. These firms are also transforming in the digital era, how do they do it?

3. Qualitative research methodology

We tracked the digital transformation of a Fortune 500 company in order to understand the strategic and organizational challenges and solutions of the phenomenon. The company subject to this research is a multinational IT company, and has been a major player of the global on-prem software market, with customers and subsidiaries in a large number of countries.

The key target market for the company is the enterprise market, large customers from banking, telecommunication, manufacturing, retail, education, healthcare, and public sector. Small and medium enterprises (SMEs) also constitute a target segment for the company; however, the majority of the revenues are generated with enterprise customers.

We used qualitative research methodology to answer the main questions of the research. We used the multi-level approach in order to get a better insight of different stakeholders in the company, and wanted to get to know a detailed opinion of every interviewee about the changes in the company.

The essence of in-depth interviews is that they test the answers and statements of interviewees with specific parts of the interview (Solt 1998). We did not compare the interviews with each other, but we tested the conclusions of each answer with other interviews, and we developed the system of opinions. Based on Solt's (1998) guidelines, we did not set up a hypothesis about the interviews, and we did not insert the answers in our existing schemes to avoid processing errors.

We prepared 19 in-depth interviews with experts to answer the research questions in sufficient detail. In the selection of interviewees, we tried to characterize the employees by the following aspects: position, line of business, and territory.

Considering the positions of the interviewees, we covered many levels of the organizational structure:

- Cloud Programs Leader;
- Consulting Director;
- Digital Champion;
- Director;

- Finance Director;
- Sales Manager;
- 4 Sales Representatives;
- Senior Director, Public Sector;
- 2 Senior Vice Presidents;
- 3 Vice Presidents;

We interviewed employees from various lines of business, such as application sales, cloud digital, cloud customer success, finance, consulting, public sector business development and technology sales.

Most of our interviewees were responsible for ECEMEA (East and Central Europe – Middle East – Africa) region (4 people), but there were some employees from other territories, like EMEA (Europe – Middle East – Africa), Hungary (4), Hungary and Slovakia (1), MEA (Middle East – Africa) and North Africa – Levant.

We conducted semi-structured interviews, using the following opening questions:

- What do they think about the new way of using IT: cloud computing?
- How good are the new products in cloud?
- How important are the traditional on-prem products?
- How has the environment changed over the years?
- Which are the main economic, social, and technological trends?
- What are the characteristics of market competition?
- How do the main competitors act?
- What are the main strategic directions of the company?
- How did the structure of the company change because of the new way of thinking?
- What are the motivational factors for maintaining the changes in the company?

We collected and analyzed data in a parallel, iterative way (Miles–Huberman 1984), hence we recorded the interviews, and took notes during them to ensure complete data collection. After the interviews, we coded the answers based on contingency theory:

- Environment: PESTEL (political, economic, social, technological, environmental, legal), Porter's six forces (competition, new entrants, buyers, suppliers, substitutes, complementary products), SWOT (strengths, weaknesses, opportunities, threats);
- Strategy: value proposition, biggest challenges, growth directions, competitive strategy, first mover strategy, strategic alliances, learning, and development;
- Structure: changes in structural factors (hierarchy, coordination, collaboration);
- Behavior: personal and organizational motivational factors;
- Performance: control processes, performance measurement.
- The code structure ensured comprehensive analysis of the interviews. We were able to understand the changes through contingency theory because of the interaction of its factors.

We also collected and analyzed data from secondary sources:

- annual reports of the company between 2010–2017
- public speeches available on-line of leading executives of the company in the 2010–2017 period

4. Results

a.) Exploring a new industry: Cloud computing in the company portfolio

Initially, the company was not amongst the pioneers of the cloud market, therefore, it didn't have the first mover's advantage. Around 2010 when other vendors started to grow their cloud business and cloud become 'hype', the company had strategic choices to make: Invest or not into the cloud business.

Although it seems reasonable for a traditional software vendor to follow the market trend and move to the new cloud market segment, such a tack raises potential problems as well.

- New cloud products could disrupt the existing high margin on-prem business, and cannibalize on-prem revenues. If the overall market does not grow, cloud solutions will take business from on-prem. Shouldn't the company focus on keeping its strong on-prem position, and compete with the new cloud rivals?
- To offer cloud products which compete with the company's own on-prem portfolio could confuse customers.
- In most cases, perpetual on-prem software is paid when purchased. This provides the company with strong cash flow. In contrast, cloud solutions are paid over time. The average estimated length of a cloud contract is 3 years; which means the revenue and the cash flow will be distributed over 3 years. However, the investment cost associated with developing the cloud product and building a data center occurs at the beginning. While the cost of the physical data center will appear in P&L as depreciation cost over the years, the cloud software development cost hits the P&L expense line immediately. This means that mid-term profitability and cash flow of the company will be negatively impacted by selling cloud vs selling on-prem.
- In 2010 cloud was not a proven technology; it could well have been a deadend direction. Redirecting investment from on-prem portfolio to cloud was a risky decision. The existing need of the mainstream customers was not cloud, but on-prem.

There could be two scenarios for the company regarding revenues with regard to selling on-prem products (Figure 1). On the one hand, cloud products of their own and other companies could cannibalize on-prem revenues. On the other hand, the company could maintain a slow growth of on-prem revenues, if top management focuses resources accordingly.



Figure 1 Scenarios of the on-prem revenues of the company (million USD)

Source: Company's financial report and company's forecasts based on IDC

Figure 2 Revenues of the company, in the case of escaping exploitation trap by exploration and exploitation



Source: Company's financial report and company's forecasts based on IDC

In the case of the company changing strategy, and cloud solutions are growing, the revenue from the on-prem and the cloud solutions combined will be significantly higher than the on-prem revenues without strategy change. This helps the company to escape from exploitation trap (Figure 2).

b.) Top management drove strategy change

By offering cloud services, the company has expanded to a different market segment. On the cloud market customer needs are different, as are the competitors. Sales cycles are shorter; the average contract size is smaller. Even the buyers from the customer side are different: cloud solutions often being purchased by the non-IT department.

The company subject of this research, with experience and success in selling large and complex on-prem solutions primarily to the IT departments of customers, faced a challenge. It had to deal with smaller size contracts, less complex solutions, work with different customer departments, and to compete with different firms than before.

Parallel to the growing cloud business, the company had to keep the on-prem business running to ensure stable revenue flow. When the cloud business started to become significant, the company had two options to structure its revenue generating sales force:

- Establish a new business unit to exclusively sell the cloud solution, and leave the on-prem sales within the existing sales business unit
- Add the cloud product to the sales portfolio of the existing sales business unit.

According to the 16th interviewee: "there was a debate in terms of this choice, which was a mental question." The company selected the second option, and did not create a separate business unit for the cloud business. Instead, it added the cloud product to the portfolio of the existing sales force, and allowed and motivated the sales team to sell both cloud and on-prem products to customers.

In order to provide support to the sales force, the company created a different team of product and business development experts to focus exclusively on cloud business.

As the interviews with company employees revealed, the readiness of the market for cloud solution was not and is still not homogenous. There are differences based on geography, customer segment (enterprise vs. SMEs) and industry. There is broad adoption of cloud solution in the USA, Western Europe and in the Middle East, while customers in Eastern Europe and Africa are moving more slowly to the new way of IT.

SMEs are more open to moving to the cloud than large customers because they do not have resources to build and manage their own IT system. Some industry segments, such as Public Sector customers are more concerned with security problems and data residency issues than others. The company was not the first mover to the cloud market, and it has consequences for the company on developed markets where cloud competitors already have a strong presence. In countries where the market is less developed, and cloud adoption less mature, that disadvantage is not as significant: other cloud vendors do not yet have significant business either.

- But there are many competitive advantages for the company that the interviewees mentioned:
- data centers are all over the world;
- complex, integrated, end-to-end solutions in the cloud;
- meet the requirements of the local markets and able to handle small countries better;
- one of the most secure companies;
- a strong sales force and next-generation sales approach;
- strong back-office and customer care system;

However, the company's strategy is to actively promote cloud across all geographies, customer segments, and industries. In some segments, the company responds to customer needs (pull mode), and in some segments, the company drives the customers to the cloud (push mode). This approach requires 'evangelization'; convincing customers that they should not invest in on-prem solutions today because that will not provide them with a modern, agile, and flexible IT system in the future.

According to the 8th interviewee: "the company is in push mode on the market, the attitude of top management is that every second we try to sell on-prem solutions is wasted. If the customer definitely wants to buy on-prem solutions, we give them to cloud solutions too, as a present." But the 6th interviewee said that "it seems irrational how the company is acting because there might be some on-prem markets which cannot be replaced with cloud solutions".

c.) Aligning the organization to the new strategy: Changes in field sales

The change from on-prem to cloud required major changes in the field sales organization. Sales reps had to learn about the new products, the new way of selling these products, and the new competition. Such significant change always requires management intervention and drive.

As described earlier, in many cases the company was not 'pulled' by customers to sell cloud products, but 'pushed' the cloud solutions on customers in anticipation of changing customer needs in the mid-term. Therefore, the drive for change was not bottom-up but top down. The top management of the company realized the need for change in strategy earlier then the lower levels did. Top management started to drive the change, and used various management methods to drive the change through the organization:

- Communication top and later middle management focused its external and internal communication on cloud messages. What is the company strategy in the cloud and why is it important for customers?
- Financial incentives the commission system for sales reps was changed to motivate them to sell cloud products. Multipliers were implemented in commission calculation, and sales reps started to earn two to four times more commission by selling cloud products then on-prem.
- Training the company provided several days of training each year for the sales force, and these training sessions were only focusing on the new cloud portfolio. According to the 9th interviewee, "training is the platform to communicate a clear and strong direction for the company and its employees", but the 7th interviewee thinks that "these training are 3-day-long brainwashing events to sell cloud solutions".
- Re-defined and simplified internal processes to support the cloud business.

Using the above-listed methods led to a fast change in the mindset of the sales force, and as a result, the proportion of cloud revenues grew at a fast pace. This was a significant success, taking into consideration that tens of thousands of sales, support and operational employees who were involved in this change process. The company's internal culture and policies were crucial to this fast change and enabled this major change to occur in a relatively short time.

The company streamlined and centralized internal processes at the beginning of the 2000's. For example, 15 years ago the commission plans for sales reps were designed and prepared by individual country operations of the company. Country managers and country finance directors had the power to design renumeration plans based on their priority. For example, some renumeration plans included several KPIs, and some were based only on revenue generated by the sales rep. As a result of the streamlining and centralization efforts, the renumeration plans today are designed by the headquarters team and produced by shared service centers globally.

All sales reps in similar positions have the same renumeration scheme (they get a commission in the same way) across all countries where the company operates. This centralized system allowed the company to change the commission plan for all sales reps from one fiscal year to another to prefer cloud sales: there was no need to convince middle management and country managers why this change was necessary. Moreover, there wasn't a complicated process to work with local finance and HR operations in dozens of countries to change the commission plans. Based on top management decision, the shared service centers produced the new commission plans for all sales reps globally without interaction of middle management and country operations.

This streamlined operation made it possible for top management of the company to drive deep changes quickly and effectively across the large global organization.

d.) Exploring and exploiting new target segment: SME customers

The company traditionally was dominating the high-end of the market, focusing on large customers. With the growth of the cloud business, the mid and small size customers also become large potential segment for the company. Cloud solutions bring several benefits for SMEs, such as reduced opportunity cost, reduction of inhouse ITC sunk cost, and scalability which improves business agility (Ross–Blumenstein 2015). Due to lack of their own IT staff and free cash available for CAPEX investment, SME customers have a large demand for cloud solutions. The company made a decision to build a large sales team, focusing only on SME customers across Europe, Middle East, and African territory. It announced to hire 1400 new sales representatives to address the SME segment.

The traditional sales force – working mainly with high-end large customers – was a field-based sales force: sales representatives were located across the territory to be able to regularly meet customers and interact with them. The field sales model is effective for large customers and large deals, but expensive. This model won't work effectively for SMEs.

The company decided to adopt a different model for the sales unit targeting SMEs: created a couple of telesales centers across EMEA. In each of those centers, there are several hundred sales representatives working with SME customers using modern ways of remote communication (telephone, email, chat, video calls, social media), supported by the latest technology. The sales reps in those centers are able to deliver live demos to customers and present proposals from thousand kilometers away.

The profile of the sales reps in the telesales centers is different to that of field sales. In field sales, reps have several years of experience (sometimes 10+ years); in the telesales centers, many of the reps are new graduates from university. Young and dynamic telesales reps don't have a problem with mindset change from on-prem to the cloud – most of them started to work in the cloud world.

As the 14th interviewee said, "we build a new-generation sales organization with hiring young freshly graduated people, who can act as digital marketing campaign agents", and the 15th interviewee confirm the trend of the changing ways of communication: "in 2014, only 30% of communication with customers took place by phone, in 2016 it's 80% and in the future it could be 100%".

5. Summary

Exploitation trap used to be a common pitfall for many firms. Nowadays, the digital transformation is reshaping every industry. However, it was uncertain, why some firms are able to lead this transformation and take full advantage of it, as well as avoid exploitation trap.

We examined the following research questions: How can a firm escape exploitation trap? How can an established firm can drive industry change by exploring and exploiting cloud computing?

In order to answer the research questions, a major player in the cloud computing industry was selected and closely monitored through a multi-level approach in order to track down its digital transformation.

The case study highlighted that the following actions are needed to avoid exploitation trap:

- exploring a new industry
- top management driven strategy change
- aligning the organization to the new strategy
- exploring and exploiting new target segments

This transformation was enabled by

- a change-oriented organizational culture: in the past 15 years a major organizational change was carried out in every 2–3 years,
- strong leadership: clear vision and direction
- strong and aligned support systems: structural and rewards systems

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