

The Business Value of CRM Technology: From the Perspective of Organizational Ambidexterity

Completed Research Paper

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ABSTRACT

In this paper we report a case study on how firms realize the business value of CRM by developing CRM-enabled ambidexterity to simultaneously pursue stability and develop adaptability. Results show that as the focal firm used CRM as a platform for standardizing operations and building routines, the top management team (TMT) and the operation team worked together to reflexively monitor the status of CRM-enabled capabilities and the usage of CRM. Such reflexive monitoring led to proactive changes in CRM and CRM usage in response to market changes and market needs, ensuring adaptability. In this way CRM enabled organizational ambidexterity through mechanisms of capabilities building and reflexive monitoring. By examining the previously unexplored relationship between CRM use and organizational ambidexterity, this study contributes to literature in both ambidexterity and CRM business value.

Keywords

Customer relationship management (CRM), CRM use, organizational ambidexterity, reflexive monitoring

INTRODUCTION

The last two decades have witnessed the accelerated embracement of Customer Relationship Management (CRM) technologies by businesses, as they hope their investments in CRM will ultimately lead to better financial performance through improved marketing, services, sales, and customer satisfactions. It was reported that the total business spending in CRM solutions between 2000 and 2005 reached \$220b and was growing yearly at a rate of more than 16% (Maklan, Knox and Peppard, 2011). However, both industry experience and research findings suggest that such positive effect do not always materialize (Maklan et al., 2011). Some researchers argued that while financial performance might be the ultimate measure for CRM success, relying solely on financial performance cannot fully capture the value CRM brings to both businesses and customers (Kohli and Grover, 2008).

Based on our observation of how CRM is used by one business, we believe that one such un-captured value brought by CRM is to help companies develop organizational ambidexterity, promoting simultaneously stability and adaptability. On one hand, CRM systems allow companies to regulate sales activities and standardize sales operations, thus routinizing sales processes and

maximizing efficiency. On the other hand, CRM systems afford the companies the adaptability to respond to changes in the market and innovate, creating new products and services to meet new needs. Among the extant research in CRM and organizational ambidexterity, to our best knowledge little has addressed the relationship between the two. In this study, we propose to explore how CRM facilitates organizational ambidexterity and subsequently creates business value.

The rest of the paper is organized as follows: We begin with reviewing the previous research on business value of CRM systems and organizational ambidexterity. To explore how CRM promotes organizational ambidexterity, we describe a case study in which qualitative data were collected through interviews. Results of the data analyses are presented next, along with a discussion of the findings. We conclude by considering the contributions, limitations, and implications of the study for future research.

THEORETICAL BACKGROUND

CRM Business Value

Organizations invest in CRM systems ultimately to benefit from CRM usage. To justify the CRM investment, an important stream of CRM research has been on the business values brought by CRM technologies (Boulding, Staelin, Ehret and Johnston, 2005). In previous research, researchers paid much attention to the effects of CRM on business performance and customer relationship improvement. To measure business performance, researchers have used both objective financial performance measures such as net profit margin, return on investment, and long-term stock price (Dong and Zhu, 2008; Hendricks, Singhal and Stratman, 2007) and subjective measures of perceived organizational benefits such as cost reduction, market share growth, and new product sales (Chen and Ching, 2004; Coltman, 2007; Coltman, Devinney and Midgley, 2011; Kim, Choi, Qualls and Park, 2004). To measure improvements to customer relationship, researchers have used subjective measures of customer benefits such as customer relationship strength, customer satisfaction, and customer retention (Chang, Park and Chaïy, 2010; Chen and Ching, 2004; Dong and Zhu, 2008; Kim et al., 2004). However, the findings from previous research have been inconsistent and inconclusive. While much research supported the positive impact of CRM usage on organizational performance, some found no significant relationships between the two. For example, Hendricks *et al.* (2007) analyzed data from 80 publicly traded companies that deployed CRM systems, and failed to identify any improvements in long-term stock price and profitability.

Some researchers attributed the inconsistent findings to the insufficient understanding of the mechanism through which CRM create business values (Chang et al., 2010; Ernst, Hoyer, Krafft and Krieger, 2011; Reimann, 2010). They argue that in addition to the hopefully eventual improvements to bottom line and customer relationship, CRM also brings indirect and/or intangible impacts to businesses (Chang et al., 2010; Reimann, 2010). Recent studies have started exploring in these areas. They indicated that CRM can create both externally-oriented and internally-oriented values. Externally, CRM allows business to focus more on customers, e.g., through promoting marketing capability (Chang et al., 2010) or developing superior CRM capability (Coltman, 2007). Internally, CRM helps enhance a wide range of organizational capabilities such as human analytic-based capabilities and business architecture capabilities (Coltman et al., 2011), and establish both formal and informal control (Li and Mao, 2012).

Following this trend, in this study we propose to examine the business value of CRM through the theoretical lens of organizational ambidexterity. We argue that CRM provides a technological path for companies to build organizational ambidexterity, which is a vital capability for businesses to compete in today's constantly changing market. We introduce organizational ambidexterity next and explore how CRM can help organizations build this vital capability.

Organizational Ambidexterity

Organizations today often have to excel in two opposite fronts (Eisenhardt, 2000; Raisch, Birkinshaw, Probst and Tushman, 2009): They need to exploit what they know already to be competitive today and explore what they need to know to survive in the future (March, 1991); they must align all activities within and across business units toward same organizational goals and be ready to reconfigure activities in response to constant changes in their environments (Gibson and Birkinshaw, 2004); they ought to fine-tune existing products and business models through incremental innovations as well as introducing revolutionarily new products and services through radical innovations (Smith and Tushman, 2005). Organizational ambidexterity refers to an organization's capability in successfully managing the seemingly conflicting needs and executing the seemingly contradictory strategies (Raisch and Birkinshaw, 2008; Raisch et al., 2009). Because ambidextrous organizations simultaneously “exploit existing competencies and exploring new opportunities (Raisch et al., 2009, p.685)”, they can enjoy long-term success. In this study, we focus on the tensions between organizational stability and adaptability. The former means that organizations operate with mechanisms of high efficiency, reliability, predictability, regularity and low variance to achieve performance objectives (Farjoun, 2010). The latter, on the contrary, means that organizations operate with mechanisms of high variance, innovation, and flexibility so that they can reconfigure activities in response to constant environment changes (Farjoun, 2010; Gibson and Birkinshaw, 2004).

Literature has identified three paths through which organizations can promote ambidexterity: structural solutions, contextual solutions, and leadership-based solutions (Raisch and Birkinshaw, 2008). Structural solutions rely on spatial separation or parallel structures. Through spatial separation, organizations create separate organizational units and equip them with different strategy, policy, and culture for either exploitation or exploration (Tushman and O'Reilly III, 2006). With parallel structures, organizations foster a secondary, usually informal structure in addition to a formal primary structure in a same organizational unit. Typically, the primary structures are used for routine activities to achieve efficiency and stability and hence exploitation; the secondary structures – e.g., task groups, informal networks, communities of practice (Wenger and Snyder, 2000) – are used to deal with non-routine tasks, to promote innovations, and to share and create new knowledge (Raisch and Birkinshaw, 2008).

Through contextual solutions, organizations empower each organizational member to make autonomous decisions on where to allocate time and resource, when to take actions, and what actions to take, and hence afford the overall organizations the ambidexterity to handle competing strategic requirements. Thus contextual solutions rely on making individual organizational members ambidextrous (Gibson and Birkinshaw, 2004). Leadership-based solution, however, focus on top management. To the extent that top management plays a vitally important role in shaping organizational strategies, for organizations to be ambidextrous the top management must excel in managing ambidexterity (Smith and Tushman, 2005). Top management must acknowledge that organizations are replete with paradoxes, contradictions, and conflicts (Poole and Ven, 1989). They must engage in paradoxical cognition, adopting “managerial frames and processes that recognize and embrace contradiction (Smith and Tushman, 2005, p523)”, before they can sense the existence of contradictions and make balanced strategic decisions (Smith and Tushman, 2005).

Unfortunately, little research has addressed the impact of CRM on organizational ambidexterity. In this study, we posit that CRM – and IT in general – can be another path to building organizational ambidexterity and we take a closer look at this untraveled path through a case study.

RESEARCH METHODS

Case study fits the purpose of this study well for two reasons. First, we intend to focus on understanding how and why firms realize the business value of CRM by developing IT-enabled ambidexterity to simultaneously pursue stability and develop

adaptability, and the case study method is ideally suitable for “how” or “why” questions (Yin, 2009). Second, since there is little prior research on IT-enabled ambidexterity, this study is theory-building in nature. The case study method is appropriate for this purpose (Edmondson and McManus, 2007; Eisenhardt, 1989).

Research Site

The field study was conducted at AlphaEdu (a pseudonym), which provides high-end English education programs for children between 2 to 10. Headquartered in Beijing, China, AlphaEdu operated about 30 teaching centers across the country, with a third of them franchises. Each teaching center is managed by a principal who supervises a group of teachers and counselors. The counselors are essentially salespersons trying to sell AlphaEdu’s programs to interested parents. In addition, AlphaEdu ran a small call center for phone marketing. The business leads generated by the call center or from other marketing channels were assigned to teaching centers, where counselors would try their best to convert them into sales.

AlphaEdu chose to build a CRM system on Salesforce.com in early 2009 before it opened its first teaching center. Due to concerns over cost, customization, and network response delay (Salesforce.com ran its servers from outside of China), AlphaEdu switched to CloudCRM (another pseudonym), who offered cloud-based CRM solutions similar to Salesforce.com. Now having been with CloudCRM for more than three years, AlphaEdu was considered a pioneer and leader in taking advantage of CRM among CloudCRM clients at the time of this study.

Each of the teaching centers of AlphaEdu – whether owned or franchised – was organized in the same way but managed independently with counselors and teachers working and only working at one teaching center and reporting to their own principles. There was no resource sharing between teaching centers. Such a business model made it perfect for us to investigate how AlphaEdu exploited what they knew, e.g. replicating best practices and standardizing operations across teaching centers. Meanwhile, the English education industry in China during the recent years was rapidly growing, and the barrier to entry was very low, which made the market highly competitive and dynamic¹. With new entrants bringing new teaching philosophy, teaching techniques, and teaching models to the market, existing competitors such as AlphaEdu must also be flexible enough to respond fast to the changes. The simultaneous requirements on stability and adaptability for AlphaEdu create an ideal research context for us to observe how organizations can become ambidextrous.

Data Collection

The primary data used for analyses were collected through interviews with the vice president of operation (twice), a teaching center principal, an operation manager, and the director of academic administration. Each interview included three sections. We began with questions on some personal background information such as position, job responsibility, and working experience. We then asked interviewees to describe how CRM system was used in AlphaEdu from their own perspective. Finally, we invited interviewees to elaborate on some previous comments and reflect on their use of the system. While we did prepare a list of questions for the interviewees to review before the interviews, we conducted the interviews without using a script. The interviewees were encouraged to follow their own thoughts and talk freely. All interviews were recorded and transcribed into texts to be used in analyses.

In addition to interview data, we also reviewed other materials including the company web site, and news reports we searched from the Web on the company and youth English education market. We also obtained from CloudCRM video data on speeches made by AlphaEdu’s CEO, operation VP, and account director on their experiences with CRM when attending seminars and marketing events hosted by CloudCRM. Not only were these materials important for us to understand the market in which

¹ <http://edu.qq.com/a/20120604/000231.htm>

AlphaEdu was competing, its own history, its approach to CRM, and the history of its CRM, they also provided a means for us to triangulate interview data.

Data Analysis

Our data analysis was inductive in nature and based on the grounded theory approach (Strauss and Corbin, 1998; Suddaby, 2006). It started with open coding of the interview data and video data to recognize the first-order concepts, which became the basis for identifying the second-order themes. Then, more aggregate dimensions were formed by associating and categorizing the second-order themes for constructing theories. Lastly, relationships among the aggregate dimensions were proposed and interpreted to develop a theoretical model. This process is consistent with the “selective coding” process by Strauss and Corbin (1998). Figure 1 shows a synthesized summary of different levels of concepts.

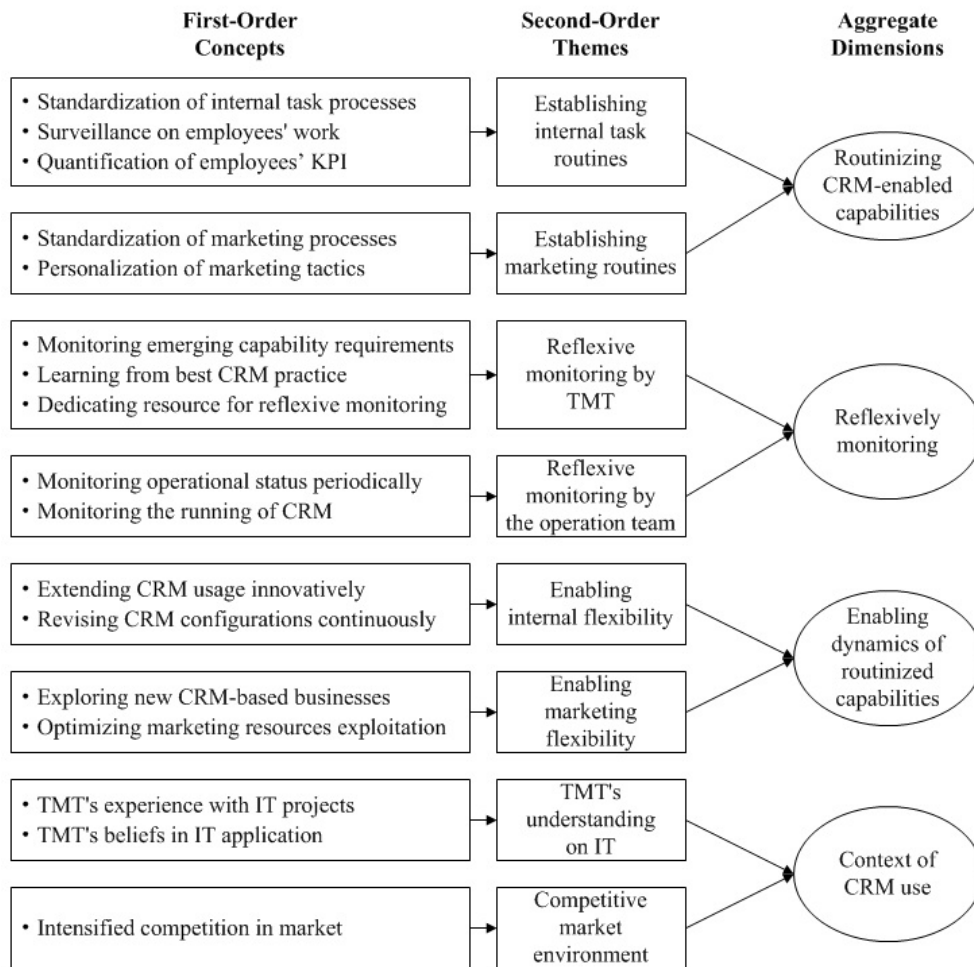


Figure 1: Synthesized summary of different levels of concepts

For example, “standardization of internal task processes,” “surveillance on employees’ work” and “quantification of employees’ KPI” are the three first-order concepts related to AlphaEdu’s endeavors to regulate employees’ daily internal tasks through CRM usage. We chose “establishing internal task routines” to label this second-order theme. In the next step, the second-order themes were formed into aggregate dimensions. “Establishing internal task routines” and “establishing marketing routines” refer to the company’s efforts in building both internally-oriented and externally-oriented capabilities to promote stability, so we used “routinizing CRM-enabled capabilities” to denote such capability building process. We also include

quotes in a tabular format to provide examples for codes. Only the most illustrative quotes were included due to space limitation.

FINDINGS

Routinizing CRM-enabled Capabilities

As soon as the CRM solution went live, AlphaEdu made it the working platform for counselors, principals, and managers and staffs at headquarters. Making the use of CRM mandatory, AlphaEdu was able to standardize daily operations on the CRM platform. In this way, they routinized internal task activities and marketing processes.

First-order concepts	Exemplar quotations
<i>Second-order theme: Establishing internal task routines</i>	
Standardization of internal task processes	All counselors have to follow a standardized process when they come to work every day: First they have to open a view that has all the phone calls they have to make. After finishing all the phone calls, they need to switch to a second view ... In this way, the system provided a standard workflow for them to do their job. (Operation manager)
Surveillance on employees' work	We can now sit in any office and listen to phone calls that are being made by any employee at any teaching center. Recordings of past phone calls, length of past phone calls, we can know all these remotely. If I want to find out how you treated a customer who called us, I can find it instantly. This is all so convenient to management. (Operation VP)
Quantification of employees' KPI	Now we can use many more KPIs to evaluate counselors. We can evaluate them through call length. We can use your call length with existing customers to evaluate if you have cared existing customer ... if your call length with new customers is less than 3 hours, then you didn't make enough phone calls. Next week, as a punishment, we won't give you that many leads. We will give more and better lead to those who work more efficiently or who work harder. (Operation VP)
<i>Second-order theme: Establishing marketing routines</i>	
Standardization of marketing processes	Customers come from different sources with different potentials. For example, those who call us, who make reservations with us, who come to us by themselves, we have to put them on the highest priority. We ask our counselors to treat them first and best, and then move down through the priority hierarchy. (Operation manager)
Personalization of marketing tactics	Now that we have the CRM, we can better take advantage of customer information. We always send "happy birthday" messages to parents. Because now we know the parents' names, we know the baby's age, we can be very specific when composing the message. Doing so definitely makes parents feel much differently ... If we don't have the system, we definitely couldn't do so. (Operation VP)

Table 1: Data supporting the aggregate dimension "routinizing CRM-enabled capabilities"

Establishing internal task routines. AlphaEdu's internal business process was consisted of a few largely sequential activities: pre-sale marketing, acquiring leads, sales, contracts, and academic administration. All these activities were now supported by different modules in the CRM system. By embedding these business activities into the CRM modules, AlphaEdu standardized its internal work flows for all workers. By mandating the use of the system, to all employees, AlphaEdu was

able to replicate its business processes in more than 30 distributed teaching centers.

The CRM system also provided management at AlphaEdu with almost real-time *surveillance on employees' work progress*. Counselors were required to keep a detailed record of their communications with customers in the system. This way, principals could review the complete process from the first contact with a customer to the final signing of the contract, tracking and evaluating the counselors' performance. The corporate management team could also monitor how each teaching center was doing by look at statistics such as the number of sales leads and the number of upgraded sales leads. In addition, the call center system was tied to CRM system. Calls to customers were recorded and saved together with the customer records in the database. All these surveillance capability allowed management to view the performance of individual employees as well as teaching centers in almost real-time.

But most importantly, the CRM system enabled AlphaEdu to *quantify counselors' performance* through Key Performance Indexes (KPI). Such KPIs included not only the final sales results (e.g., number of customers and revenues) but also intermediary measures of performances at all stages throughout the sales process such as average call length, number of class, number of upgraded sales opportunities. To AlphaEdu management, these KPIs guided counselors' efforts and had become a great tool for process control.

Establishing marketing routines. AlphaEdu's marketing routine was also based on CRM. It followed the sales funnel model that was built into the CRM solution, and enhanced it with tiered customer management, thus *standardizing its marketing process*. Using the sales funnel, the CRM system prescribed what counselors need to do and how counselors should communicate with customers as they evolved from one stage to another. With the tiered customer management, the CRM system allowed the counselors to focus more on more promising and more profitable customers, improving the overall performance.

Moreover, CRM also made it easier for AlphaEdu to personalize marketing tactics. When counselors engaged customers, they could use the personalized information stored in the system to communicate with customers more effectively. For example, they could send personalized greetings on the children's birthdays and be more targeting when promoting courses to parents.

Reflexively Monitoring

Reflexive monitoring by TMT. Ever since the founding of AlphaEdu, the top management team (TMT) kept exploring how to take advantage of IT. They kept *monitoring new capability requirements* for the CRM system. For example, when the CRM was first put to use, it could generate some of the required reports, but Excel spreadsheets were still needed to complement CRM reports. As the managers became more experienced with data processing and with the system, they required increasingly more from the CRM reporting functionalities and now made all sales reports available from the system.

The TMT was especially interested in *learning from best CRM practices of their star counselors*. They found that their star counselors used CRM not just to manage customer relationships. More importantly, they used it as a tool to manage their daily works, from setting up calendar and reminders to monitoring work progresses.

Earlier when AlphaEdu was operating only a few teaching centers and just started to use CRM, the TMT, especially the operation VP, was able to monitor closely how the CRM was used. With the fast addition of teaching centers and the expanded use of CRM, the company had to *dedicate resource for reflexive monitoring*. An operation team was created for this task. Almost all members of this team were experienced counselors or principals. They knew both the business and the system well, and played an important role in monitoring capability requirements.

First-order concepts	Exemplar quotations
<i>Second-order theme: Reflexive monitoring by TMT</i>	
Monitoring emerging capability requirements	(Our requirements) are constantly changing. I just paid the CloudCRM a visit last week and made a bunch of requirements. We always have new requirements. (Operation VP)
Learning from best CRM practice	We often wonder why some counselors are doing better. Through studying their working habits, we found why they excel ... We now set up those reminders, those things to pay attention to (in the system) ... we actually learned these from our star counselors, how they used the system, how they would like to use the system from their perspective. (Operation VP)
Dedicating resource for reflexive monitoring	We created a special operation management team to monitor the performance by the teaching centers. (The team's job is) to evaluate the performance of the teaching centers, identify the gap between the performance, and check how efficient the resources are used through analyzing the data. (Operation VP)
<i>Second-order theme: Reflexive monitoring by the operation team</i>	
Monitoring operational status periodically	We have an operation supervision department. Every day we have two people staying on the CRM system and monitoring the system. They oversee how counselors work, how well each teaching center is doing. For example, how many customers came to visit, how many customers signed the contract, how much was the contract worth, and then which class were the students assigned to after they signed up, who taught those classes, when were those classes and in which classrooms were the classes. All this detailed information is available from the system. Once authorized, one can direct monitor the sales department, even individual counselors. (Account director)
Monitoring the running of CRM	If we (teaching center) have any requirements, our HQ have people in charge of collecting and summarize them. HQ will then follow up with engineers from CloudCRM. (Principal)

Table 2: Data supporting the aggregate dimension “reflexively monitoring”

Reflexive monitoring by the operation team. One of the operation team’s responsibilities was to *monitor operational status periodically*. As the liaison between teaching centers and TMT, the team monitored established internal task routines and marketing routines, analyzed operational data, and organized and optimized leads.

Another responsibility of the team was to monitor the running of CRM. Especially, the team was responsible to ensure the data quality – comprehensiveness and timeliness in particular – of the system. It was also charged to collect new CRM requirements from principals, counselors, and call center representatives and benchmark the new requirements against the system to identify possible matches with and improvements to the system.

Enabling Dynamics of Routinized Capabilities

Enabling internal flexibility. AlphaEdu has always been extending CRM usage proactively and innovatively. At the very beginning, it defined the CRM system as the information systems for marketing and sales. It then added contract management, and *extended to system* to include finance module so that they could analyze customer value and keep track of customers for long-term. Later, academic administration was also included: course offering, student assignment, and classroom arrangement could also be done in CRM now.

First-order concepts	Exemplar quotations
<i>Second-order theme: Enabling internal flexibility</i>	
Extending CRM usage innovatively	Before we didn't use finance and contract management modules. We were able to generate reports on how much money the customers paid us. But now we wanted to know what kind of products they signed for, for how long ... With all this information, we can do more follow-up analysis which will help us do more business with the customers. ... (The CRM system) was not designed for this; but for us to better understand the process of selling to customers, we had to put some finance information into the system. (Operation VP)
Revising CRM configurations continuously	Minor adjustment is definitely frequent. On every working day, a lot of new things will pop up. Often you have to make some adjustment. It is probably not as frequent as making adjustments every day. More likely every month or two we will find that we need a new functionality, and we have to add something or adjust some, which is quite normal. (Principal)
<i>Second-order theme: Enabling marketing flexibility</i>	
Exploring new CRM-based businesses	We just launched a library program and invited all customers in Beijing and Nanjing to register with us for free memberships. Each of our teaching centers will have a small library. As long as you become our members, you can borrow books. You don't have to be our students to borrow books, but we certainly wish you will be our students in the future. We will track the whole process from when you are interested to when you really borrow books. We will use the CRM to track the whole process. (Operation VP)
Optimizing marketing resources exploitation	The information is always there ... But if there were no this system, by the time we want to put everything together, some will get lost. Without the system we couldn't trace back. (Operation VP)

Table 3: Data supporting the aggregate dimension “enabling dynamics of routinized capabilities”

Enabling marketing adaptability: With the constant changes in the environment, AlphaEdu also engaged in *exploring new business opportunities* with the helps from CRM. At the time of our interview, AlphaEdu was planning a new library-like business which responded to the market needs in children's reading. AlphaEdu hoped that this free service would eventually draw children to their programs. According to the director of academic administration, adding this new business was made much easier with supports from the CRM.

In addition to exploring new business opportunities, AlphaEdu was also constantly adjusting marketing resources allocation to *optimize marketing resources exploitation*. For example, based on the operation team's monitoring, AlphaEdu kept adjusting investment in different marketing channels so that they could get optimal returns on investment in acquiring the leads.

Context of CRM Use

CRM usage at AlphaEdu was affect by both internal and external contexts. The most important internal context involved TMT's understanding of IT's impact on business and the most important external context was the intensive competition in the market.

TMT's understanding of IT. The key members of AlphaEdu TMT were all *experienced with IT*. The CEO was a senior manager in PWC and implemented many an information system there. The operation VP also worked in software companies. During our interviews, when asked about the operation VP's understanding of IT, an operation manager agreed, “he is very

familiar with informationization.”

One of the *TMT’s beliefs in IT* was that IS could bring business values to organizations. When faced with business problems, the TMT sought helps from IT solutions consciously and aggressively. As early as when the company was founded, the TMT researched IT systems in leading competitors and started implementing their own CRM system. The CRM system grew in functionalities as the company grew. AlphaEdu used to have to generate some reports with Excel spreadsheets. After the most recent upgrade, all sales reports were generated by the CRM system, which prompted the operation VP to claim in relief: “We now have only a single version of correct numbers!”

First-order concepts	Exemplar quotations
<i>Second-order theme: TMT’s understanding on IT</i>	
TMT’s experience with IT projects	Our CEO was a senior manager at PWC ... He himself was involved in many IS implementations. So he is very knowledgeable. I myself worked in a software company before. So it is natural (for us to seek IT solutions). (Operation VP)
TMT’s beliefs in IS application	Awareness is key. Me, and other members in the TMT, we all know IT quite well. When we are looking for solutions, we usually will think how to use IT to solve some problems. (Operation VP)
<i>Second-order theme: Competitive market environment</i>	
Intensified competition in market	At the beginning there were not many competitors in the youth education industry. Now as we are all aware of it, many, many weird companies whose name you don’t even know popped up. This is really a fast-growing industry. (Principal)

Table 4: Data supporting the aggregate dimension “context of CRM use”

Competitive market environment. CRM usage at AlphaEdu was also spurred by *intensive competition in youth English education market*. Due to the low barrier to enter this market, the TMT had been under enormous pressure from market competition since 2011. On one hand, the pressure on performance required AlphaEdu to refine management with numbers to improve efficiency. On the other hand, the ever-changing market mandated AlphaEdu to keep innovating to meet customer needs. According to the operation VP, “When the market was small, we could easily do well. But the competition suddenly intensified by this year. We are all doing the same thing. Can we do it a little bit better than others? ... Why do we have to listen to the recordings? Why do we have to monitor the processes? Why do we have to manage the KPIs? ... All the new things we do fundamentally can be attributed to performance pressure.”

DISCUSSION AND CONCLUSION

In this study we explore how CRM promotes organizational ambidexterity through a case study. Our findings suggest through reflexive monitoring by key organizational members on how CRM is used and could be used, organizations can use CRM to routinize CRM-enabled capabilities for stability and to dynamically adjust CRM-enabled capabilities for adaptability, thus promoting organizational ambidexterity (Figure 2). Thus our study contributes to both research in ambidexterity and research in the business value of CRM. Literature identified structural solutions, contextual solutions, and leadership-based solutions as three paths to build organizational ambidexterity (Raisch and Birkinshaw, 2008). As the CRM system in AlphaEdu showed, IT such as CRM can indeed help organizations become ambidextrous, and our study demonstrated how. Thus we argue that IT can provide an additional, yet understudied, solution to building organizational ambidexterity.

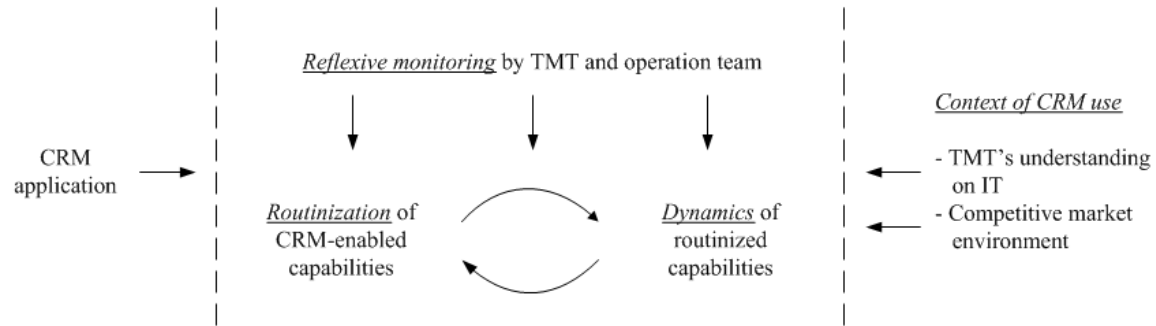


Figure 2: Realizing CRM-enabled ambidexterity

Consistent with what Schreyögg and Kliesch-Eberl (2007) pointed out, we observed in our study how routinization and evolution of organizational capability and reflexive monitoring consist the dual-process through which an organization attempts to be ambidextrous. In the case of AlphaEdu, it embedded business process, data, authorization, and policy into CRM. By mandating the use of CRM for employees' daily work, AlphaEdu routinized its operational capability internally and marketing and sales capabilities externally. These capabilities provided AlphaEdu with what Schreyögg and Sydow (2010) called “problem-solving patterns” that allowed AlphaEdu to maximize business efficiency and grow rapidly in an extremely competitive industry.

Our study also highlights the role played by reflexive monitoring in making organizations ambidextrous. As it was routinizing organizational capability, AlphaEdu also started building its capability in reflexive monitoring. Reflexive monitoring is the “the intentional or purposive character of human action as a continuous process of routine monitoring of their daily tasks, the environment, and others' actions (Puron-Cid, 2013, p.S48).” In AlphaEdu, reflexive monitoring by the TMT played a key role. Not only were they themselves involved in discovering emerging capability requirements, they also dedicated resources and created an operation team to engage in reflexive monitoring. Under relentless reflexive monitoring, routinized organizational capabilities and the CRM system co-evolve: As AlphaEdu was getting better and better in taking advantage of the CRM system in areas such as surveillance on employee work and optimization of marketing resource, the CRM system was under constant adjustments and its scope was kept being expanded, from marketing and sales to including finance and academic administration. More interestingly and more importantly, this mechanism allowed AlphaEdu to innovate and launch new businesses supported by the CRM system.

Our study also offers a new theoretical lens to examine business value of CRM: through building ambidexterity. Prior researchers have indicated that it is hard to comprehensively capture IT business values with mere quantitative and tangible indicators (Kohli and Grover, 2008; Schryen, 2013). Our research responds to calls for empirical research on the systemization of qualitative and intangible aspect of the IT business value concept. We argue that CRM-enabled ambidexterity may help account for some of the paradoxical findings in prior research on CRM impact. Our findings suggest that future measures of CRM business value should be broadened to incorporate the ambidextrous impact dimension. Moreover, through building the process model (Figure 2), we explicate how and why such ambidextrous impact could be realized, thus opening the grey box of CRM business value creation process (Schryen, 2013).

Our study should also interest practitioners who are puzzled by how to justify the investment in CRM and how to maximize the benefits from CRM. Consistent with previous research that highlighted the indirect or non-financial benefits of CRM, our study suggests that improved organizational capacities –ambidexterity in the reported case – may be used to provide an alternative view on the business value that could be brought by CRM technologies and may be used to motivate and justify

investment in CRM. Moreover, the insights we gained through the case study on the dual-process of the reutilization and evolution of organizational capability and the key role played by reflective monitoring from both the TMT and operation team provide companies with lessons on how to benefit from CRM that are both valuable and actionable.

As a single-site case study on the usage of a single CRM technology, the reported study is explorative in nature and certainly limited. For future studies, we plan to replicate the study in more sites and collect more interview data so that we can refine our theory-building and test the generalizability of our findings. The impact of CRM – and IT in general – on organizational ambidexterity was hardly explored, yet it may be key to understand the indirect and intangible values CRM brings to businesses. We hope the reported study can help draw more research attention to this important and theoretically interesting research area.

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