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Mergers and Acquisition – Post Merger IT Integration

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Mergers and Acquisition – Post Merger IT Integration

by

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Dedication

This Thesis is dedicated to:

Mr. Panjabrao Deshmukh, my father who has been a great pillar of support and most the understanding and humble person. I learnt the importance of hard work through his tough life.

Mrs. Chandraprabha Deshmukh, my mother who has inspired and instilled the importance of education in me. Her oozing optimism and encouragement drives me and gives me immense strength. I cannot thank them enough for supporting and encouraging me to take up Masters Degree.
Abstract

Mergers and Acquisition – Post Merger IT Integration

Rani Deshmukh MSE
The University of Texas at Austin, 2012

Supervisors: Steven Nichols, Bruce McCann

“All marriages are happy. It’s the living together afterwards that causes all the trouble.”
- Raymond Hull, Canadian Playwright.

Although Mergers and Acquisitions are common, no merger is termed as successful until post merger integration is successful. During M&A, two companies that function uniquely are fused together, and the Information Technology group is expected to consolidate two different systems efficiently. This integration should be well-executed, and without any disruption to business or customers. Every merger is different, and can have innumerable reasons for failure, ranging from poor implementation strategies to cultural or attitudinal problems. One of the reasons, many Post-Merger Integration activities fail, is due to the Information Technology complexity and inadequacy to address the issues, it brings to the table. This thesis aims at studying the importance of post-merger
Information Technology (IT) integration and developing an IT strategy for the integration. There are no scientific guidelines laid out for a post-merger IT integration and each company employs its own methods. Hence the author has researched and developed a post-merger IT integration framework that can give definitive approach and assist in seamless integration. This framework includes practices that can be followed for a smooth IT transition and checklist to ensure successful integration.

Lastly the author presents two cases of M&A that illustrate the importance of IT integration, namely, Sallie Mae- USA Group and HP-Compaq. Sallie Mae & USA Group was a huge success due to its successful IT integration implementation while HP-Compaq merger was a disappointment for the lack of understanding the importance of IT integration. From these two cases, the author has also derived the usefulness of the proposed framework. Author has also presented another case of Oracle-Sun merger, which does an analysis of the IT integration carried out by the two companies. It would not be unwise to say, that IT plays an ever increasing pervasive role in today’s organizations, hence a successful merger demands successful IT integration.
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THESIS OVERVIEW

Growing competition in the business environment drives many companies into merger (Bibler, 1989) (Haspeslagh and Jemison, 1991). Mergers often target number of objectives like increase in market share, rapid growth, diversification, and new business opportunities and technologies (Haspeslagh and Jemison, 1991). However, managers face problems with making the mergers work (Giga Information Group, 1999). McKiernan & Merail notes (McKiernan, Merali, 1995): “One of the main reasons for poor post merger performance is the failure of the organizations to fully consider the IT implications of mergers. Causes for the performance failure do often relate to the definition and development of the new IT infrastructure”. According to Giga Information Group analysts Mark Cecere and Julie Giera, Information Technology (IT) plays a critical role in the success of Mergers and Acquisitions and creates opportunities for the IT executives. In the past, Information Technology (IT) was taken care of later, but today, the greatest opportunities for economies of scale occur through elimination of redundancies in hardware, software and networks (Giga Information Group, 1999).
This Thesis is divided into three chapters and wrapped with a conclusion chapter.

**Chapter 1**: Chapter 1 focuses on basics of M&A that includes definitions and the process of M&A. It also explains some of the reasons, for which companies pursue a strategy of M&A.

**Chapter 2**: This chapter continues the literature review with the overview of post-merger issues, and explains the importance of Post-Merger IT integration. Thesis element of development of IT strategy, and aligning it with M&A strategy is included in this chapter.

**Chapter 3**: In Chapter 3, author has also researched and proposed a framework for IT integration, in terms of best practices to be followed. It also includes the checklist that ensures successful integration.

**Chapter 4**: Finally, Chapter 4 includes three case studies, one of which is Sallie Mae-USA Group. This case helps us understand how an effective IT integration goes a long way to define the merger success. The second case study of HP-Compaq analyses an IT integration fiasco, and the third case study, Oracle-Sun merger provides an analysis of IT product integration between the two software giants. The author has derived information from
the cases, and applied to emphasize the importance of the proposed framework.

Chapter 4: To wrap up, conclusions are drawn from the Thesis and key points are summarized from the research.

The purpose of this research is to answer the following questions.

1. *Why is IT integration crucial to Merger & Acquisition success?*

   *This is explained through the literature review in chapter 2 and the case studies, Sallie Mae-USA group and HP-Compaq.*

2. *How to develop an applicable IT strategy for the post merger integration (PMI), which meets the business needs & M&A goals of the company?*

   *The IT strategy applicable to the organization is developed through the generic IT strategies, Merger & Acquisition (M&A) strategies, and aligning the two in chapter 2.*

After the development of the IT strategy, the thesis proposes a Framework for IT integration from the research, which can help with the smooth transition of the organizations. To support the framework, a checklist of all the questions to be answered for a successful M&A is suggested.
CHAPTER 1: INTRODUCTION

MERGERS AND ACQUISITIONS

Mergers and Acquisitions are increasingly frequent events in today’s business practices due to the continuous churn in businesses and the need for growth, efficiency and market capturing. In recent times, there have been numerous examples of success and failures of mergers, and many giant companies like Google, Oracle, and Microsoft indulge in the practice of buyouts. Merger and Acquisition throughout the thesis is termed as M&A. The terms’ IT (Information Technology) and IS (Information System) are used interchangeably.

BASICS OF M&A

The terms’ merger and acquisition are often used interchangeably as though they are synonymous. However, these terms mean different things. A technical definition of the terms from David.L.Scott in Wall Street Words: An A to Z Guide to Investment Terms for Today’s investors is as follows:

Merger: A combination of two or more companies in which assets and liabilities of the selling firm(s) are absorbed by the buying firm. Although the buying firm may be a considerably a different
organization after the merger, it retains its original identity. The merger of equals between XM and Sirius to form Sirius XM is an example.

**Acquisition:** The purchase of an asset such as plant, a division or an entire company. For example, Oracles’ acquisition of Sun Microsystems was a significant technology transaction in 2010 (Sherman 2010).

The distinction between the two terms truly does not matter for the purposes of this Thesis since the net result of the two companies coalescing together remains the same and that the two companies will be operated under the same roof.

**WHY MERGERS AND ACQUISITION HAPPEN?**

There are various factors in the prevalence of mergers and acquisition. Most prominent factors for the M&A, and the motivation behind those theories are listed below in Table 1.

Table 1: M&A causes (DePamphilis 2010)

<table>
<thead>
<tr>
<th>Theory</th>
<th>Motivation</th>
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<tbody>
<tr>
<td>Diversification</td>
<td>Diversifying or positioning the company into new products and new markets.</td>
</tr>
<tr>
<td>Strategic Realignment</td>
<td>Acquiring capabilities through</td>
</tr>
</tbody>
</table>
Table 1: M&A causes continued

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<th></th>
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<tbody>
<tr>
<td>regulation of technological advances.</td>
<td></td>
</tr>
<tr>
<td>Operating synergy</td>
<td>Economies of scale and scope can help improve operating efficiency.</td>
</tr>
<tr>
<td>Buying undervalued assets</td>
<td>Buying assets cheaply based on Q-ratio.</td>
</tr>
<tr>
<td>Tax Benefits</td>
<td>Tax gains through lower performing companies.</td>
</tr>
</tbody>
</table>

As explained by (DePamphilis 2010) the definitions are elaborated below.

**Diversification**: Acquiring companies that are not related to the primary line of business is called diversification. Highly diversified firms like General Electric are called conglomerates. Diversification helps create financial synergy and shifts the current product lines into higher growth markets. Companies facing slower growth in existing markets can accelerate growth by diversifying into new markets. 3M and GE are the examples of highly diversified firms with a wide range of products.

**Synergy**: It is a notion, that the merged parts of the corporation create more economic value than if operated separately. There are two types of synergy operating and financial.
• Operating Synergy comprises of economies of scale and economies of scope. An economy of scale refers to the cost advantage i.e. spreading fixed costs over increased production levels obtained by a business during M&A or business expansion. Economy of scope refers to combine multiple product lines in one firm than producing in different firms e.g. Procter and Gamble, the consumer products giant, uses its highly regarded consumer marketing skills to sell full range of Personal care and pharmaceutical products under the same brand (DePamphilis 2010). Thus in economy of scope, a firm is applying specific set of skills or assets to produce or sell multiple products to generate more revenue (DePamphilis 2010).

• Financial Synergy refers to impact of M&A on the cost of capital on acquired or newly formed firm. Cost of capital is the minimum return required by investors to buy stocks of the firm.

Strategic Realignment: During M&A, a company can rapidly make changes to its environment. Changes to the organization can be from many sources or many ways, but strategic realignment theory considers regulatory change
and technological innovation, e.g. The banking sector has seen a sharp increase in mergers and acquisition due to regulatory changes.

“They have created a culture of acquisition instead of innovation. It is a lot easier just to write big checks than it is to innovate.” ~ Marc Benioff (Quotes)

With technological innovation companies can create new products and industries. It is not always feasible for a corporation to invest resources in technological innovation, hence mergers and acquisitions can be an easy way to acquire modern technology and fill the gaps in their product range.

Buying Undervalued Assets: Companies interested in expansion can invest in new equipment or plants by acquiring companies with undervalued assets. The Q-ratio determines this M&A decision. The Q-ratio is the market value of the acquiring company’s stock to the replacement cost of its assets.

\[
Q\text{-Ratio} = \frac{\text{Total Market Value of the Firm}}{\text{Total Asset Value}}
\]

Company A that is looking for expansion can acquire Company B, if its market value is less than what it would require to replace the assets i.e. Q-ratio < 1.
Tax Benefits: Mergers and Acquisitions can generate tax gains for the acquiring firms. “Tax benefits such as loss carry forwards, and investment tax credit can be used to offset the taxable income of the firms, combining through M&A” (DePamphilis 2010, p: 11). The taxable nature of a transaction can play an important role in the deal negotiation (Ayers et.al 2003).

The parameters explained above are most commonly studied; however, there are certain factors that lead to M&A but do not add value for shareholders. They are as follows:

Hubris: Overoptimistic valuation of the expected synergies of the target firm by the manager. The desire of management not to lose the deal can actually turn into the winner’s curse, if the acquiring firm pays too much for the target firm.

Managerialism: Increasing the empire through M&A gives more power and pay to managers.

PROCESS OF MERGER AND ACQUISITION

For both buyer and the seller, the M&A process is an exciting and stressful experience (Paulson, Ed 2001). The process is full of uncertainties, different personalities and risks (Paulson, Ed 2001). And this time-consuming and
lengthy process should be approached with a thorough study. Failure to study & plan can affect the whole process from negotiating the deal through the integration phase. There is also the possibility that the parties lose interest in the Merger if it is not handled professionally, and in the interest of both the buyer and the seller.

(DePamphilis 2010) & (DePamphilis 2009) describe the process of Merger and Acquisition in great detail. The process has been summarized in Table 2. The acquisition process, as explained by (DePamphilis 2009) can be separated into the planning stage and the implementation stage. The M&A planning stage consists of the development of Business and acquisition plans (DePamphilis 2009). The implementation stage includes the search, screen, contact the target, negotiating the deal, merger integration planning, closing the deal, post merger integration and evaluation/analysis of the merger processes (DePamphilis 2009). The acquisition process can be thought of as a series of independent events, resulting in transferring the ownership from the seller to the buyer. In theory, thinking of the process as discrete events facilitates communication and understanding of the numerous activities required to complete the transaction (DePamphilis 2009). Table 2 shows the Process of Merger and Acquisition and 10 Phases to complete the process.
The Phases are further categorized into two sets of activities Pre-Merger, i.e. pre-purchase and Post-Merger, i.e. post-purchase activities (DePamphilis 2009).

Table 2 – Process of Merger and Acquisition (DePamphilis 2009)

<table>
<thead>
<tr>
<th>Pre-Merger Process</th>
<th>Phase 1: Business Plan</th>
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<tbody>
<tr>
<td></td>
<td>Phase 2: Acquisition Plan</td>
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<td></td>
<td>Phase 3: Search</td>
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<td></td>
<td>Phase 4: Screen</td>
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<td></td>
<td>Phase 5: First Contact</td>
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<td></td>
<td>Phase 6: Negotiation</td>
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<tr>
<td>Post Merger Process</td>
<td>Phase 7: Integration Plan</td>
</tr>
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<td></td>
<td>Phase 8: Closing</td>
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<td></td>
<td>Phase 9: Integration</td>
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<td>Phase 10: Evaluation</td>
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</table>

The Pre-Merger process involves first assessing one’s own business situation. Development of the business plan, and a roadmap for the company are essential factors to decide if the path of acquisition should be approached at all. To develop a business plan analyzing the company internally and externally i.e. SWOT analysis, is crucial (DePamphilis 2010). Based on the external analysis, the mission statement and the vision of the company are articulated to clarify where, how and what markets the company needs to
penetrate and compete. Objectives for this mission statement are set so that the company selects a business strategy to achieve the company goals.

Analysis and developing business strategy might be time consuming initially, but it gives a vision and growth roadmap to the company. If the company decides on M&A, a well-designed plan will help to evaluate the M&A prospects with confidence. The firm can try to achieve the strategic goal through its own processes or opt for merger and acquisition.

When the company decides on M&A, the search for the potential candidate is commenced. Computerized databases and directory services such as Dun and Bradstreet’s Million Dollar database, Disclosure, Standards and Poor’s Corporate Register or Thomas Financials register, are some of the tools that can give best data (Sherman 2010). With the internet search giants like Google Finance, Yahoo Finance or EDGAR, the fishing for the target is much easier, and the data can be obtained more easily than in earlier days. Advertisement regarding the acquisition plan can be made through The Wall Street Journal or trade press, if security regarding the acquisition is not an issue. There can be thousands of potential targets for acquisition, but building screen criteria before searching and screening is essential in the process to filter the targets (Depamphilis 2010).
Once the target is identified, Phase 5 i.e. initiation of contact, comes into the picture. The initiation of contact with the target firm depends on factors like the size of the company, whether the company is privately or publicly held and the time of the acquirer for the completion of the merger. If time permits, it is useful to develop personal relationships with the target firm, especially, if it is held privately. Such a rapport can help acquire a firm that is not thought to be for sale (Sherman 2010). If time is critical, and does not permit developing a rapport, then there are other formal ways to approach the firm. For small companies having less than $25 million in sales, a direct contact can be made through a formally worded letter expressing interest in the acquisition and market alliance (DePamphilis 2010). There should be a follow-up phone call, and preparation should be done to explain to the target the advantages of the proposed merger or alliance. For medium (sales $25 to $100 million) and large-size firms an intermediary should be used to make contacts at the highest levels in the target organization. Intermediaries can be a member of the board of directors or legal counsel, accounting firm or investment bankers (DePamphilis 2010). It is crucial to maintain a high quality of secrecy surrounding an acquisition proposal since even a rumor of a change in the firm can change the market position of the target firm, and
can have an impact on the stock values. Not to mention it can strike a panic button between suppliers and employees, and help competitors to fan on these rumors and shift the customer base to its advantage. The preliminary documents required during this first contact are (DePamhilis 2010):

1. Confidentiality agreement about the data shared by the target firm and about the financial information of the buyer’s firm. This exchange of data facilitates the buyer and seller to assess the credibility of one another.

2. Term Sheet outlines the terms with the seller about what is being acquired, the purchase price and a no-shop agreement, to refrain the seller from disclosing the deal data to other potential buyers. This term sheet is usually 2-3 pages long and can be used as a basis for a Letter of Intent.

3. Letter of Intent (LOI) –This letter helps in defining the terms of the agreement early in the process. It defines the reason for the acquisition agreement and key terms, and conditions and fees of the transaction. The LOI provides a snapshot of the whole acquisition proposal to both parties involved in the transaction.
On completion of the contact phase, the companies go through the negotiation process. This is the most complex process during the course of acquisition, and the make or break of the deal is decided in this phase. It comprises of four iterative overlapping processes. One is preliminary valuation that provides a base for negotiation of purchase and sale agreement. Due diligence is another process, that enables a buyer to understand the nature of liabilities (Sherman 2010). Deal structuring helps meet the needs of both the parties, considering the risks and rewards by constructing appropriate compensation, legal, tax and accounting structures. Fourth consideration is developing a financing plan so that the buyer defines the maximum amount the buyer can expect to finance to take over the target company (DePamphilis 2010). If there are any deal breakers, they should be considered as the highest priority in this process. After the successful completion of negotiation and merger transaction, the next challenging is to integrate the two firms, and make them perform inline. It is, however, beneficial to go through the integration planning phase.

The integration planning process involves identifying the entities like assets, processes and other resources that can help to achieve the goals of the acquisition. This also involves addressing the human resource, customer and
supplier issues due to change of ownership. The buyer should be well aware of the issues like ownership of securities, pending debts, pending lawsuits, real and intellectual property, inventory, worker compensation and accounting practices. As perceived commonly, integration is not the end of M&A. There is a closing phase which involves all necessary shareholders, regulatory and third party consents (DePamphilis 2010). Completion of contracts and agreement, allocation of price and payment mechanism, assumption of liabilities, merger agreement, closing conditions and documents, are all the responsibilities of the closing phase before any Merger and Acquisition can be considered complete.
CHAPTER 2: POST MERGER

“Successful post-merger integration is the key to generating sustainable added value for companies. Every merger is unique and requires a customized solution.” (Guy Carpenter, Oliver Wyman 2008).

After all the transactions of the merger are complete, the only agenda for the buyer firm is to integrate both the firms to reach the goal of the merger. The category into which the acquirer falls greatly influences the pace and the depth of the integration, e.g. the financial buyers, who buy the business for the eventual resale, tend not to integrate heavily whereas strategic buyers, who want to make a profit from by managing the acquired business, usually run the business as subsidiary or integrate completely (DePamphilis 2010). The integration activity is done post-merger and is weightily dependent on the integration-planning phase described in Chapter 1. This activity is called Post-Merger Integration. A smooth post-merger integration ultimately defines the success of the Merger and Acquisition that was carried out by the buyer to achieve its goals.

IMPORTANCE OF POST-MERGER INTEGRATION

According to a BusinessWeek survey about 40% of merger-seasoned professionals in the U.S.A blamed the Post-Merger Integration (PMI)
process for the failure of M&A (Guy Carpenter, Oliver Wyman. 2008). The success of M&A not only depends on negotiations and purchase price but also on generating expected synergies and the desired results out of the merger. One example of the merger failure during the Post Merger Integration (PMI) process is DaimlerChrysler AG. The two companies, Germany based Daimler-Benz and the American car maker Chrysler Corporation, that seemed similar at first failed due to the organizational and cultural misfit (Mirvis, Marks 1998) unearthed during the PMI process. (Julia et.al. 2010) explains in the “Clash of culture” section that the two companies were too different to be integrated successfully. They differed in the fundamental values and morals that came to light in the day-to-day work (Julia et.al. 2010), approach towards decision-making and working methods. Germans could not understand the flat hierarchical organization structure at Chrysler and the compensation structure rooted in the culture. American executives received more generous pay than their German counterparts (Julia et.al 2010). All the issues were uncovered during the PMI. The company lost focus on strengths and failed to apply mitigation strategies for the PMI process (Julia et.al 2010). Every merger is unique, and desired merger results can only be generated through focus and a systematic tailored
approach to the Post Merger Integration process. Only a well-structured PMI process can ensure that the expected synergies are realized, and the two companies become one (Guy Carpenter, Oliver Wyman. 2008).

**PMI PROCESS**

Every organization is different and has its own culture, organizational structure, information systems, strategies etc. making PMI one of the most difficult processes within the M&A (Matt Evans 2000). This requires extensive planning and cooperation from the entire organization.

Post-merger can take place at three levels (Matt Evans 2000):

1. **Full Merger**: All functional units like operations, finance, marketing, sales, human resource and IT merge into one-company and use best practices of both of the two original companies.

2. **Moderate Merger**: Only minimal functions like production are merged together. All strategic decisions are centralized while the day-to-day decision will remain with the two firms.

3. **Minimal Merger**: Only selected services are merged while strategic decisions and daily decisions are autonomous maintaining each firm's own identity.
There are six key activities involved in the integration of the two firms, and they fall loosely in the following sequence, planning the pre-merger integration, resolving communication issues, forming the new organization, developing staffing plans, integrating functions and departments and building a corporate culture (DePamphilis 2010).

**Premerger integration planning** – The integration process starts as soon as the M&A for a certain firm is announced. It is crucial to involve the integration manager early in the process of the integration. Pre-merger integration planning helps the buyer to estimate appropriate closing conditions and refine valuation. The post-merger integration team should be in place before the deal closing.

**Communication Plan** - It is necessary for the acquiring organization to develop a communication plan to convey the message to the appropriate key stakeholders, employees, suppliers, investors and media.

**Organization Structure** – The PMI process includes forming an organization structure. The combined firm’s owners or leaders should build the best possible management team to achieve the business needs of the companies. There are various organizational structures, and the right structure is an
evolving one but a centralized structure makes the post-merger integration much easier.

**Staffing Plans** – Staffing plans must be developed early in the integration process. This helps identify the key personnel from both the firms, required for the merged functions. A well-developed plan helps retain employees with key skills and talents, and avoids a brain drain during the merger. Compensation can also be defined during this stage.

**New corporate culture** – It is entirely possible that the two merging companies can have different corporate culture. It is essential to identify the cultural differences between the two firms through cultural profiling and overcome the differences to form a brand new corporate culture for the merging entities.

**Functional Integration** – This is the execution stage, and here management should decide the extent to which the two firms should be merged e.g. full, moderate or minimal merger as described in the above. The areas of focus can be Information technology (IT) integration, R&D, manufacturing, sales, etc. For the purpose of the thesis; we will mostly focus on the Post merger IT integration. IT is vital to businesses today and interacts internally and externally for businesses (Giga Information Group 1999). Hence it is
imperative that the IT should be well integrated, and be functional to cater to the newly formed organization.

**KEY TO MERGER SUCCESS – IT INTEGRATION**

An in-depth study by Accenture “Keys to the Kingdom: How an Integrated IT capability can increase your odds of M&A success” (Accenture 2002) shows that 75% of executive managers underestimated the role of IT in merger success. According to the same Accenture study and in the words of Gary Curtis, global head of Accenture’s Strategic information Technology Effectiveness Practice “about half of M&As either fail outright or else fall well short of the value they’re expected to bring because when viewed unilaterally, IT integration can wind up crippling rather than enabling the new organization. Without adequate integration, processes become disconnected, redundancies arise; merged companies inherit the liabilities of the larger organization and the business applications are isolated. There are numerous examples in the business press where combining the IT affects the financial outcome of M&A. Lloyds and TSB were incapable to integrate their back-office system, resulting in bank tellers unable to access the common banking services and in synergies not met (Bill Goodwin, 2000). In 1996, U.S railroads Union Pacific and Southern Pacific merged, and the
approach was to gradually migrate Southern Pacific’s outdated IS to that of Union Pacific. This resulted in redundant parallel processing for more than a year, causing service disruptions and discomfort to the customers. The integration problem was estimated to be $2 billion (Oxford University Press). On the other hand, Sallie Mae’s acquisition of USA group was extremely successful, since this organization was keenly aware of the importance of IT for its operations (Brown et al. 2003). Today’s businesses are entirely dependent upon various forms of enterprise information systems. IT infrastructure and its integration in M&A, is thus, key to merger success.

With so much dependent on technology, a clear focus on IT is required.

**ROLE OF IT IN POST-MERGER INTEGRATION**

IT is usually perceived as a mechanism to achieve merger goals like cost reduction, and revenue enhancement. IT should ensure that the lights of the business must always be ON even during the merger proceedings. Poorly implemented IT integration can have a significant impact upon the operations and negative impact on the customers during the merger. Some roles that IT tries to fulfill are short-term roles and finished once integration is completed, while some roles are long term. The roles mentioned below ensure effective and successful integration.
1. Creating standard processes to unify the business units involved in M&A (Kearney 2010).

2. Integration of businesses – Most mergers depend on IT support to function and achieve connectivity between its assets, people and shared services. The focus on this role is strong since several challenges are faced while integrating businesses. Volume of work, application consolidation, roadmap, and resources are some of the challenges. Some applications need to be available from Day1 into the merger with uninterrupted customer service and hence prioritizing to ensure that highly tactical and strategic projects are taken up first (Kearney 2010).

3. IT cost savings – The cost savings can be achieved through consolidation of systems and in two ways, i.e. near term and long term (Kearney 2010). Consolidation of datacenter resources or IT vendors or assets can provide immediate, near term savings whereas consolidating business units into a single enterprise resource provides for long-term savings.

4. Continuity of operations and capabilities – Merging two entities on paper does not necessarily mean that they would function
smoothly. Entities might differ in a lot of aspects like organizational structure, processes, applications, systems and services despite these circumstances, there should not be any degradation in service and capabilities should be developed to ensure the quality of service.

5. Achieve a more aligned information system planning and generate more benefits from IT (Robbins & Stylianou 1999).
Figure 1 shows the role of IT in post-merger integration discussed above, in a more structured way.

**Fig. 1 Role of IT in post-merger integration (Kearney 2010)**

**IT Integration Strategy and Alignment**

One of the pre-merger activities is to develop an IT integration strategy. Deciding on how to integrate IT in a merger requires a view that includes strategic, organizational and IT characteristics (Wij et al. 2006). There may not be any stated scientific guidelines for the integration strategy, but the
strategy can be developed based on M&A strategy that is identified during the contract of the merger. And this strategy can be aligned to the business objective or the operation model of the acquired organization. To develop IT integration strategy, certain questions need to be answered (Wij et.al 2006).

- What is the M&A strategy adopted by the company during merger?
- What is the requirement of this M&A strategy to be fulfilled by IT strategy?
- What are the kinds of IT integration approaches feasible?
- What approach best aligns with the business objective or M&A strategy?

**M&A STRATEGIES**

M&A strategy is derived through the business objective. Brown and Renwick (Brown et al. 1996) categorized the M&A strategies as horizontal integration, vertical integration, concentric and conglomerate.

**Horizontal or Market extension merger**: Two companies merging together that sell same products to different markets, i.e. market expansion.

**Vertical merger**: Customer and company or a supplier and a company merging together.
**Concentric:** Merger can be defined as no sharing of common market by the acquiring firm that has related products.

**Conglomerate:** Two businesses merging together that have no related products or business ties.

Table 3 below summarizes the topologies of M&A. However, these M&A strategies do not clearly define the requirements for IT integration. To understand the expectations of the IT integration it is important to understand the requirements of different business operating models. Ross and Weill defined the operating models as Diversification, Unification, Coordination, and Replication and explained the key IT capabilities required by each model (Ross, Weill 2006). Operating models and their key IT capabilities are summarized below.

**Diversification:** It operates as independent business units with different expertise and customer base. The level of integration required in diversification is also low. The key IT capability is to provide economies of scale without limiting the independence.

**Unification:** This model is a single business with global process and global data access (Ross, Weill 2006). It requires high business standardization and highly integrated systems. The key IT capability is that the enterprise
systems streamline operation and reinforce standard process and global data access.

**Coordination:** Coordinated business models are unique businesses but with a need to know each other’s transactions and the key IT capability requires access to shared data through standard technology interfaces (Ross, Weill 2006).

**Replication:** It is the replication of business, i.e. independent but similar business units, e.g. franchisees. It may require high process standardization but low integration. The key IT capability demands providing standard infrastructure and application components for global efficiencies (Ross, Weill 2006). Table 3 aligns the operating model with type of M&A and explores the IT requirements for each.

Table 3 – M&A strategies aligned with Business operating model (Ross Weill 2006)

<table>
<thead>
<tr>
<th>M&amp;A strategies</th>
<th>Business operating model</th>
<th>IT System</th>
<th>IT requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal or market extension merger</td>
<td>Unification</td>
<td>Common</td>
<td>• Fully integrated company</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Real time information exchange</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Standardized processes and consolidation</td>
</tr>
</tbody>
</table>
Table 3 – M&A strategies aligned with Business operating model continued

<table>
<thead>
<tr>
<th>Coordination</th>
<th>Replication</th>
</tr>
</thead>
</table>
| • Customer information sharing  
  • Centralized management | • Low integration  
  • Autonomous business units  
  • Centralized process design & decentralized implementation |

<table>
<thead>
<tr>
<th>Vertical Coordination</th>
<th>Few Interconnected Unification</th>
</tr>
</thead>
</table>
| • High integration and information  
  • Exchange | • High Integration  
  • Real time information exchange  
  • Cost savings through consolidation |

<table>
<thead>
<tr>
<th>Concentric Coordination</th>
<th>Common Unification</th>
</tr>
</thead>
</table>
| • Autonomous business units  
  • Low information exchange  
  • Shared infrastructure  
  • Independent transactions | • Sharing of customer information  
  • High Integration |

<table>
<thead>
<tr>
<th>Conglomerate Diversification</th>
<th>Different</th>
</tr>
</thead>
</table>
| • Very little business info sharing  
  • Autonomous business units  
  • Businesses tied together with common financial funding |
IT STRATEGIES

Like M&A strategies, there are IT strategies or choice of IT systems during merger. (Wir et al. 2004) outlines four different strategies.

Take-over or Winner: One company’s IT system takes over in its entirety. Usually the best system wins.

Best of Breed: This takes the best part of each system and combines them through e.g. Service-oriented architecture (SOA), and forms a new integrated system. SOA is an evolution of distributed computing (JavaWorld 2005). An application’s business logic or individual functions are modularized and presented as services for consumer applications (JavaWorld 2005). The services are loosely coupled to provide ease for the system integration.

Disconnection: Maintain both models with no integration trouble but synchronized data.

New system: Build altogether a new system discarding the systems of both organizations.

Some other strategies like outsourcing or sharing critical information or high-level information aggregation are also possible. The IT strategy is limited by the goals associated with the merger, as well other factors: such
as the complexity of the existing systems, and the physical or geographical distribution between the organizations (WIR et. al.2004). In practice merging partners can mix these strategies and hence closely aligning them with M&A strategies is all the more important (WIR et. al.2004). The Next section helps this alignment.

ALIGNMENT

(Accenture 2002) states that 71% of executives involved in successful merger have a clear IT vision. This indicates the importance of clear IT vision for the future IT capabilities (Menge 2005). This vision, aligned with general M&A strategies and vision, reaps greater benefits. Alignment can be achieved through the combination of M&A strategies and IT strategies as shown in Table 4. A conglomerate that demands diversification require low integration and hence the IT strategy can be disconnected, and IT systems of both the companies can be maintained, whereas, market extension merger that demands the Unification business model, can develop a new enterprise system or employ the Winner IT strategy.

Table 4: Alignment (Ross, Weill 2006)

<table>
<thead>
<tr>
<th>M&amp;A strategies</th>
<th>Business operating model</th>
<th>IT Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal or market extension</td>
<td>Unification</td>
<td>• Develop new enterprise system</td>
</tr>
</tbody>
</table>
IT strategy for the integration is closely associated with the goals of the merger and the business model. Alignment Table 4 shows that the companies can mix these strategies to suit the business model and the level of integration. Developing an IT strategy for a merger is the first step toward the post-merger IT integration. In the next chapter we introduce the framework to carry out the subsequent steps of the IT integration.
CHAPTER 3: FRAMEWORK

The literature section gave us an overview of post-merger integration process and the role of IT in it. Most importantly we learned how to develop and align IT strategy to satisfy business and merger goals. Now, the next step into the IT integration is to develop an IT integration framework. This chapter proposes a framework, developed by the author through the course of this Thesis.

FRAMEWORK FOR POST-MERGER IT INTEGRATION

In the past, companies have highly underestimated the power of Information systems and the challenges faced during their integration. Accenture study shows that it is vital to involve IT early on in the merger process to plan the integration and uncover the risks (Accenture 2002). The two merging entities should help each other understand the full breadth of data and process, which needs to be up and running post-merger to ensure uninterrupted customer service. Every merger-consulting firm employs its own parameters to help with the M&A. There is no stated or theoretical process. This thesis proposes a framework for IT integration for the merging companies taking into consideration the process from planning through implementation. Figure 2 shows the framework proposed by the author in
terms of six practices to be followed for the IT integration. The framework touch bases on each issue of the IT integration from preparing an IT roadmap to planning and addressing the cultural issues after integration. The practices suggested are explained in detail below.

Figure 2: Proposed IT integration framework

**Practice I** – Prepare an IT roadmap.

An old saying “Those who fail to plan, plan to fail” is applicable to IT integration. A well-developed plan can significantly increase the likelihood
of successful integration within the desired time frame (Deloitte 2008). Developing an IT roadmap is thus a critical initiative for overall integration effectiveness (Deloitte 2008). An IT roadmap is a well-structured plan for the integration of the merger. It lays down clear goals, specific strategies, critical events, dependencies, detailed approach and methodologies to achieve goals, and lists resources and time frame for each goal.

Research by Accenture shows, 71% of the deals that were successful said that they had a vision of the future IT capability in place (Accenture 2002). The IT roadmap is a vision that gives a “big picture” overview of each stage of integration (Deloitte 2008). A few points of how IT roadmap can be of help are elaborated below.

- The destination for the integration is envisioned, and people, although following different paths, will work towards the same goal.
- Usually the mismatch happens between the Business and Technology implementation groups. It helps coordination between the business folks and the IT strategy and implementation group.
• It brings people back on track, when deflected and serves as a reminder throughout the integration.

• Finished IT roadmap can serve as a reusable tool for future reference.

The IT vision needs to be a clear goal for substantial planning. Circumstantially it is needed that this vision is refreshed and revisited and communicated across the company. The IT strategy discussed in the section above helps in laying this roadmap.

**Practice II – Involve IT early on in M&A process.**

IT integration is one of the major factors for the success of the merger (Accenture 2002). Involving IT early in the M&A process gives a different perspective to the deal. It helps uncover the potential risks that can lead to unexpected expenditures and delays in integration. This in turn can affect the merger valuation. At this stage once the IT strategy is decided, IT needs to go through a rigorous assessment to determine the technologies to be used, technology consolidation or conversion, network integration, resolve the complexity of the IT etc. Asking Right questions from the start is critical and companies should facilitate for the same. IT is one of the largest spending
areas during merger, but this can be a one-time cost if IT undergoes through planning and involvement early on in the process.

**Practice III – Due Diligence before the deal.**

IT due diligence is a way to make sure what is achieved through the merger (DePamphilis 2010). But, what is Due diligence? The due diligence is a process that involves a legal, financial and strategic review of all the seller’s documents, contractual relationships, operating history and the organization structure (Sherman 2010). In short, it is a reality test of all the factors that were found attractive to the buyer in the first place (Sherman 2010). Since the thesis is in the context of IT we also study IT due diligence.

So, what is IT due diligence? IT due diligence is synonymous with “assessment” or discovery of the company’s technology capabilities and environment (Michael 2002). To prepare for the IT due diligence, the technology leader should send the list of documents required by them for technology assessment, as soon as the Letter of Intent (LOI) is signed between the companies. Tech leaders can request hundreds of items from the seller for the assessment; some of them are listed below (Michael 2002)

- Current technology in place.
- Information about the networks, IT operations, information security
- Detailed hardware/software inventory list
- Support methods
- IT organization
- Contracts
- Software ownership, licenses, patents.
- Ongoing support costs
- Capital investment needed
- Key investment planned
- Risk and mitigation strategies
- Planned technology initiatives

After studying these documents, the buyer can schedule an onsite visit for the technology assessment. Reviewing the documents beforehand familiarizes you with the company and creates questions for the onsite visit. During the onsite visit, interview with the IT operations personnel is critical to understand the overall infrastructure. Due diligence can answer questions like whether the assets being acquired have full service capacity? Are the technologies being used supported? Are the IT systems well-designed and document for take-over? Are any hidden IT investments involved? There is a high likelihood that if due diligence is not performed companies can have unexpected surprises while integrating IT, e.g. in banking mergers a large
bank acquires a smaller bank only to discover later that the smaller bank is unable to handle a large customer base. Performing due diligence during merger would have allowed the larger bank to devise better implementation strategies.

**Practice IV – Dedicated Team for Planning, Integration and Management**
or external help.

It is imperative for a successful merger that the acquirer assigns a dedicated team to manage the IT integration. The leader should be chosen who has demonstrated ability in collaboration and is process oriented. There should be strong agreement and confidence between the leader and the CEO of the company for the merger goals. Disapproval at this juncture can cause team fallout and prove fatal to the IT integration, and hamper the overall process. Core experienced resources can be identified to form the rest of the team. This team researches the target in terms of the IT infrastructure, technologies and processes. They help in detailed planning and devise implementation strategies. Strong & savvy leadership is required in this practice to ensure success. The entire integration implementation and management can be carried out under this experienced leadership. Technical expertise is of prime importance to understand the infrastructure and technical implementation.
External consulting expertise can be used from time to time to resolve highly complex systems.

**Practice V – Detailed Integration Planning.**

PMI is a complex process, and needs effective and comprehensive planning with clear milestones and deadlines. The IT roadmap discussed in Practice I will facilitates strong planning. Listed below, are examples of the IT components that should be considered during the integration planning:

- Setting up the network
- Data centers
- Consolidating CRM systems or financial system, if applicable
- Back office systems
- Data migration
- Server
- Physical locations of infrastructure.

The planning phase should also answer some of the questions like (Accenture 2002):

- How many projects would be consolidated?
- What happens to the projects in progress and the teams working on it? How to achieve cost savings through IT integration?
• Decision, whether the redundant technology and duplicate skill set work force should be eliminated?

• What are the day one requirements?

• How many customers is the integrated application released to?

**PRACTICE VI - Address cultural change and HR issues in IT merger.**

Two distinct merging companies, bring with them, the integration of two unlike cultures and HR issues. Cultural clash is often the most significant obstacle to integration. This is illustrated by the failure of DaimlerChrysler merger, to align cultural issues during the PMI process (Julia et.al 2010). Cultural issues equally affect the IT integration just as it does the whole company. Managers are used to run the projects in certain ways and have processes that might not necessarily match with the merging company’s IT team. HR issues, like job losses, changing job roles and reporting structures, and compensation structures need to be addressed. Technology talent is in high demand and is marketable. This can result in brain drain which might not necessarily be favorable for the merger. HR has to play a key role in talent retention; building commitment, setting up two way dialogue and explaining to the teams about the projections of the company. Productivity
during IT integration can be adversely affected until common cultural grounds are built.

CHECKLIST FOR IT

A checklist should be developed while planning the stages for technical integration. The IT system elements are broadly classified into Hardware, Software, Resources and IT support as shown in figure 3.

Figure 3: IT System elements

During integration it is important to ensure that all the areas of IT systems are worked upon for seamless integration. A sample checklist is provided to support the above framework.

Before Starting:

- Has the IT roadmap and strategy been determined?
- Based on IT strategy is the consolidation plan for IT system developed?
- Does a consolidation plan have adequate time & resources for integration?
- Have test plans been developed?
- Based on the IT strategy is the contingency plan available for schedule slippage?
- Are all systems elements included in the consolidation plan?
- Has the plan for IT procurement, physical location and resources been determined?
- Is all the documentation being procured from the merging entities?
- Is the productive IT integration team formed with efficient leadership?
- Is the Risk Management plan developed?

During Integration:
- Are following details of the IT elements worked on?
  - Network Connectivity through the merged firms
  - IT Leadership team
• IT Integration of work culture
• Mainframe infrastructure if applicable
• Business application and architecture
• Data or call center facilities
• IT Processes
• IT products and services
• Licensing of products
• Office applications
• Desktop/laptop systems
• Machine setups

▪ After the consolidation, is adequate testing performed on integrated systems to ensure the success of integration and smooth functioning of integrated applications?
▪ Are the timelines and milestones being followed?
▪ Is the whole integration process documented, timely updated and maintained?
▪ Is the integration report and plan made available companywide?
▪ Are the risks uncovered and worked on and communicated to the authorities for consideration of IT funds or strategic decisions?
Answering these questions can ensure seamless integration within the timelines and help with IT cost savings.

The next chapter focuses on the analyses of the IT integration strategies used by the three case studies. In order to get a clear idea and validate the proposed framework, comparison will be made between the case studies and the framework.
CHAPTER 4: CASE STUDY

As described in the Thesis overview, we will now review two cases that emphasize the importance of IT and the proposed framework in the PMI process. The struggling merger of HP-Compaq and the success story of Salie Mae-USA Group are discussed in the following sections.

IT INTEGRATION STRUGGLE FOR HP-COMPAQ MERGER

Hewlett-Packard Company (NYSE: HWP) and Compaq Computer Corporation (NYSE: CPQ) announced the merger on September 3rd 2001 (HP Newsroom). This merger to create a global technology leader under the guidance of Carly Fiorina, chairman and chief executive officer of HP was valued at $87 billion. While announcing the merger HP envisioned the following things:

- This merger will offer businesses and consumers a complete set of IT products and services, with a commitment to serve the customers with open systems and architecture.

- The company will have #1 position in Servers, PCs and handhelds and in imaging and printing. It will also have a leading revenue position in IT services, storage and management software (HP Newsroom).
• Expected annual cost synergies will be approximately $2.5 billion (HP Newsroom).

The stock prices did not react positively to the merger announcement, HP (HP) and Compaq (CPQ) shares fell by 21.5% and 17.5% respectively (ICMR 2006). Fortune magazine said in February 2005: “The HP-Compaq merger was a big bet that did not pay off, that did not even come close to attaining what Fiorina and HP’s board said was in store. At bottom, they made a huge error in asserting that the merger of two losing computer operations, HP’s and Compaq’s, would produce a financially fit computer business”. Michael Dell, of Dell Computers called it “the dumbest deal of the decade”.

The struggling merger was attributed to various factors, but one of the reasons was, IT integration and migration of Enterprise Resource Planning (ERP) systems to the new SAP system. ERP system integrates all the departments and functions across the company into a single software system that runs off of single database system (CIO 2008). With ERP system various departments can share information and communicate effectively. HP launched its $110 million ERP consolidation project and rollout, known as iGSO, in 2002 after the acquisition of Compaq Computer Corp. (Songini
The GSO system aimed at combining about 250 systems, some 20 years old and custom written for HP and Compaq. A 350 member team started rapid deployments in 2002, installing applications such as SAP materials management while still linking them to HP legacy systems. Songini suggested that, after poorly executing the SAP’s ERP software in the server division HP also struggled with its second SAP project affecting the return of investment. The difficulties were blamed primarily on:

1. Lack of adequate internal processes and planning.

2. Aggressive schedule did not allow for mapping of business processes or the implementation of a change management system (Songini 2005).

3. Peter Ginouves of HP said that, in haste, the team lost focus on business process management and failed to carve end-to-end workflow (Songini 2005).

4. The data modeling issues between the legacy system and the SAP system prevented SAP system from processing some orders for customized products, resulting in total financial impact of $160 million (Bhagwani 2009).
5. CIO and Executive Vice President of Global Operations Gilles Bouchard didn’t think that the data modeling problems between the legacy and SAP systems was the source of the problem. He blamed HP's inability to keep pace with orders in the supply chain (Bhagwani 2009).

In 2004, it was clear that the project would take five years instead of three as decided earlier. HP decided to reassess its plans and take a new approach by driving collaboration between business users and IT, and mapping business processes thoroughly. Net process tool by IntelliCorp Inc. helped them achieve this mapping.

Findings for the Proposed IT integration Framework: This case, when referred back to the proposed IT integration framework shows that the key IT practices were missing. Point 3 above suggests that the basic practice of laying down IT roadmap was missing in which HP failed to carve end to end workflow. Points 1, 2 & 4 suggest that comprehensive integration planning was not done. Aggressive planning and implementation usually do not leave scope for detailed planning. The IT team could have uncovered the data modeling issues between legacy system and SAP system with proper integration planning thus saving $160 million in losses. Point 5 suggests that
the key leadership was unable to uncover the problem, instead, shifted the focus to an unrelated problem. In this case lack of Practices I, IV and V, proposed in the framework emerge strongly.

**Sallie Mae – USA Group IT Integration Success Story**

In June 2000, industry leaders in education finance Sallie Mae of Reston, VA and USA Group of Indianapolis, IN announced their merger (Brown et.al 2003). By the end of 2001, Sallie Mae announced that it had met its cost-saving goals and increased its share in the loan origination market by 9%, and one of the success factors was attributed to the aggressive planning and implementation of the IT integration post-merger (Brown et.al 2003).

According to Carol Brown author of award winning paper “Fast Track for Sallie Mae: A Post-Merger IT integration success story” the merger was at par with the M&A record in terms of Business metrics and IT metrics. The public goals of the Merger were clearly defined e.g. 40% cost reduction, 25% headcount reduction and achieve double-digit growth. The IT goal was to consolidate four datacenters into one. The CIO in the Sallie Mae case had clear competence in managing IT projects and a strong IT team. Below are some excerpts from the (Brown et al. 2003) that contributed to the success of Sallie Mae and USA Group merger.
1. Soon after the merger announcement critical systems were assigned to the two managers, one from Sallie Mae and other from USA group. They indulged in full disclosure and comparative analyses of the systems.

2. Change in the decision process in USA group to act more quickly e.g. detailed written justification were changed to quick bullet points, decisions were made in a single meeting instead of multiple meetings, and five-year NPV analyses were replaced with three-year analyses.

3. External merger consulting help from McKinsey and Company was procured.

4. A quick decision to consolidate data centers and move IT functions to Indianapolis instead of Reston was made through cost/benefit analysis.

5. Gap analysis was performed to determine the fate of each application mainly based on features, scalability, performance, etc.

6. Customer facing applications were given more priority than the back office applications.
7. Generous retention packages were offered on top of severance pay to encourage the most critical employees to stay until the merger was complete.

8. Knowledge transfer from Reston staff to Indianapolis staff was given high importance, in the event that if the Reston IT staff opted to leave. Sallie Mae never lost sight of the end goals. Carefully planning and executing relocation of data centers and at times adopting the go-it-alone approach, i.e. without the help of external consultants, to migrate the applications helped Sallie Mae achieve those IT goals (Brown et al. 2003). The Sallie Mae IT integration plan was considered too aggressive to succeed, but the IT groups responded with great enthusiasm, under strong leadership to achieve this speedy post-merger IT integration.

Findings for the Proposed IT integration Framework: The case of Sallie Mae and USA group aligns best with the IT integration framework that is proposed in chapter 3. Sallie Mae had the end goals always in sight (Brown et. al 2003) pointing towards the IT roadmap practice. Point 1 suggests that the IT function was involved in the process early on by assigning critical systems to the managers. This also suggests that the IT leadership was decided fairly quickly. Cost/benefit analysis and gap analysis, tells us that
the due diligence practice was followed. Point 3, where external help from McKinsey and Company was taken shows practice IV being followed. Points 7 and 8 address the cultural and HR issues described in Practice VI. Last but not the least, Sallie Mae carefully planned the integration and set the priorities for rolling out customer facing applications. This case study emphasizes, that the proposed IT integration framework can achieve integration success if followed diligently as Sallie Mae.

**ORACLE-SUN CASE ANALYSIS**

Next we move on to a case analysis of IT product integration of two IT giants, Oracle and Sun Microsystems. The merger between these two firms gives a perspective on core IT integration. The integration strategy aligns with the framework proposed by the author in Chapter 3.

**ORACLE AND SUN MICROSYSTEMS ENGINEERED TO WORK TOGETHER**

Oracle indulges in massive acquisitions. It acquired Sun Microsystems in 2010 worth $7.4 billion (Charles 2010). Since this time, Oracle's hardware and software engineers have worked side-by-side to build fully integrated systems and optimized solutions, designed to achieve performance levels that are unmatched in the industry (Oracle).
This integration process was enormous, especially with a wide range of products that Sun Microsystems had. Oracle aimed to invest in innovation by fusing the products together and also to sell the individual products. To name a few, Sun servers, Sun storage and tape, Solaris, Java, MySQL, and Sun virtual software are the products that Oracle has integrated and rebranded (Oracle).

**INTEGRATION VISION (PRACTICE I)**

"Our vision for 2010 is the same as IBM's in the 1960s," said Oracle CEO Larry Ellison (Charles 2010). He noted that, he liked the strategy that IBM integrated hardware with software to form mainframes. Oracle envisioned combining hardware/software products from Sun but also continuing to sell the products separately. During the integration, Oracle was committed to providing the following benefits to the customers of both the companies (Sun Oracle Overview 2010).

- Offering complete and integrated products that provide flexibility and choice to customers across the IT infrastructure.
- Delivering increased investment and innovation in Java.
- Delivering increased value to customers through superior and synergistic hardware and software engineering.
- Providing world-class customer support and services to the customers of both companies.

**IT Strategy**

“Our goal is to build the best of breed components, and we're going to integrate those components together" into hardware appliances (Charles 2010). The IT strategy employed by Oracle was best of breed for their product integration, and, Oracle invested about $4.3 billion in R&D spending (Oracle).

**Detailed Integration Planning (Practice V)**

Oracle and Sun is one of the biggest mergers in IT industry. Oracle carefully laid the strategic merger plan to integrate the complex product range from Sun microsystems. Oracle and former Sun executives such as John Fowler, who is now lead systems development at Oracle, pledged to continue investing in Sun technologies (Mike 2010).

The product integration was planned in a manner that could maximize the customer base and give an edge to Oracle in the competitive markets of hardware and software (Mike 2010). The plan was formulated taking into consideration, how to manage and integrate each product. Listed below are few examples.
On the hardware front, Oracle planned to roll out the next-generation Sun processors (Mike 2010). These multi—processors will be optimized to run virtual machines on sun operating systems (Mike 2010).

Technologies of the two companies were integrated to build virtualization family for SPARC and x86 systems.

Oracle aimed at improving application performance by investing heavily in flash memory and low cost disk technologies (Mike 2010).

During planning Oracle had to answer questions like:

- What are the plans for SPARC?
- What are the plans for Solaris?
- How would Sun systems that run Oracle, function performance wise? If the Sun operating systems products are adopted what happens to the Linux? (Sun Oracle Overview 2010),
- What are the plans for x86 and storage in Sun-Oracle portfolio?
- How would networking be developed?
- Most importantly, what is the plan to support open source technologies like Java and MySQL, Glassfish & NetBeans, since Sun has been supporting these open-source technologies?
• Sun Microsystems provided for Sun certification programs. Oracle was committed to support this through Oracle University.

• Oracle decided to provide training on the newly integrated products and continue the Sun open learning center to provide training on Sun’s products.

Oracle consolidated the systems in an iterative process. During the integration implementation, Oracle rebranded several products from Sun, for example, Sun Java Communication Suite became Oracle communications unified suite, Sun Java system Instant Messaging server became Oracle communications instant messaging server, Sun Glassfish server became Oracle Glassfish server. The company however, retained certain technology names that were widely popular among the open source community e.g. Java, OpenOffice, MySQL (Oracle). For business continuity, the company also put a great emphasis on customer support. The Sun products were still sold with the Sun sales services, and customers could call Sun support services and sales representatives.

**IT integration – A success or Failure**

Rob Enderle who used to run post-merger team in IBM stated in one of his articles that “the odds that the merger between Oracle and Sun will fail
exceeds the odds that it will succeed, regardless of how well Oracle does mergers” (Rob Enderle 2010).

After integration Oracle made some successful moves like (Oracle)

- Released Java 7 that has new java developer kit for open source java community
- OpenOffice was given to the Apache Foundation
- Released Oracle VM VirtualBox 4.1 as a free download
- Announced version 5.6 of MySQL.

On the other hand, there was a huge uproar from the Java community against this merger fearing the instability of technologies, and doubts about whether Oracle would continue to support Sun open source. Although Oracle continued to support open source technologies, and released a newer version of Java i.e. Java 7, which was widely considered as buggy (CNET, 2011; Java Community: java.net, 2011), competitors like IBM were successful in luring the customers.

(Rob Enderle 2010) also stated that there was inadequate due diligence performed during the integration, and the European Commission delayed the approval. Delays caused inadequate planning. All these problems resulted in
the announcement of massive layoffs including the Sun CEO. It is still early
to decide if the merger was failure or success for Oracle and Sun.

The Oracle-Sun merger case, loosely based on the proposed
framework, emphasizes that strong IT integration planning is the key to the
post-merger success. The case of HP-Compaq struggling merger provides a
lesson for the future mergers while the case study of Sallie Mae – USA group
provides an insight into a successful merger.
CHAPTER 5: CONCLUSION

Merger and Acquisition has a potential to disrupt the systems during integration and create chaos affecting every entity in the organization. Today, the information technology plays an increasingly pervasive role in the organizations; hence it is important that the IT systems are well integrated and absorbed after the merger.

The literature study in the thesis reviews the role of IT integration in the PMI process. It states the necessity to clearly define and understand the business goals that the organization is trying to achieve through the merger. With this clear picture of the goals and strategies, IT can work with business side of the organization to set priorities early in the integration. First step into this integration is the close alignment of the IT strategy to these goals to operate in a synergistic way. The strategy that satisfies the business need, and that allows for maximum resources utilization should be chosen.

Because IT is critical to the success of each merger, it is vital to consolidate the IT systems in an effective way, so as not to disrupt business operations and to allow the business to enjoy the fruits of merger. The worst of all scenarios can arise when IT is thought to be an issue only after the completion of the deal. The IT integration framework proposed by the
author in this thesis outlines the best practices to be followed during the merger process. Successful integration dictates that the IT integration is approached early in the merger process, and requires substantial due diligence pre-merger planning. The research done to develop the framework also focuses on the importance of cultural and HR issues and team work. The suggested checklist ensures that these best practices are followed and implemented. The proposed framework is compared to HP-Compaq and Sallie Mae-USA group cases. During the comparison it is found that, most of the practices suggested in the framework indeed have the influence on the cases. The other practices are either not encountered in the case study, or are not relevant. The framework is further validated with the detailed analysis of Oracle-Sun merger case.

Key points learned from the research are:

- Research the IT systems of both of the merging entities.
- Plan, Plan and Plan for IT integration ahead of time.
- IT teams are required to give their inputs right from the initiation phase of merger activity.
- A definitive approach and best practices should be followed during integration.
Due diligence before the deal and the effects of cultural change should be taken into consideration.

Best suitable IT strategy should be chosen for the business needs and maximum profits, and the integration roadmap should be built accordingly.

Planning for risk management is crucial too.

Most of all documenting every aspect of IT including hardware, software and networks infrastructure as well as the IT engineering team, can help in future mergers.

IT integration in an M&A is a significant undertaking and the success of it often hinges on a strong IT governance structure.
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