ENGSCI 9510L Case Study—Group 31

Lessons Learned on Bayer HealthCare CRM Project

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Executive summary

This report provides brief project introduction and analysis on lessons learned in a global multinational, Bayer HealthCare (BHC), which includes the organization specifications, overview of the cloud program and lessons decomposition in different phases and perspective. As a typical adventure and innovation project, BHC's choice has revealed some common challenges and particular payoffs, which attract our interests.

Since the lack of needed published materials for BHC's global project, our study is mainly based on the business analysis articles and news from Internet and journals. Meanwhile, we also talked to some previous project members to understand some details and management processes without violating the privacy policy from BHC.

Total 12 lessons learned are presented which belongs to different categories. In each lesson we try to explain the details way this strategy applied and what they plan in future project.

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1. Introduction

1.1 Bayer HealthCare Company's Challenges

Bayer HealthCare (BHC), is a subsidiary company of Bayer Group, which is concentrate on nutrition and health care with core competitiveness. With the vision of improving the well-being of mankind and animals, BHC studies, produces and markets a wide variety of medical products. Because of its high reputation in medical and healthcare field, BHC takes the leading position and is facing to increasing competition gradually with each passing day.

In order to maintain this high position, besides updating innovative medical products, BHC is more willing to pay emphasis on extending their business to those potential market that is just emerging at the moment, which means there will be huge potential business opportunity in the future and the competitors are relatively less. Thereby, a beneficial and sustainable development can be achieved. On the other hand, recently, with the greater impact applied by clients and patients, the medical and healthcare surroundings are fluctuating persistently, thereby forcing BHC to find out some new opportunities which are able to not only afford the increasing cost in research and manufacture, but also maintain the quality of services and products. However, even the whole company insists in developing potential therapies based on the increasing demand, their most well-known medicine is still the product called Aspirin over almost 200 years history.

1.2 Issues in Cloud Payoffs

Cloud payoff is something which arose with the increasing popularity of cloud computing and services in recent years and something drawing people's attention since the potential commercial opportunities is emerging as well, for example, the maintenance costs can be saved and the efficiency can be boost at the same time. [1] Smaller companies are more flexible and adaptable when facing to these opportunities, so that they stood forefront of those advanced technology and accumulated much experience, which may be inappropriate for multinational enterprises. [2] However, in order to catch up with the rapid development of business and being attracted by the powerful potential demonstrated by the cloud payoffs, multinational companies have to adopt those experience regardless of correctness, and finally encounter some difficulties called inhibitors. These issues happened to BHC as well when the managers tried to bring this advanced technology into their company.

1.3 The Cloud Program in BHC

Initially, the cloud CRM (Customer relationship Management) program for BHC was introduced by a new CEO, who came to BHC with the experience obtained in his former occupation. The program was intended to solve some potential difficulties we have discussed in the former sections. These problems were becoming increasingly complex with the time passing and the gradually growing of the whole company.

In order to achieve the advantages of cloud payoff, a program was got through by the managers and created to decide the future CRM plan and prepare everything

necessary for the CRM project, including compliance checking and global rollout decision. Based on the specifically analysis on the situation, BHC started the program and decided to use a composition of two cloud providers, who were already experienced. Facing to the high profit and tempting attraction, the young manager of BHC decided to trust the former experience blindly without thinking and pressed the

speed-up button for the program.

Undoubtedly, with the support of the main company, the whole program proceeded rapidly and however, pushed the team under extremely huge pressure at the same time. Numerous challenges emerged during the first pilot rollout and the whole program had to stop because of these issues. This halt played a key role in BHC's program since the manager can learn numerous lessons from it and thereby improving their decisions in the following phases. These lessons learned based on BHC's program is analyzed in this case study and the approach of success coping with difficulties is

2. Lessons Learned from the Project

2.1 Cost Management

insightfully introduced as well. [3]

According to estimate the required resources and the desired output, cost management could involve the project budget.

Lesson Learned #1: Consider Multi-Platform Cloud Strategies

Considering the financial strategies as a large multinational project, BHC does not

pick up cost-effective solutions separately but choose a unified Cloud-based solution,

which would cost more for the smaller country with less requirements, but

considering an enterprise-wide solution in long-term picture, the company and project

team believed it is a cost-efficient strategy. [3]

Initially, cloud platform will save time and effort to build system infrastructure,

meaning the project will devote more time and budget to focusing on how to figure

out more values to turn the system into business success. Besides, the unified platform

solution also means unified processes and key functions for multinational customers,

which will highly reduce the cost to implement different customized requirements

from different countries to achieve the similar functions.

To achieve commercial excellence in today's rapidly changing life sciences industry,

companies need to create a fully coordinated, relevant customer experience that

seamlessly traverses all channels. The global company will not only consider the

project cost saving from short-term technical perspective when selecting the solution

proposals, but also be aware of need for a mutual solution with business value growth.

2.2 Time Management

Project Time Management includes the processes required to complete of the project

in time. It also involves keeping everything on track and maintaining the project on

schedule. [4]

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Lesson Learnt #2: Shorten the implementation time for cloud solution

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Selecting cloud solution costs BHC a lot since the license fee will be charged annually. However, how does the project team make their boss feel worthy and actually saving the finance in big picture? The answer would be shortening the project time with high quality delivery.

One of the advantages of mutual CRM cloud solution is that it can be implemented quickly in a "plug-and-play" style to reduce the project timeline. On the other hand, the key future requirements collected by project team from workshop will propose to the cloud product vendor firstly as new service feature, once the feature is accepted, it will be free released in next version after 4 month, which will save a lot of project budget and time in current project phase.

2.3 Scope Management

Scope Management describes the boundaries of the project tasks and ensures all the work required successfully in the project.

Lesson Learned #3: Design a Global Template Approach for Rollouts

Similar to select the system platform we mentioned in the Lesson #1, BHC realized the most cost effective way is not trying to implement as many different requirements as possible from each country in lowest budget. Instead, as the BHC case shows that companies choose a template-based rollout approach where a global template for the target processes and systems is developed during one or very few concurrent pilots, before rollouts to other entities can proceed at a more accelerated rate. [3]

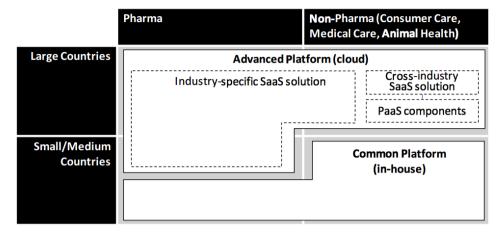
Unlike the risky 'big bang' strategy of doing anything at once, BHC is willing to focus on the key features firstly in pilot phase to well control the scope and cost, the global template not only defined the data schema but also provide the key processes designed by business expert to fulfill multinational requirements. Under this methodology, the project scope is well controlled, when customers want to propose a new requirement just flashed in the brain, they should consider twice if this is the key function which will bring business values or if it is following the global template. All the stakeholders can reach an agreement on this policy, the communication will become more effective and project team will allocate sufficient cost and resources to initiate template and continuous adaptation for different countries' rollouts.

Actually BCH has paid a price for having rushed the template definition and trying to implement several pilots concurrently in a too agile trend. After a period of halt and heated discussion, the project team adapted the policy and transited to a relatively steady stage for sequential releases rollouts. The first rollout country's most features have become the design blueprint for the future global processes.

Lesson Learned #4: Build strategies to control customization work

In current mutual pharm-industry based cloud solution, most common functions can be covered 'out of the box', BHC set up a strategy to control the project scope for different countries and business unit, especially for non-pharma customization requirements (See Figure 1). [5]

Figure 1: Two-Platform Approach for Global CRM at BHC



For example, in China Pharma's workshop, project team proposed adapting the industry-specific Saas (Software as a service) solution to replace the customized or uncertain processes on 'sample management' module, according to which the work scope will be focused on the platform approach to avoid customization effort and risk.

2.4 Schedule Management

Lesson Learned #5: Keep balance when managing the project schedule

PM should be fully aware of the workload usage peak and buffer in different phases and then make a relatively balanced schedule, especially for the local development teams or vendors.

In the pilot project for China BHC, the local vendor devoted more than expected overtime workload to implement one customization feature, in order to motive the team to keep working and finish the task before the time schedule, the project team offered an additional contact to pay more in following scheduled pilot rollout phase, to support the end user before the call center is fully ready, apparently this is much

easier work than the development before. Through this BHC has built better relation and reputation among cloud vendors and fitted the schedule accordingly since more resources were involved by the new contact.

2.5 Quality Control

Quality control is significant as it ensures the performance of the system and makes the project meet desired requirements.

Lesson Learned #6: In user acceptance test (UAT) phase, make sure all test cases are related and only related to the sign-off requirements.

When project team does the system integration test, lots of issues should be relevant to the platform or technique issues and when the system are ready to show to end users for UAT, a well-organized test case is necessary.

Firstly, the test cases mapping to specific requirement items will remind the testers the function they used to propose, in this way they will leave a better impression on the system psychologically. Secondly, strictly mapped quality goals will make both the development team and testers focus on the key functions in the scope instead of imagining some other comments on the features out of the scope. In this way the project team could save much extra communication effort but could set the more valuable target to pass the UAT.

In a global project with multiple channels, effective negotiation and sign-off required documents are the key steps based on which the following phase will focus on the

implementation in the signed scope, the change request and the system quality will be well managed and predicted.

2.6 Human Resources Management

Human resources aim to manage and coordinate people of a program to develop the overall team performance [6]. The objective is to ensure that all human resources could be utilized effectively and various skills of them could be made highly use of, like leadership, communication and coordination.

Lesson Learned #7: For acquiring functional needs, it is necessary to partner with cloud vendors and third parties for functional needs

It is common to see big companies prefer to cooperate with third parties for cloud services to acquire needed complement expertise at the beginning period of implementation. BHC has its own IT team globally to in charge of the development, maintenance and support for various systems. However, BHC tend not to put more cost in developing new functions in this enterprise-wide cloud platform system. On the contrary, BHC choose to build partnership with third party vendors through the negotiate contractual terms, vendors are really cherish the 'cake' like BHC' size and tend to offer cost-reducing benefit in the partnership, which includes providing continuous new product features as Saas (Software as a service) in cloud platform to enhance the pharmacy solutions. Meanwhile, the BHC's project team also keep controlling and tracking the function rollout, which is a win-win cooperation. Making

highly use of third parties' resources, the company could harvest plenty of benefits in terms of cost, knowledge and energy.

Lesson Learned #8: The progress of IT function and training staff should be strengthened.

The IT function becomes indispensably important when large and complicated cloud solutions are installed in an increasing number of companies. For BHC, targeting at global business market does not mean weakening the importance of IT industry. On the contrary, the key functions of IT area at BHC could not be ignored as they coordinate all the internal and external parties in a program. Moreover, it is meaningful to reduce the dependency on third party resources, which not only could decrease the expenditure, but could improve the cloud quality and initiative. Consequently, IT managers have the obligation to train their staff to meet these requirements. In current companies, highly-competent labors with abilities and skills are the priceless treasure, which could make the company strive in extremely furious market competition.

2.7 Communication

Communication plays vital role in project management as it ensures that the right person acquires the needed information timely. In a large project there are multiple entities and the communication efficiency and effectiveness will determine the successful level of the project while improper communication would lead to misunderstanding [7].

Lesson Learned #9: Wide levels of communication should be arranged for promoting the management process in a positive way.

In order to improve the performance of a project, multiple layers of the company are required to discuss and make suitable strategies according to constantly changing situations. [8] BHC has harvested success in terms of global business governance from the collective efforts between the top management and strong backing across all levels of the program. More specifically, senior business leaders from different locations, nowadays, are appointed to the program steering committee to handle the main market direction while the knowledge of stakeholders could be used to polish the program to a higher level. It is hugely wise to concentrate on all the strength of a program by using proper communication methods.

2.8 Risk Management

There is no doubt that risk management is a critical aspect among management system. It needs the project manager to accurately analyze identification, assessment and priority of risks and adopt proper, feasible and effective actions to increase positive outcomes. [9] The risks could be dealt after assessment by using suitable methods in terms of avoiding risks, transferring risks, mitigating risks and accepting risks. [10]

Lesson Learned #10: Risk assessments should be taken accurately and comprehensively.

Taking specific and suitable actions to decrease risks is based on the proper risk assessments. Consequently, effective risk assessments are the precondition to deal with risks successfully. Due to several cloud vendors cooperating with BHC, the first step for BHC is to entirely investigate prospective cloud vendors. What is more, the team of BHC has been encouraged to access vendors at worst scenarios in order to take positive measures to address unpredictable risks. [3] Only in this method, the risks could be evaluated roundly and the ability and encourage of vendors to face risks could be tested. Risk assessments are essential in various project process and accurate risk assessments should be advocated in other projects.

Lesson Learned #11: The compliance of rules is necessary to reduce risks.

One challenge of the application of cloud in pharmacy industry comes from the various national regulations about protecting customers' information. Consequently, it is important to regulate the differences of management rules, company compliance and relevant laws at an early stage before the application of cloud in BHC. We cannot deny that BHC does well in this area as any accident happens, the company could deal with it in the normalization rules without disputes. For the future projects, using uniform criteria will be beneficial to control and monitor the project process.

Lesson Learned #12: The assurance of data security is an effective way to

mitigate risks.

Data security is the most important factor of project management especially for those companies relating to high-tech areas, like Internet. In order to keep this kind of risk at a low level, BHC has investigated and assessed all the cloud offers roundly. The Bayer's team also spends lots of energy and time in data encryption, recovery and other extreme situations like the ownership of the data in case of contract termination. Moreover, a middleware is adopted as a cloud security strategy to connect the cloud information with internal systems. [3] In the further development of the project, data security should also be put at the main consideration position. The awareness and the measures of maintaining data security will make the company out of data crisis, allowing the company to go further with lower threat.

3. Conclusion

From the group research on the case study, we have an intuitive feeling about project management in details. More importantly, the lessons learned from BHS help us to summarize a multinational project's payoffs in current cloud solution and reveals how a large organization derives effective coping strategies to maximize the project's value, which will be beneficial to our engineering careers in the future.

The Table below offers an overall condition of the lessons learned from BHC's management strategies

Lessons Learned at BHC	
Cost Management	#1: Consider Multi-Platform Cloud Strategies
Time Management	#2: Shorten the implementation time for cloud solution
Scope Management	#3: Design a Global Template Approach for Rollouts #4: Build strategy to control customization work
Schedule Management	#5: keep balance when managing the project schedule
Quality Control	#6: In user acceptance test (UAT) phase, make sure all test cases are related and only related to the sign-off requirements.
Human Resource Management	#7: For acquiring functional needs, it is necessary to partner with cloud vendors and third parties for functional needs. #8: The progress of IT function and training staff should be strengthened.
Communication	#9: Wide levels of communication should be arranged for
Management	promoting the management process in a positive way.
Risk Management	#10: Risk assessments should be taken accurately and comprehensively. #11: The compliance of rules is necessary to reduce risks. #12: The assurance of data security is an effective way to mitigate risks.

References:

- Ried, S. and Kisker, H. Sizing The Cloud A BT Futures Report. Understanding And Quantifying The Future Of Cloud Computing, Forrester Research, 2011.
- 2. Venters, W. and Whitley, E. "A Critical Review of Cloud Computing: Researching Desires and Realities," Journal of Information Technology (27:3), 2012, pp. 179-197.
- 3. Till J. Winkler, Alexander Benlian, Marc Piper and Henry Hirsch "Bayer HealthCare Delivers a Dose of Reality for Cloud Payoff Mantras in Multinationals," MIS Quarterly Executive (13:4), 2014, pp. 193-208.
- 4. "Multichannel CRM Overview", https://www.veeva.com/products/multichannel-crm/
- Till J.Winkler, Alexander Berlian, Marc piper and Henry Hirsch Bayer HealthCare Delivers a
 Dose of Reality for Cloud Payoff Mantras in Multinationals Executive Summary
- 6. PMBOK® Knowledge Areas,

 http://www.free-management-ebooks.com/faqpm/principles-17.htm
- 7. Russell Darnall, John M. Preston. "Project Management From Simple to Complex," Flat World Education, 2015
- 8. PMBOK® Guide project management knowledge areas

 http://www.pm-primer.com/pmbok-project-management-knowledge-areas
- Project Management Body of Knowledge, From Wikipedia

 https://en.wikipedia.org/wiki/Project_Management_Body_of_Knowledge
- Project Management Institute, Practice Standard for Project Risk Management (Paperback July 1 2009)