Importance of Due-Diligence in Cross Border Mergers & Acquisitions - A Case Study of High-Tech Industry

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Abstract

The Due-Diligence is a critical evaluation process to be executed prior to taking decision of merger of two companies. This process plays a very significant role in cross border mergers of high-tech companies where technical, cultural, financial, legal and business parameters govern the success of the merger. This paper studies the merger of two high-tech companies located in different countries. The source company was interested to buy the target company to leverage the technological integration of both companies thus enabling development of a new cost optimized product. The focus of this paper is to examine various aspects of business such as finance & human factors influencing the post-merger performance, then reviewing challenges faced. Suggestions have been provided for careful considerations of some of important factors during the Due-Diligence process prior to the merger in similar integration scenarios. This study is mainly focused on high-tech industry though learning from the analysis can be applied to other industries as well.

Keywords: *Cross Border, Merger & Acquisition, High-Tech, Due-Diligence*

Introduction

The rationale behind Mergers & Acquisitions (M&As) is to acquire complementary Intangible Assets, Technology, Human Resources, Business, Brand Names, etc. Traditionally, M & As are resorted to satisfy customer demands, new growth opportunities, deregulation, shareholders' pressure for enhanced results, economies of scale, critical mass and access to increased capital, etc. The cross border Mergers & Acquisitions based on the Business & Technology requirements attained a significant prominence in the last few years. In addition, Globalization & Foreign Direct Investments (FDI) enabled companies to boost cross border M & As in a wider spectrum, more specifically in the developing countries like India and China. In recent years, some important developments took place in Hardware and Software industry domains with respect to M&As.

The most recent survey on M & As indicates that many deals in the past have failed due to non-anticipation of foreseeable events, paying too much for the acquisition and not achieving the expected synergies for incompatible prevailing economic

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and cultural conditions. These issues could have been avoided or minimized by conducting a proper Due-Diligence(DD). A Due-Diligence (DD) is a program of critical analysis that companies undertake prior to M & As. The Due Diligence process, whether outsourced or executed in-house, is in essence an attempt to provide business owners with reliable and complete background information on proposed business deals so that accordingly they can make appropriate decisions. In fact, the recent drop in the premium paid for an acquisition is most likely due to improved Due Diligence.

The key areas covered by the acquirer under the Due-Diligence process are general corporate matters, financial, accounting & taxes, technology & intellectual property, product & service offerings, operations, sales & marketing, human resources & personnel and legal & regulatory system, etc. Typically, the DD process involves filling questionnaire, reviewing supporting documentation, personal discussion with various stakeholders etc. The target company should be very careful in providing the requested information to the source company since the deal is not concluded during the Due-Diligence stage. The merger driving team from the target company should gauge the seriousness of the acquirer and watch the movements of the acquirer and release the necessary information stage wise.

Literature Review

In one paper, Kang examined recent trends and drivers of cross-border Mergers and Acquisitions (M&As) which grew six-fold in 1991-98 and now account for more than 85% of FDI investment. They are prompted by a range of factors including excess capacity, increased competition in traditional industries and new market opportunities in high-technology sectors.

In another paper, Douglas indicated that the successful execution of every Merger and Acquisition would hinge on the Due- Diligence and integration processes. When two different teams constituted for above two processes often specialize and perform separately isolating the two function, it frequently results into dropped handoffs, incomplete consideration of complex issues, and loss of critical knowledge sharing opportunities. Properly aligning the two processes can help prevent such issues, strengthen the Due Diligence, and improve Integration.

From the review of various research papers on M & As, it is realized that the Due-Diligence is a very important stage prior to finalizing the merger deal.

Overview of Case Study

In this case study, two semiconductor organizations (name changed – CanSemi & IndSemi) having offices across the globe were considered. CanSemi located in Canada and involved in the system product design (SymProd) was following one set of technologies, financial & accounting systems, legal compliances, tools and workflows. The other organization IndSemi located in India was involved in the media product design (MedProd) having a different set of technologies, procedures, policies, tools and workflows. Prior to the merger, both the companies had their independent product lines targeted for some of the common customers who needed both these products into their integrated product design. CanSemi analysed products developed by IndSemi and decided to acquire the company with objectives of leveraging the technical capabilities through integration of IndSemi's technology into CanSemi products. This was aimed to optimize the overall product cost for the end customer. In addition, CanSemi wanted to expand its business portfolio in India.

When CanSemi acquired IndSemi, it appeared that the companies were following a number of common processes & tools and there were only a few apparent variation in processes and practices. After merger, the visible biggest challenges started surfacing regarding how to integrate processes, procedures, accounting practices that two companies were practicing differently prior to the merger . Added to these, cultural differences and difference in legal practices also appeared to be challenging. While integrating both companies, the merger team from the acquirer realized that the company should have conducted a proper Due-Diligence to value the target company and set expectations of how the target company team should perform after the merger. This paper captured various challenges faced by the acquirer and recommended

guidelines for the Due-Diligence process to benefit the cross border mergers of similar companies.

Objective & Scope:

The objectives of this paper are:

(i) Reviewing the post-merger performance of the acquirer company
(ii) Identifying the challenges during the merger integration process
(iii) Listing recommended guidelines to conduct a proper Due-Diligence

Review & Analysis:

As a part of the review process after the acquisition of IndSemi at the end of the year 2008, the executive team (Chairman, CEO and Board of Directors) of CanSemi organization formed a steering committee consisting of Marketing Director, Finance Director and Engineering Director on 01st December 2009. The key responsibility of the steering committee headed by the Chief Operating Officer was to collect and analyse Business & Financial data for the period 01st January 2010 to 31st December 2010. Data collected after a year of acquisition revealed that results were not at all encouraging. The company's revenues & profit margins were lower than the target. The steering committee also collected employee data during this challenging situation and understood that there was greater employee attrition. Reviewing opinions of various senior leaders in the organization, the steering committee came to the deduction that reasons for post-merger failure were lack of proper evaluation of technology, process integration and human factors prior to the merger.

Some of the key performance parameters considered for analysing the post merger situations are listed in the following table (TABLE-I). The steering committee also collected the financial statements (Refer TABLE-II and TABLE-III) for the year 2010 and observed that the actual values were disappointing compared with target values. From the Profit & Loss statement (TABLE-II), it could be seen that the cost of sales and the sales expenses were higher than the target values. Main causes for the same are - lower productivity and excess staff in operations after the merger of both the organizations. From the Balance Sheet (TABLE-III), it can be seen that the cash in bank & accounts receivable are lower than the target values and accounts payable and secured loan values are higher than the target values. This is due to higher amounts of payables to vendors. Also because additional funds are arranged through financial institutes to meet unexpected working capital requirements after the merger.

From data of these tables, the steering committee recognized that all the parameters for the year 2010 were not met mainly due to many merger challenges as described in the following section. These reports were submitted by the steering committee to the executive team on 01st January 2011. The 'Target Values' indicated in the following tables were derived by the steering committee based on company's historical sales data, financial data and market situation at the time of preparing business plan. These values represent close to benchmark values for similar organizations in the market.

TABLE - I POST-MERGER PERFORMANCE PARAMETERS OF CANSEMI ORGANIZATION (AFTER MERGING WITH INDSEMI)

Sr. No.	Description	Year 2010 Actual Values	Target Values
1	Business revenues	2 Billion US$	2.5 Billion US$
2	Profit margins	7%	9%

3	Market share	20%	30%
4	Share price	9.5 US$	12 US$
5	Key talent turnover rate	20%	15%
6	Backfill ratio of key talent	45%	60%
7	Rate of successor identified	55%	65%
8	Development cycle time	10 Weeks	8 Weeks

Note: Above data as on 31st December 2010
1) The data is collected for the period 01st Jan 2010 to 31st Dec 2010
2) The data is collected after CanSemi is acquired IndSemi in Dec 2008

TABLE - II POST-MERGER FINANCIAL PERFORMANCE OF CANSEMI PROFIT AND LOSS STATEMENT FOR THE YEAR 2010

Description	Amount in Billion US$	
	Actual 2010	Target 2010
Sales Turnover	2.00	2.50
Cost of Sales	1.50	1.25
Gross Profit / Loss	**0.50**	**1.25**
Admin Overheads	0.12	0.10
Sales Expenses	0.14	0.12
Depreciation	0.05	0.05
Operating Profit / Loss	**0.19**	**0.98**
Less Interest	0.10	0.10
Net Profit / Loss Before Tax	**0.09**	**0.88**
Taxation	0.04	0.35
Net Profit / Loss After Tax	**0.05**	**0.53**
Dividends	0.00	0.00
Retained Profit	**0.05**	**0.53**

Note: Above data as on 31st December 2010
1) The data is collected for the period 01st Jan 2010 to 31st Dec 2010
2) The data is collected after CanSemi is acquired IndSemi in Dec 2008

TABLE - III POST-MERGER FINANCIAL PERFORMANCE OF CANSEMI BALANCE SHEET FOR THE YEAR 2010

Description	Amount in Billion US$	
	Actual 2010	Target 2010
Assets		
Cash & Bank	0.40	0.50
Accounts Receivable	0.75	0.90
Fixed Assets	0.30	0.35
Other Assets	0.10	0.15
Total Assets	**1.55**	**1.90**
Liabilities		
Accounts Payable	0.75	0.65
Secured Loans	0.40	0.30
Other Liabilities	0.15	0.20
Sub-Total Liabilities	**1.30**	**1.15**
Net Worth		
Share Capital	0.12	0.12
Retained Earnings	0.08	0.10
Profit / Loss for the year	0.05	0.53
Total Net Worth	**0.25**	**0.75**
Total Liabilities	**1.55**	**1.90**

Note: Above data as on 31st December 2010
1) The data is collected for the period 01st Jan 2010 to 31st Dec 2010
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Issues & Challenges

CanSemi faced a lot of challenges during integration & just after the merger with IndSemi. This is basically due to lack of a proper Due-Diligence prior to the merger. Challenges occurred to whole range of issues such as Technology Integration, Cultural Fitment, Accounting Practices, Financial Outlook, Business Opportunities, Government Regulations, Legal Compliances and Infrastructure Limitations etc. This paper in the following section analyses some of factors to reflect why a Due Diligence prior to the merger is important.

1. *Technology Integration Challenges*: Firstly, there was no adequate technical documentation available at IndSemi to quickly integrate IP (Intellectual Property) to SOC (System on Chip) developed by

CanSemi. Secondly, CanSemi teams were spread out globally (Canada, USA, Europe and China) and it was very challenging to bring all teams to common technology platforms so that technology could be transferred to the acquired company (InSemi). Thirdly, key technical teams from CanSemi were engaged in the development of their roadmap products and had very limited or no time to focus on the integrated product proposed by the management of the combined organizations.

2. *Global Culture Fitment:* CanSemi's corporate office was located in Canada while the design centre and sales offices of the company were spread across the globe. CanSemi didn't have an office in India prior to acquiring IndSemi. Hence, CanSemi had very little or no experience to understand the business compliances, commercial and human factors in the Indian organization. CanSemi reviewed the job title of IndSemi after merger and felt that their designations were on higher side for the job specifications as per CanSemi designations. To maintain the parity of designations across the globe, CanSemi downgraded the designations of some of the staff in IndSemi to lower levels. This action was culturally not accepted by IndSemi staff and some of the key resources left the organization. This in-turn, affected the project schedules, quality and subsequently revenues and customer engagements.

3. *Stakeholder Viewpoints:* Key stakeholders of merged companies were Customers, Vendors, Partners, Investors and Employees. Some mergers failed due to differences amongst the key stakeholders both at the Source & the Target companies especially in cross border mergers of high-tech companies. In the case of IndSemi, partners of the company played the key role and most of the work executed at IndSemi was driven by good relations between the CEOs of IndSemi and partner companies. Most of tool licenses, storage equipment, employee training, financial management, infrastructure facilities were provided by partners. After the merger, these partners did not participate actively in the merged company which had an impact on projects executed from India office. This in turn impacted the business and revenues.

4. *Accounting Practices:* Companies adopt various standard packages for accounting and financial data management analyses across the globe. Some of these tools are built on the basis of domestic / local requirements for various workflows & functionalities. Here, CanSemi adopted QuickBooks while IndSemi adopted Tally as their accounting tools which are different tools of accounting. Indian team faced great deal of difficulties in transferring data from Tally to the QuickBooks and misplaced a lot of important data in transition. This scenario resulted into loss of some important information on debtors and creditors. Teams struggled to retrieve data by contacting concerned individuals or companies.

5. *Business Opportunities:* One of the primary reasons of the global companys' intent to go for cross border mergers is to leverage local market in the target company. In some cases, the target company may project a bright prospect of business growth in the domestic market though in reality it may not be completely true. IndSemi projected a huge market potential in the domestic market to CanSemi. However, after the merger, the company was struggling to achieve the expected revenue targets. IndSemi also didn't have a good brand image or contacts to quickly churn out the business with optimized efforts and costs.

6. *Expected Synergies:* The intention of any merger is to make one plus one is more than two (1+1 = 2+Synergy value). The additional expectation over the result 'two' is normally termed as the Synergy value. In this case, the expected synergy was to develop an integrated low value consumer electronic product for Indian market and make 'low price-high volume' business revenues. However, after the merger, this expectation was not met as the demand for this product was lower than the projection and the cost was also higher than the projected cost.

7. *Government Regulations:* In any cross border merger, the management should understand thoroughly the government policies, legal compliance and tax considerations. For Example, due to legal restrictions on the transit of some electronic components to India, IndSemi was unable to receive some equipments from CanSemi's global offices for testing purposes. This constraint was realized after the merger by both the companies. CanSemi tried to manage the situation by investing a

lot of efforts & money to locate similar test setup in another country from where IndSemi could get testing done with no restrictions. This process had delayed the entry into the market and subsequent loss of customers and revenues.

8. *Infrastructure Constraints:* CanSemi thought of expanding the existing facility at India after the merger and double the test infrastructure (such as servers, displays & systems etc.) to meet future business requirements. However, it is realized after merger that the generator power & mainline power is not sufficient for expansion. The cost of expanding generator power was very high and the mainline power could not be extended due to restrictions on transformer capacity in the city area. CanSemi had two options viz., relocate the office to new premises where all facilities would be available at an additional cost or to expand the facility in some other country where there were no such restrictions. CanSemi decided to relocate the office and delayed their expansion plan. This in turn, delayed new product schedules and subsequently impacted on business and revenues.

Recommended Guidelines

Based on the analysis of challenges faced by CanSemi, following guidelines are recommended for thorough Due-Diligence exercise prior to cross border mergers of high-tech companies.

(a) *Technical Evaluation:* Thorough technical assessment of the target company is very important to ensure that the existing technology is better suited to the source company without much modification. Points to be focused are: (i) Verify the availability and completeness of technical documentation of the target company with proper NDA (Non-Disclosure Agreement) signed by both companies. (ii) Evaluate present and future value addition to the end customer in terms of functionality, performance and price. (iii) Evaluate whether the target company source code can be customizable on tools and infrastructure available at the source company. (iv) Analyse the training requirements of the staff and availability of senior resource persons for imparting necessary training to have smooth integration of technologies just after the merger. The source company should keep the information confidential to avoid any breach of trust by the competitors.

(b) *Cultural & Human Factors:* Review of cultural & human aspects are very important before deciding to sign-off on cross border M & As. The culture-clash arises when the corporate culture of two organizations are not compatible. The culture-clash comes to the fore when two groups have different beliefs about decision making, the way of managing resources, strategic directions, the channel of communication, creating new businesses, the measurement of performance & priority of tasks etc. The culture-clash can lead to debates, arguments and differences among teams. The management of the source & the target companies should spend good amount of time & efforts to analyse: (i) extent of the commonalities and differences in the culture of both companies (ii) the feasible of controling or managing culture-clash if it is anticipated in advance (iii) the efforts & trainings required to bringing both teams to follow similar cultural behaviours (iv) the impact and proposed working models (without compromising on synergy effect) to minimize the risk of cultural differences.

(c) *Corporate Governance:* Having good governance model in both the companies will benefits during and after the merger. As a part of the Due-Diligence process, the source company verifies (i) whether the target company has proper organizational structure, roles, responsibilities, workflows, processes and procedures (ii) in case few processes are different, then how to enable the target company to follow the processes of the source company easily (iii) the impact of overlapping roles of senior executives. (iv) how easy or difficult it is to fit in the new company into existing source company organization and potential impact to stakeholders.

(d) *Potential Business Growth:* If the source company's intention is to have their business presence in another country, a proper market evaluation is very much required prior to the merger deal. Some of the points to be focused are: (i) the current market share of the acquirer company in the country of the target company (ii) if there is no earlier presence of the acquirer company, it is essential to know the existing competitors already in the market and their market shares (iii) it is also necessary to know the discomfort points of the customer and

whether these can be addressed by merging with the target company. (iv) The potential business opportunity in the next 3 to 5 years after the merger and whether it adds financial value to the source company.

(e) Legal & Commercial Aspects: Some of the legal and commercial practices and policies are different in the countries of the source as well as the target company. In the case of cross border mergers, the management should focus on evaluating: (i) tax considerations in the year of the merger and subsequent years just after the merger (ii) procedures for legal & necessary government approvals (iii) financial compliances (iv) creditors and Debtors management (v) loans, Securities etc. (vi) Debt Equity ratio (vii) thorough analysis of previous 3 to 5 years of financial statements & audit compliance reports (viii) any legal cases involving the firm or any key stakeholders of the firm (ix) cross border licencing issues, if any.

(f) Stakeholders Perspective: The source company should evaluate the stakeholder's viewpoints before proceeding for the merger. Some of the points to be addressed are: (i) what will be the added value to both the source and the target company of shareholders (ii) what will be the future value (next 3 to 5 years) of integrated company from technology, business & financial perspective. (iii) will there be any impact on human, social and economic parameters in the countries of the source as well as the target company (iv) continuation of good support from existing financiers, vendors, partners, customers, investors & employees on the potential merger deal.

(g) Analysis of Synergy Effect: The main objective of the merger is to increase the value of combined firms through the synergy effect. The merger will change the existing situation at both ends. Keeping in view the merger, some of the key indicators are to be evaluated viz., (i) what will be the impact on the share price and the market value (ii) what will be the market share, business revenues & margins (iii) what will be the savings in the operational costs, distribution costs & basic costs of product (iv) what will be the human resource skills & assets compared to competitors.

(h) Geographical Constraints: In the case of cross border mergers, some points need to be focused from the geographic perspective, such as: (i) geographical time differences to have common meetings and reviews across global offices. (ii) weather and infrastructure facilities for teams to visit offices across global locations. (iii) differences in ethics, work culture, behaviour, habits & language etc. (iv) availability of natural resources such as land, skilled man power, transportation, electricity, water, security & medical facilities etc.

Conclusion

The two merged organizations studied in this paper faced a lot of challenges in the beginning (just after the merger) due to lack of a proper Due-Diligence on Human, Business, Technology, Legal & Commercial aspects of the acquirer and the target companies. As a result, the merged company faced difficulties in performance management, cultural assimilation, technology transfer and over all coordination issues. All these difficulties led to underperformance of merged companies, revenue loss, non achievements of the optimum cost target and the market share. This paper provided few recommendations concerning how to conduct a proper Due-Diligence processes prior to the implementation of cross border mergers. This study is mainly focused on the high-tech industry and considered few impending factors to analyse the challenges of the merger.

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