

Limited Impact of ERP on the Indian Subsidiary Case of Osram India Limited

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Abstract

A one-phrase explanation for the impact of ERP would be Simplifying Complex Process. ERP has a significant impact right from the time it is conceived in the organization. It paves way for restructuring which would not have otherwise happened in organizations sticking to traditional and conventional values. ERP is an eye-opener for such organizations because they get to realize the fine distinction involved in modifying the business process. Organizations now disclose vital information in the public domain, which was otherwise, considered confidential and not meant for dissemination.

The OSRAM India Limited is a young and vibrant company and started its operations in India in early 1994. It is a wholly owned subsidiary of OSRAM GmbH, Germany, which in turn is a group company of Siemens AG, Germany. Within one year of OSRAM entering India, the local manufacture of Compact Fluorescent Lamps was commenced. The acquisition of ECE Lamp Division followed in October 1998. The company has two major groups of products – low end high volume GLS and FTL Lamps, and high end products for automotive and architectural applications. The current local manufacturing range comprises of slim, energy efficient Tri-Phosphor Lumilux Plus Fluorescent Lamps, a wide range of Integrated and pin-based CFL, Incandescent Lamps and Glass for FTL. Company is structured in five product divisions General Lighting, Lighting, Display, Luminaries, and Electronically Control Gear. A strategy of constant innovation is the key to success. Each year, OSRAM invests around 5 percent of turnover in research and development. OSRAM India has an e-catalogue and is in a position to supply all products listed.

OSRAM India Limited wanted a system for reduction in forecasting horizon, inventory, inter warehouse transfer and order processing cycle time, lost sales and improvement of maintenance plan.

The challenges were faced at two levels, the low-end segment and the high-end segment. The competitive dynamics in the two major segments are quite different. Low-end market was price sensitive, pushed by channel members and volume driven, while the high-end market required wide range of choice and application advice. The solution at the low end GLS and FTL segment were reengineering of the manufacturing processes and distribution supply chain, restructuring the operations to support the new processes, integration of the complete operations using SAP, integration of the distribution supply chain using web-based system. The solutions at the high end segment were reengineering the import process, defining warehousing, stocking and order fulfillment processes and creating mobile e-Office.

The complete e-transformation adopting ERP systems was done by the Siemens Information Systems Limited, by adopting ERP systems which helped to meet the global challenges faced by the Indian subsidiary. It simplified and focused business processes supporting company's strategy, tightly integrated Management Consulting and Software Development processes resulted in clear software specifications, virtually no changes in the project and a short deployment time. Online solutions provided maximum mobility to the sales team with enabling provision for sales person to execute complete sale cycle even in offline mode covering creation of quotation, creation of sales order, posting of the goods, stock status, quotation / sales order status details, query and reports.

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The benefits of ERP system for OSRAM resulted in reduction of forecasting horizon, reduction in local material procurement cycle and inventory, reduction in the down time of critical machines, reduction in inter warehouse transfer and improved stocked visibility and access to head office data. The channel member got easy ordering and transactions facility, better stock control and vastly superior service. The customers got direct access to wide range of OSRAM products and services using the new channel and the ability to engineer complete systems quickly with firm delivery.

Introduction

In the recent years the most media reference to India's growth have focused on the sub-continent as a destination for outsourcing and investment but now India has emerged as a shaping force on global market with businesses such as hospitality, retail and entertainment. Entrepreneurship displayed by Indian corporate has lead the Indian emergence as the new global player and the evolving business models to sustain global competitiveness require the global benchmarks in terms of cost, quality and service and may involves sourcing from low cost countries as well as locating plants in the most competitive regions of the world. Some innovations are required as India's economy evolves further and the rupee continues to gradually appreciate, a low cost position may not remain a sustainable proposition. Indian firms will have to innovate in terms of products, processes and customer service to retain their position. Intellectual property could be an asset is in terms of proprietary technology/ processes, brands, privileged information, unique knowledge about customers and markets etc. The research suggests that the some business solutions provided by the ERP vendors had created new options in streamlining various issues involved in the business by reengineering of the business process.

A new ethos of good corporate governance is emerging in India. Government has taken several significant steps to create congenial conditions for global competition and increasing integration with the global economy. The "India story" has seen a profound shift in gear and direction during 2006. While in recent years most media references to India's growth have focused on the sub-continent as a destination for outsourcing and investment, this year has seen the arrival of India as a shaping force on global markets. This is a trend that is being witnessed in the new-age businesses such as hospitality, retail and entertainment.

Whether it is trade, finance and banking or across industries, there is a sea change in the operating environment, in outlook, in optimism and in the mindsets. Of course, India wasn't the only country undergoing change. The whole world changed dramatically, too. Apparently, the idea of globalization is now entrenched and cuts across all political lines and most countries.

Our global success so far transcends Indians as individuals. It has been nothing short of breathtaking, in the way they have raised to the challenge of fierce global competition and limited resources. Our technological creativity is well recognized. In areas such as information technology, pharmaceuticals and auto ancillaries, we have developed formidable competencies and competitive advantages, which has helped us to gain a position of global leadership.

Indian firms need to review their traditional ways of doing business in light of the oncoming discontinuities. The future challenges and opportunities will warrant following new and evolving business models to sustain global competitiveness:

1. Global Benchmarks: The most fundamental requirement for competing with global players is to identify and achieve the relevant international benchmarks of costs, quality and service. This could involve sourcing from low cost countries as well as locating plants in the most competitive regions of the world. As capacities ramp up to achieve scale economies, the pursuit of new markets will become a natural extension to catering to a growing domestic base. Several Indian companies have traveled this path and have reached global standards: Tata Steel, Bharat Forge, Sundaram Fasteners are examples. Several software companies (e.g TCS, Wipro, Infosys) have achieved the CMM Level 5 certification for their Offshore Development Centres

2. **Innovation:** As India's economy evolves further a low cost position may not remain a sustainable proposition. Indian firms will have to innovate in terms of products, processes and customer service to retain their position. Pharmaceutical companies like Dr. Reddy's Lab and Ranbaxy are moving from being low cost generic drug producers to new drug discovery and new drug delivery systems. I-flex has developed a banking software package FLEXCUBE which has become the No. 1 selling banking solution in the world across 65 countries. The Indica/ Indigo story is yet another case in point.

3. **Intellectual Property:** The holy grail of all firms is to move up the value chain - from competing on cost to creating a portfolio of intellectual property which results in competitive advantage. This could be in terms of proprietary technology/ processes, brands, privileged information, unique knowledge about customers and markets etc. Leading companies like Samsung, LG, Sony and Toyota have evolved to reach this position. However, it has taken them several decades of consistent effort to get there.

ERP solutions for coping with radical changes

The need for cutting edge **ERP solutions** is becoming crucial in this information age. This is accentuated by the fact that even the most fundamental market philosophies are changing rapidly and radically. Market for almost all products / services has become truly global.

Another important factor that is driving the demand for ERP solutions is the changing characteristics of customers. Customers, who have become more knowledgeable of the various choices in offer, have come to expect better quality, faster delivery, highly customized products, and enhanced support services. Delivering all these to customers is getting more difficult with the consistent entry of new players in the market space, competition getting stiffer and enterprises losing their regional domination because of globalization.

Last decade has seen the organizations around the world spending a large amount of money to adopt ERP systems due to six main reasons. Firstly, companies require a common database; secondly, they want to improve and Standardize their process; thirdly, they require ongoing monitoring; fourthly, cutting down the operating cost; fifthly, improving relations with customers and suppliers and finally, improving their decision-making capability

With the help of ERP solutions, enterprises are increasingly looking at sharing relevant business process-related information with business partners. This not only allows all the partners involved to take decisions quickly and plan out actions according to the changing market compulsions, but also decreases the overall risk factor.

The enterprises with a global outlook are making a beeline for implementing cutting edge ERP solutions, which goes much beyond the focus of traditional ERP solutions. This is rendering the vast majority of the current ERP solutions obsolete from both architectural and business importance viewpoints. Therefore, there is increasing demand for both ERP II (from large enterprises) and advanced ERP solutions.

There is need for an economical transformation to an enhanced ERP solution. ERP vendors are rightly poised to help to undertake this transformation. ERP solutions, which are developed painstakingly with an experience of over a decade in the ERP solutions space, are also designed to take care of an enterprise's future technology and business process needs.

CASE OF OSRAM INDIA LIMITED

About OSRAM

On April 17, 1906 the brand name of OSRAM was entered in the Trademark Directory of the Imperial Patent Office in Berlin and now is one of the two largest lighting manufacturers in the world.

100 years of OSRAM – light has a name.

The OSRAM Company and world-famous logo were created in 1919. Today, the stylized light bulb is a symbol not only for light but also for good ideas – and for our passion for intelligent light. OSRAM has always specialized in lighting and has done an impressive amount of pioneering work in lighting, always with great enthusiasm. With numerous inventions OSRAM has been instrumental in shaping the current lighting market. Around 38,000 employees are constantly working on new lighting solutions to improve quality of life. OSRAM India started its operations in India in early 1994. It is a wholly owned subsidiary of OSRAM GmbH, Germany, which in turn is a group company of Siemens AG, Germany. Within one year of OSRAM entering India, the local manufacture of Compact Fluorescent Lamps was commenced. The acquisition of ECE Lamp Division followed in October 1998. The current local manufacturing range comprises of slim , energy efficient Tri-Phosphor Lumilux Plus Fluorescent Lamps , a wide range of Integrated and pin-based CFL , Incandescent Lamps and Glass for FTL.

The company has two major groups of products – low end high volume GLS and FTL Lamps, and high products for automotive and architectural applications. The low-end products are manufactured in a plant near Delhi and all high end products are imported from Osram factories worldwide

Innovation

A strategy of constant innovation is the key to success. Each year, OSRAM invests around 5 percent of our turnover in research and development to impress customers in 150 countries throughout the world with new lighting concepts.

Smaller, brighter and more economical products of OSRAM

One of the outstanding innovative products at the moment is the new high-power OSTAR®LED. OSTAR® lighting is currently brightest semiconductor light source with more than 300 lumen, HALOPIN® mains voltage halogen lamp the company is setting new standards in miniaturization. Small and stylish luminaries can be designed without transformers. A similar success story is MINISTAR®, the smallest halogen reflector lamp in the world. Intelligent electronic control gear from OSRAM helps save energy and resources. As the heart of lighting management systems, ECGs are taking on an increasingly important role in technical lighting planning and as architectural design elements

OSRAM PRODUCTS

Company is structured in six product divisions:

- General Lighting
- Automotive Lighting
- Display/Optic Lighting
- Luminaires
- Electronical Control Gear

OSRAM India is in a position to supply all products listed in the E-Catalogue with major focus on:

- Incandescent GLS Lamps both in screw type E 27 and B22d caps
- Low Voltage and Mains Voltage Halogen Lamps
- A wide variety of Fluorescent Lamps including the latest generation of Tri-Phosphor Lumilux Plus Lamps.
- The widest range of Compact Fluorescent Lamps, in particular, the retrofit Dulux EL which meets the Indian conditions of wide fluctuations in voltage, high ambient temperature and high humidity.
- HID Lamps including high pressure Mercury Vapour Lamps (HQL), Blended lamps (HWL), High Pressure Sodium Vapour Lamps (NAV), Metal Halide Lamps (HQI) and other high discharge lamps for special applications.
- Widest range of Automotive Lamps for 4 Wheelers, 3 Wheelers and 2 Wheelers.
- Complete range of Photo-Optic Lamps to meet the requirements of studio and stage lighting, video application, projectors, medical & surgical, scientific & industrial applications.

The Challenge

The competitive dynamics in the two major segments are quite different. Low end market is price sensitive, pushed by channel members and volume driven, while the high end market requires wide range of choice and application advice.

Osram India, therefore faced challenges on two different fronts. The challenges in the low-end GLS and FTL segment were to operate a highly efficient manufacturing plant and distribution supply chain offering inter-alia a few products with high volume, cut down costs and to build relations with and service the distribution channel members better than competitors, whereas the challenges in the high-end segment were different. There was need to evolve effective ways to import and stock a wide variety of goods required by the market and to tailor complete solutions to architects and institutional buyers through multiple choices.

The solution

It was clear that right awareness process design, tightly integrated by information technology would be the direction in which the solution lay. Siemens Information Systems Limited with its strength in Management Consulting, Business Solutions and IT services designed the solution. The solution at the low end GLS and FTL segment were reengineering of the manufacturing processes and distribution-supply chain, restructuring the operations to support the new processes, integration of the complete operations using SAP, integration of the distribution supply chain using web-based system that would let channel members conduct all transactions online and to get up-to-date relevant information at all times. The solutions at the high end segment were reengineering the import process, defining warehousing, stocking and order fulfillment processes, creating Mobile e-Office for the sales force to enable on-line configuration of the customer need and order.

E-Transformation project and the scope of the work

The project implementation by the SISL, which helped to meet the global challenges faced by the Indian subsidiary involved the following:

- Business process reengineering in manufacturing and supply chain to improve customer service, production planning and scheduling, maintenance and reduced inventory.
- Develop e-processes and Internet technologies to provide solutions for each strategic segment of the market.
- Develop a customized web-based solution for online sales (Online store and e-office)

- Enterprise wide implementation of SAP v 4.6

The scope of the work was restricted to

- Process redesign on “buy”, “sell”, “ inside” the enterprise
- E- Business Strategy for OSRAM – India’s operations to cater to retail and institutional customers.
- Implementation of SAP (ver4.6) to integrate the company operations across all units and processes.
- Customized solution development for online and offline access to SAP for executing the sales cycle.

Key features of the project

- Simplified and focused business processes supporting company’s strategy
- Tightly integrated Management, Consulting and Software Development processes resulted in clear software specifications, virtually no changes in the project and a short deployment time.
- Online solutions provided maximum mobility to the sales team with enabling provision for sales person to execute complete sale cycle even in offline mode covering creation of quotation, creation of sales order, posting of the goods, stock status, quotation / sales order status details, query and reports.
- E-office provides sales engineer with online availability information, online configuration of solution to customer requirements, online ordering of configured components.
- A customised solution was developed on web-sphere using IIS- Ver 4.0, MTS – ver 2.0, SQL Server 7.0.
- Enterprise wide resource planning on SAP R3 ver 4.6
- Access to business transactions for business partners using Internet.

Target Groups

The target groups for the projects were at two levels, OSRAM operations and management and the OSRAM sales and customers channel, which included suppliers, sales representative, customers, Osram’s distribution centre and the Osram’s Head Office

The Benefits Envisaged for OSRAM

The benefits for the OSRAM were for the following three categories

Company

- OSRAM – Forecasting horizon reduced from 1 month to 1 week leading to the reduction in forecasting errors and change in production plan
- Local material procurement cycle reduced by 50% resulting in inventory reduction of 30%.
- Improved maintenance plan reduced the down time of critical machines by 30%.
- Reductions in inter warehouse transfer by 70%.
- Improved stocked visibility and access to HO Data led to reduction of order processing cycle time and reduction in lost sales.

The channel

- Easy ordering and transactions
- Stock control
- Vastly superior service

The customers

- Direct access to wide range of OSRAM products and services using the new channel
- Ability to engineer complete systems practically, quickly and with firm delivery

Limitations faced in Indian scenario

Earlier the companies did not invest beyond a certain point because they were not made aware that the investment in ERP can only be the foundation. With the exception of the finance sector, which heavily invested in mainframe capacity, Indian industry was neither system-oriented nor process-oriented on a strictly end-to-end basis. There was no pressure to modernize IT. For example, as human resources (HR) costs are still low in India, but there is no pressure to reduce headcount in offices by introducing IT systems.

But this generic mind-set is changing fast now. Industry realizes that the companies have to invest in new processes and technologies to extend their ERP capabilities. They will go the next mile because of the good growth rates during the last few years and they hope to get returns.

Conclusion

From the foregoing, it is evident that ERP had lead to following benefits for OSRAM

- Reduction in forecasting horizon.
- Reduction in local material procurement cycle and inventory
- Reduction in the down time of critical machines.
- Reductions in inter warehouse transfer and improved stocked visibility and access to Head Office Data.
- The channel member got easy ordering and transactions facility.
- Better stock control and vastly superior service.
- The customers got direct access to wide range of OSRAM products and services using the new channel
- The ability to engineer complete systems quickly and with firm delivery.

This it is clear that ERP systems have high impact on the Indian subsidiary and helped them let to meet the global competitiveness and compliance of global Benchmarks in terms of cost, quality & service and proper handling of innovations and intellectual property.

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