

**USAGE OF INTEGRATION MANAGEMENT IN INFORMATION TECHNOLOGY
APPLICATION PROJECTS WITH A CASE STUDY CALLED CIGNA**

**UYGULAMALI BİLİŞİM TEKNOLOJİSİ PROJELERİNDE ENTEGRASYON YÖNETİMİNİN
KULANIMI VE CIGNA VAKASI**

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Abstract

In January 2002, Cigna HealthCare budgeted \$1 billion dollar to renovate information technology by the control of its new CIO and executive vice president of systems, Andrea Anania, who was promoted this position near end of 1998. However, this plan did not go so smoothly and the Cigna lost a million of its customers; moreover, their statement shows \$398 million net loss for the year 2002 while their stocks went down fifty five percent. In addition, the Standish Group surveyed 365 information technology executive managers in the United States who managed more than 8380 information technology application projects. Their study reported that the overall success rate of information technology projects was only 16.2 percent. The main reason behind this low percentage and fail of the Cigna case is mostly not using integration management properly. The aim of this study is to expose the essential usage of Integration management on information technology application projects.

Key words: Cigna, integration management, information technology and project.

Özet

Ocak 2002’de, “Cigna Healthcare” şirketi, 1998’in sonunda CIO olarak şirketin başına getirilen Andrea Anania yönetiminde, 1 trilyon dolar bütçe ile bilişim teknolojilerinde yenilenmeye gitti. Ancak, bu plan istenilen düzeyde başarılı olamadı ve bunun sonucunda “Cigna Healthcare” milyonlarca müşterisini kaybetti. Şirket, 2002’de net 398 milyon dolar zarar etti ve stoklarında % 55 düşüş görüldü. Öte yandan, Amerika’da 365 bilişim teknolojisi yöneticisi ile yapılan bir anket çalışması sonucunda, bu yöneticilerin yürüttükleri 8380 projedeki başarı oranının sadece % 16,2 olduğu belirlenmiştir. Cigna projesinin başarısızlıkla sonuçlanmasında ve bilişim teknolojisi projelerinin başarı oranının bu kadar düşük olmasının arkasında yatan temel neden, entegrasyon yönetiminin gerektiği gibi kullanılmamasıdır. Bu çalışmanın amacı, entegrasyon yönetiminin uygulamalı bilişim teknolojisi projelerinde kullanımının önemini ortaya çıkarmaktır.

Anahtar kelimeler: Cigna, entegrasyon yönetimi, bilişim teknolojisi, proje.

INTRODUCTION

The Standish Group surveyed 365 information technology executive managers in the United States who managed more than 8380 information technology application projects. Their study reported that the overall success rate of information technology application projects was only 16.2 percent (Schwalbe, 2004, p2). Cigna’ case is one of unsuccessful information technology application projects; moreover, the primary reason behind this low percentage is that many businesses do not implement the integration management perfectly to their projects.

This paper investigates how the integration management should work on integrating new systems to the businesses with reference of the analysis on the case of Cigna; in addition to that, the aim of this study is to expose the essential usage of integration management on information technology application projects.

Integration management is considered key for the management to overall project success and project managers and leaders are responsible for coordinating all of the people, plans, system and work to complete successful projects. Integration management involves identifying and managing the points of interaction between various elements of old system and new system. Integration management also includes a potential of teaching the structure to the internal employees so that they can understand organizational strategies and identify the business areas (Schwalbe, 2004, p115). Moreover, integration management must occur within the context of entire organization when the organization migrates to new

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systems. To ensure that changes with migration new systems to organizations are beneficial to the organization, there should be proper and careful usage of integration management. Good integration management is critical to providing stakeholder satisfaction and integration management is the key overall project success.

As in the Cigna case, today many businesses underestimate the integration management especially on information technology application projects of integrating to new systems; as a result, the businesses lose millions of dollars, customers and stake of holders. To overcome these types of problems, the business must coordinate all the following management knowledge areas thorough a project's life cycle with the integration management: Project Management, Time Management, Systems Analysis and Design, Transformation, Customer Relations Management, Executive Support, Testing, and Benchmarking. This paper aims to explain the major milestones of integration management and improve their usage on information technology application projects supported by the Cigna case to have successful projects. Before explaining these milestones of integration management, I will give a brief explanation of the executive summary of the Cigna case to prove problems of integration management.

EXECUTIVE SUMMARY OF CIGNA CASE

Cigna Healthcare organization, one of the largest health insurers in the United States went into a project to improve its information technology; in order to, compete to its competitors (United Health, Well Point Network, AFLAC, Aetna and other companies) who already had tried using modern information technology to reduce costs while they were improving their services. Cigna has been in the insurance business for 125 years. Revenues in fiscal year 2002 totaled \$19.3 billion, employing thousands of people worldwide. In January 2002, Cigna HealthCare budgeted \$1 billion dollar to renovate information technology by the control of its new CIO and executive vice president of systems, Andrea Anania, who was promoted this position near end of 1998 (New Survey Shows, 2003). In addition, the goal was to have one integrated system for enrollment, eligibility and claims processing, so that customers would get one bill, medical claims could be processed faster and more efficiently, and customer service representatives would have a single unified view of members to accomplish that. Initially, in early 2002, the migration from the old system to the new one was a near disaster. The entire switch took a matter of minutes and the "glitches were so significant that millions of dissatisfied customers walked away, causing the nations' fourth largest insurer to lose 6 percent of its healthcare members in 2002" (CIO Magazine, 2003).

Since one of Cigna's competitors, United Health, spent about \$1.4 billion on successful projects from 1998 to 2002 and other competitors were moving up to similar project, Cigna was under a sudden considerable pressure; as a result, \$1 billion was budgeted for the information technology renovation in 2002. In addition, this application project was such a disaster and Cigna ended up losing a million of its customers, showing \$398 million net loss for the year 2002 on their financial statement while their stocks went down fifty five percent (Bass, 2003).

Just after the executive summary of the Cigna case, I will start to expose the major milestones of integration management with analysis on the Cigna case.

1. PROJECT MANAGEMENT

We can call the project management the most considerable milestone of the integration management; in addition, the businesses can only have successful integration by developing well defined project management skills. A report in 2001 pointed that the U.S organizations spends \$2.3 trillion on projects every year, an amount equal to one quarter of the nation's gross domestic product (Schwalbe, 2004, p2). Many firms spend huge amount of money on the unsuccessful projects; in order to be successful, today's organizations need to be conversant with and use modern project management techniques. To remain a competitive, the companies should develop skills to organize good project managers and project leaders who have strong knowledge of integration management skills.

In January 2002, Cigna budgeted \$1 billion to renovate its information technology projects; however, the company lost almost a million customers; moreover, their financial statement showed \$398

million net loss for the year 2002 whereas their stocks went down fifty five percent (Bass, 2003). Clearly, Cigna did not manage the project successfully because it did not have a clear triple constraint: scope, time and cost. As in Cigna case, the report showed that 86 percent of information technology projects fail yet most of them do not have a clear triple constraint. The triple constraint (Schwalbe, 2004, p7):

Scope:

It was not so clear what was expected from the project besides having a plan to integrate the company's enrollment, eligibility and claims of processing systems. Cigna's scope should have been not limited only on information technology integration plan besides what unique product, service or result customer expects. The scope constraint refers to what must be done to produce the project's end result and if the scope is not clearly defined, it is hard for integration to work.

Time:

Cigna did not provide a clear idea of how long it should take to complete the project; moreover, Cigna did not have project's schedule and they were so late in jumping to this project. The time constraint refers to the amount of time available to complete a project. I will go deeper to the time perspective when I explain the time management.

Cost:

Cigna's project budget was 1 billion; however, this cost was not enough to complete the project. Cigna could not manage its cost; as a result, there were unexpected cost were generated. The cost constraint refers to the budgeted amount available for the project yet many businesses mostly fail on achieving the cost that they estimated.

The studies reported that the overall the success rate of information technology was only 16.2 percent (Schwalbe, 2004, p2) and this success rate can be improved by well defined triple constraint before the integration management process actually starts on.

2. TIME MANAGEMENT

Fifty-one percent of information technology projects were challenged according to the 2003 study, and their average time overrun increased to 82 percent from a low of 62 percent in 2000 (Schwalbe, 2004, p201). One of the most important concepts of why Cigna's technology project failed was not meeting time and time is the biggest challenge of delivering the project.

It took a quite of time for Cigna getting started to its information technology renovation projects; whereas, its competitors were done successfully with their projects when Cigna had just started. United Health had spent about \$1.4 billion on its successful projects. In 2002, to catch its competitors Cigna jumped to its new project; however, it was late and they did manage the time sufficiently. Cigna later on mentions out that much of their work was done by Cigna's internal staff yet the project too large to given time frame and they went to external companies for help (Bass, 2003).

In integration management, time is an essential tool, we can earn back money and we can achieve the scope in any other project yet the time is once gone it is gone. In order to have successful projects, managers must deliver projects on time and that must be their one of the biggest challenges during integration management.

3. SYSTEMS ANALYSIS AND DESIGN

Systems analysis and design must involve in new projects of the organizations to catch their desired business benefits. Most of systems analysis and design include gathering information, defining system requirements, prioritizing requirements, prototype for feasibility and discovery and generating and evaluating alternatives (Satzinger, 2004, p160).The business cannot integrate any new system to its field without a clear system design and analysis and on integration process. For all that, Cigna did not do its homework on gathering information because users could not functionally use the system and there was not enough collection on technical information (Goodridge, 2001). System requirements somehow was clear

such as using IBM AS400 computers yet they still had to use old computers because of data transferring problems; therefore, their system requirements did not clearly defined (MacSweeney, 2003). Moreover, one of the milestones of systems analysis and design which is generating and evaluating alternatives was missing in Cigna's project (CIO Magazine, 2003). When the businesses migrate to the new systems, they must have alternatives for their final design and implementation because there are many possibilities that the new system might not work properly. In order to have successful projects, integration management should have a well structure of systems analysis and design of new and old systems.

4. TRANSFORMATION

As Cigna's Health Care president states that Cigna didn't do so well on transformation and their cost was greater than anticipated; moreover, most of Cigna's economic and service benefits were not realized and transformation shortfalls had brought essential shortfalls to the firm (Baron, 2003). Transformation is so essential on moving to new information technology in organizations and if transformation of old systems to new systems is not achieved by integration managers, the project will fail with huge amount of cost just as in Cigna's case. The main obstacles of a successful transformation cover a well systems analysis and design of old and new system jointly successful integration management (CIO Magazine, 2003). However, as in Cigna case and other unsuccessful information technology projects did not do a smooth job on integration and systems analysis and design; as a result, most of information technology projects failed (Bass, 2003). Successful transformation will increase the productivity and effectiveness of integration management on the projects.

5. CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

Customer Relationship Management is a concept of the method and technologies used by organizations to manage their relationships with their customers; moreover, it coordinates most of the business processes surrounding the firm's interactions with its customers in marketing, service and sales to optimize customer retention, customer satisfaction and revenue (Laudon, 2006, p393). For the most organizations, Customers are the most important asset of the organizations and companies must adapt their business and technological goals to the benefit of this asset especially in a new project that change the business way of the company. However, Cigna forgot about its CRM when they develop the new project besides they lay off many people from customer service department and newly hired representatives were not adequately trained; as a result, their CRM system did not support the project's outcomes (Bass, 2003). If your system is besieged by calls, the last step you would take is to layoff of employees from call centers. Furthermore, that was the one of the biggest mistakes Cigna had done; as a result, call center could not handle customers' calls and newly hired employees did have much about how the systems worked. As CIO of Cigna, Anania says you can have the best system in the world but if you have people with relatively tenure, you are not going to get best service. Cigna brought a good system to the company but they did not support their CRM as they implemented new systems; as a result, they lost millions of customers (Baron, 2003). When the businesses migrate to the new systems, they must fit the best customer relation management that supports their new systems; otherwise, the fail in the projects will be unavoidable (Goodridge, 2001). Good customer service is becoming an integral part of any well managed IT department.

6. EXECUTIVE SUPPORT

Cigna CIO Andrea Anania is shown the main or only person in the charge of this project and we don't hear anything from her peers Chief Operating Officers (COOs), and Chief Financial Officers (CFOs) and the heads of various departments such as engineering, operations and distribution (Anania, 2002). Cigna's CIO could not implement IT and achieve the business goals of the company herself yet she needed ongoing executive support for key systems managements (O'Brien, 2002) One of the primary activities of the projects of migration to the new systems must be getting full support of executives because they are the one who decides the businesses short and long term goals. Regardless of how well integration managers design and implement systems management processes, they will likely fail without the approval and support of senior management. Senior managers must be informed about the true benefits

of a new system or process (Laudon, 2006 p479). Management backing also ensures that the project receives sufficient funding and resources to be successful. Migration to any new systems must be on custody of executives of the businesses otherwise, the integration management's goal will be rather a dream. The integration management at any point in time is critical to acquiring the necessary management support

7. TESTING

Testing is another shortfall of the Cigna's project. Testing should answer this question, "Will the system produce the desired results under known conditions"? Even though Cigna goes to renovation on its Information Technology; it does not do necessary testing in many areas of new Technology. Furthermore, Anania, CIO of the Cigna, agrees that Cigna's project team did not have time to do a very thorough volume testing or end-to-end testing before taking the full system live. Also, Cigna brought consultants to solve problems of implementation as a result of not having a good testing; moreover, these consultants were high cost in Cigna's financial statement (Bass, 2003). Testing is time consuming and system testing as a whole is costly and time concern. However, better testing in unit testing could give an idea about shortfalls of the project and these shortfalls could be improved by systems managers with better time and cost management. Integration management testing tool usually has three essential stages. First, the management should create test cases, second they should execute them and on the final stage, they should report the results (Laudon, 2006, p548). In any project especially in information technology application projects, testing must have a special concern by integration management and without testing it is a miracle for projects to be done properly.

8. BENCHMARKING

Benchmarking is the process of comparing the cost, time or quality of what one organization does against what another organization does. The result is often a business case for making changes in order to make improvements (Wikipedia, 2009). Benchmarking is a powerful management tool that improves the organizations' effectiveness overall on the projects; moreover, Cigna did not use this management tool to gain advantages among its rivals. For instance, United Health, competitor of Cigna in the industry, moved into in new technology from 1998 to 2002 with its successful projects and this movement had been a hard push for Cigna's new project (Forefield Delivers, 2002) However, Cigna could gain some advantages by benchmarking successful parallel systems of the United Health. As in Cigna case, there are always other parallel projects that businesses can learn lessons from and implements these lessons to their projects. On integration process, benchmarking other successful businesses contributes success to the projects.

In 2008, a comprehensive survey on benchmarking was commissioned by the Global Benchmarking Network (a network of benchmarking centers representing 22 countries - and for which the founder of benchmarking, Dr Robert Camp, is the honorary president). Over 450 organizations responded from over 40 countries. The results showed that:

1. Mission and Vision Statements and Customer (Client) Surveys are the most used (by 77% of organizations) of 20 improvement tools, followed by Strengths, Weaknesses, Opportunities, and Threats SWOT (72%), and Informal Benchmarking (68%). Performance Benchmarking was used by (49%) and Best Practice Benchmarking by (39%).
2. The tools that are likely to increase in popularity the most over the next three years are Performance Benchmarking, Informal Benchmarking, SWOT, and Best Practice Benchmarking. Over 60% of organizations that are not currently using these tools indicated they are likely to use them in the next three years.
3. When Best Practice Benchmarking is done well significant benefits are obtained with 20% of projects resulting in benefits worth US\$250,000

CONCLUSION

A very large percentage of information technology application projects fail to deliver benefits when they migrate to new systems on their business because the process of integration management is not properly addressed and used. Successful information technology application projects on building new systems require that the businesses must adapt careful and proper integration management.

As Cigna's competitors, United Health and other competitors spent billions on successful projects from 1998 to 2002 and other competitors were moving up to similar projects, Cigna was under a sudden considerable pressure; as a result, the company went to the information technology renovation in 2002. However, this plan did not go the way that the management anticipated; in addition, the Cigna lost a million of its customers and stated a net loss while its stock fell down. Also, the studies reported that the overall the success rate of information technology application projects is really low and Cigna is not alone on unsuccessful information technology application projects. This study has aimed to explain that many of the information technology application projects fail because of the following problems especially on integration management and other areas that related to it: transformation, time management, project management, testing, benchmarking, system analysis and design, executive support and CRM.

This paper has aimed that with a strong and structural integration management and its related areas, the Cigna project and other unsuccessful projects could be turned into successful projects. With careful and proper usage of integration management on information technology application projects on introduction to new systems, the businesses will have more effective and efficient projects.

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