PGDM (RM), Batch 2018-20

ERP for Managers

RM-501

Trimester-V, End-Term Examination, December, 2019

Time Allowed: 2Hrs. & 30Mins.

SECTION-A   (30 Marks)

Q1. . Compare and contrast MIS and an ERP system.   (10 Marks, CILO-1)

OR

Q1. Explain why "Process" approach is better than "Functional" approach. (10 Marks, CILO-1)

Q 2. What are the three important concepts of BPR? Why is BPR needed? (10 Marks, CILO-2)

OR

Q 2. Explain three tier architecture of an ERP.   (10 Marks, CILO-2)

Q 3 Explain the following: (10 Marks, CILO-3)

a) RFP and RFQ
b) Source list
c) Hedging
d) Vendor Master
e) Condition Master
f) Route Master
g) Put-away
h) What is reverse logistic
i) Three major challenges of information silos
j) Business blueprinting

OR

Q 3. (a) Explain the slotting process. Explain the ABC slotting process.   (5 Marks, CILO-3)
     (b) Explain the different value-added services that a warehouse can offer. (5 Marks, CILO-3)

KEDA'S SAP IMPLEMENTATION

Questions:

Q 1. ERP projects are expensive and risky. Why did Keda decide to embark on an ERP implementation project?

Q 2. Leadership plays a pivotal role in the success of ERP projects. Which "leadership best practices" did the Keda managers engage in?

Q 3. Are the particular strategies adopted by Keda in its ERP project generally applicable to all ERP implementations?

Q4 How were Keda's cultural characteristics leveraged in bringing about project success?

Dr. Fan Zhu, vice general manager of Keda Industrial Company Ltd. (Keda), was utterly satisfied with the outcome of the SAP project. A mere five months after forming an implementation team, Keda had successfully deployed SAP as its enterprise resource planning (ERP) solution, and the system was quickly paying for itself through more efficient inventory management. The success was all the more remarkable given that an estimated 80 per cent of ERP implementation efforts in China failed.[1] Despite the success, Zhu was uneasy. Keda had a large backlog of other information technology (IT) projects waiting in the pipeline, and Zhu wanted to carefully evaluate the SAP project to determine what had been done right, what had gone wrong and what Keda had gotten away with due to blind luck.

COMPANY OVERVIEW

Founded in 1992 by Lu Qin, with an initial capital outlay of only 90,000 Chinese yuan (CNY) (US$13,500), Keda began as a small manufacturer of ceramics machinery located in Shunde, in Guangdong province. At the time, the global ceramics machinery industry was dominated by European companies. Keda modeled its business after these market leaders and enjoyed rapid growth in the local Chinese market through the 1990s. In less than a decade, the company was recognized both as one of China's top 500 national machinery manufacturers and as a top 10 building materials machinery enterprise in the world. By the early 2000s, Keda had surpassed most of its competitors to become a world leader in building materials machinery, second only to SACMI of Italy (www.sacmi.com). Keda Industrial (stock symbol 600499:CH) became a listed company on the Shanghai Stock Exchange in 2002. In 2009 Keda reported total revenues of more than CNY1,425 million (US$209 million), almost double the amount of its 2006 revenues of CNY931 million (US$119 million).

By 2010, Keda had more than 2,000 employees and a broad product offering, spanning industrial machinery for ceramics, stone processing, building materials processing and energy resource

management. Keda also offered comprehensive plant design and technical consulting services to industrial clients. Due to the nature of Keda's products, its sales orders were typically characterized by significant customization, low volumes and high margins.

Keda's business as a whole relied on several key business functions, such as research and development (R&D), purchase of raw materials and parts, inventory management, production that comprised many assembly line and workshop processes, logistics, and sales and marketing. Each of these areas functioned autonomously, giving rise to a freewheeling corporate culture where non-standardized processes were adapted on the fly, and problems were resolved in an ad hoc manner. This high degree of autonomy and flexible culture enabled Keda to achieve its "pursuit of perfection" through "endless innovation" in the global market. Indeed, innovation had been essential to the firm's success in the market. In 1999, Keda had rolled out the first 3,200-ton pressing machine in China. In 2005, Keda had introduced three of the 10 most innovative new machinery products in the world. Perhaps more remarkable, in addition to its product innovation, was Keda's commitment to business innovation. In 2003, the company set up a Chinese national enterprise post-doctoral workstation and invited post-doctoral scholars to work on research projects on such topics as supply chain management and human resource management. Keda also invested more than CNY45 million (US$5.4 million) to set up a state-of-the-art ceramic engineering R&D testing center. Keda thus established itself not only as a leader in market share and revenue but also as a product and management innovator.

DRIVERS FOR ERP

Things, however, were not all positive. Keda's silo-based model, while encouraging decentralized decision-making and a free wheeling entrepreneurial culture, was clearly taking a toll on Keda's business performance. Disconnected business units often duplicated identical processing tasks, resulting in redundancy and heightened costs. Very little information flowed between departments; as a result, managers could not make timely, well-informed, holistic business decisions. The lack of integration prevented Keda's leaders from acting strategically. For example, when faced with a decision on whether to compete for orders for a line of polishing machines in foreign markets, Keda could not meaningfully assess cost and profitability potential — the final quote was based on a hunch.

This lack of integration was especially taxing in the face of competition from local and foreign companies that challenged Keda on many fronts. To retain its leadership position and continue growing, Keda needed to continue innovating in terms of product development, business management and operations, and it needed to be more informed about production, sales and, most importantly, customers. As Zhu put it: "In managing the enterprise, our most important task is to provide the needed information for every decision maker every step of the way in the decision making process."

An added factor was pressure from Chinese government agencies. Recent years had seen China encouraging innovation in local enterprises, in an effort to catch up with foreign firms. This encouragement took the form of campaigns with explicit incentives to promote computerization in corporations. Thus, Keda's ERP undertaking could be seen as a reaction to the government's call.

Another challenge faced by Keda and similar enterprises related to inventory management. Keda's low volumes and high customization across an increasingly diverse product line made it difficult to keep track of the many unique, individual parts. Zhu explained:

Before ERP deployment, due to the mess in material management, the cost of a product was unclear and costing was based on experience. It was not clear how much profit or loss resulted from the sale of a product, nor which part of the product or the production process contributed to that profit or loss. That made pricing our products difficult, too.

Keda struggled to meet demand. It was producing only six machine presses per month, grossly below the quantity demanded by customers. This suboptimal use of company resources represented a significant opportunity cost for the company. Production delays were common, yet resources and facilities were not being optimally utilized. Reusable materials and parts were often scrapped, and precious machine time of key facilities was often wasted, idling at times. As Zhu illustrated:

> We had a key facility for production [and] someone timed its usage over a week using a stopwatch. We were shocked when we learned that it was only in production 24.6 per cent of the time! [This usage compared with more than 90 per cent utilization by a Japanese competitor for a similar facility.]

Meanwhile, Keda's rapid growth was driving other change. For example, competition, both local and abroad, prompted Keda to diversify its business and product lines, resulting in a greatly expanded product offering. The company's single production plant mode could no longer cope with the highly diversified business lines and production functions, prompting Keda to open multiple plants in 2004. The expansion caused the company to outgrow its Manufacturing Resource Planning (MRP-II) system, which did not support multi-plant operations. Adding to the demise was the fact that the MRP-II system's vendor, Beijing Riamb Software IT Co. Ltd., had ceased maintenance support for the system due to an internal corporate restructuring. To continue successfully, Keda needed to rethink its IT, urgently.

COMPUTERIZATION AT KEDA

Keda's first attempt at computerization began in 2000. No overarching direction or roadmap was provided for IT projects. Rather, needs were addressed as they emerged. Thinking back to this time period, one member of the IT department recalled:

> There was no strategic goal. Others were doing it, so we decided to jump in as well. Since there was really no planning or even particular objectives, the IT projects were not particularly effective in solving the company's problems, and the use of the systems at that time was less than satisfactory.

Vendor withdrawal of support for the MRP-II system in 2003 did not help. At that time, Dr. Fan Zhu came on board as the new head of the IT department. Understandably, he was under tremendous pressure, faced with the dilemma of having to direct resources both to the immediate and emergent needs of the company, and to the development and execution of an overarching computerization plan. Satisfying the former needs would likely ensure smooth operation in the short term and hence ease the pressure Zhu would face from senior management. Satisfying the latter needs, however, would be more proactive in directing the future development of the company, the trade-off being disturbances to business in the short run.

Instead of addressing these and other emergent IT projects reactively, Zhu believed that success required defining clear objectives and expectations, and then constructively aligning initiatives with the company's strategic goals. Zhu explained:

Keda's goal is to be a world leader. Such a goal cannot be attained by simply increasing labor hours. It requires a well established structure and system ... including computerization as a means. Computerization is an auxiliary tool that helps [Keda] to achieve its goals and develop its business.

With this strategy in mind, Zhu decisively ordered a halt to all ongoing IT projects and refocused his employees' efforts on developing a comprehensive five-year computerization plan. This plan would address both short-term needs and long-term strategic goals to propel Keda forward. In devising the plan, Zhu relied heavily on Benjun Zhang, who eventually became the head of the IT department. According to Zhang:

When working out the plan, we focused on how much investment was needed and in what kinds of systems, what our objectives were, what hindrances the company faced, why we needed computerization, and what problems we were targeting to solve.

Such a comprehensive technology plan had many complexities. The first step was to conduct a company-wide status quo analysis. Existing problems were identified, business requirements were collected from various levels of management and a set of shared objectives was established. Objectives were then prioritized according to their urgency and how well they aligned with the company's strategic goals.

Ranked high on Keda's wish list was an integrated organization structure that would "break" departmental boundaries and replace them with streamlined data flows and integrated business processes. By imposing standardized processes and procedures, the new system would provide improved management control and information quality (e.g., availability, accuracy and timeliness).

The result of the six-month planning process was an encompassing IT blueprint that included implementation projects for enterprise resource planning (ERP), product data management (PDM), office automation (OA), manufacturing execution systems (MES), customer relationship management (CRM) and supply chain management (SCM) solutions. Each of these projects would be completed in phases. A key element of the plan was to develop a centralized, unifying, shared platform on which all of the business applications would run (see Exhibit 1).

The plan provided detailed analyses of each project, including objectives, expected investments and benefits, feasibility in terms of factors such as staffing and technology requirements, risks and alternative solutions. According to the plan, the ERP implementation project was a priority. Time was critical.

CHOOSING AN ERP VENDOR

One of the easiest decisions Zhu faced was whether to develop a customized ERP system in-house or to purchase the technology from a third-party provider. The reality was that Keda was out of time. Riamb, the vendor of the current MRP-II system, had ceased providing maintenance support, making urgent the need for a replacement system. The company generally lacked internal IT expertise, and building a large team for such development would be expensive and time-consuming. Furthermore, Keda derived its competitive advantages not from proprietary business processes but from product innovation and price competition. Although successfully implementing a packaged solution was far from guaranteed, Zhu believed that customizing an existing system would be faster, cheaper and of higher quality than building one from scratch:

Enterprises need to be clear about their core businesses and competencies. For instance, we could have developed in-house our own ERP system, but that would not be very smart. Why reinvent the wheel? We prefer renting or buying existing solutions for anything outside of our core business and competency.

Choosing a vendor, however, was not as easy a decision. Although a global vendor might be more experienced, a local vendor might be more suitable in a cultural context. A balance between risk and benefits needed to be struck. Keda contacted 20 software vendors, both local and global, including Kingdee, Lima, Tianxing and several SAP vendors. The vendors were invited to visit Keda, to be introduced to the needs of the company, to demonstrate how their software packages would satisfy those needs, to share their past experiences and to discuss other implementation issues (see Exhibit 2 for some of the main selection criteria). Zhang recalled:

> Vendor assessment was conducted as the ERP project kicked off. We invited both local and foreign software vendors to visit our company for detailed assessments. Through these visits we also aimed to let Keda's middle and top managers learn more about computerization and ERP in general.

Zhu also took a proactive role in visiting existing clients of these vendors:

> We visited their existing clients to confirm that what they'd showed us was real. In these referrals, vendors would likely put forth their most successful cases, and by comparing real production environments in the industry, we had a much better idea what suited us."

Through these visits, Zhu and Zhang gained insights about not only the vendors but also possible complications in the implementation process. These insights proved invaluable later in the implementation process because Keda could avoid the same mistakes committed by others. For example, as Zhu commented:

> After visiting several enterprises, we observed something very interesting. The only ones who seemed to be working on the ERP projects were the IT departments. They were churning out reports, workflows, etc. — activities we thought were outside the work scope of an IT department. Where were the business managers?

On the basis of these encounters, Keda short-listed nine vendors to respond to a request for proposal (RFP), which described the exact needs of the company and provided a standardized response form that would allow Keda to quickly compare vendor offerings. Vendors presented their proposals over a three-day period. Each vendor offering was rated according to strategic alignment goals. Zhu ensured that senior managers, including the director, were involved in this presentation, negotiation and selection process. Zhang explained the top management involvement:

> If senior managers would not even attend these meetings, then we knew their so-called support for the project would remain superficial and that project implementation would be difficult. On the other hand, if they were interested — and they should be given that this is a CNY10 million project! — we hoped they would raise questions during the vendor presentations and give us a feel for what they were excited about.

SAP emerged as the winner. According to Zhu, SAP's ERP solution appeared to be sophisticated and feature-rich. It would support complex operational processes across multiple production plants. As an

industry leader with more than 35 years of experience and more than 40,000 client implementations, SAP had a proven track record of successful ERP implementations. The fact that SAP had been adopted by SACMI, a major competitor of Keda and the global industry leader, was not inconsequential.

ASSEMBLING THE IMPLEMENTATION TEAM

As Zhang explained, different groups were responsible for getting the SAP system up and running:

> There were three main roles: the key users, the consultants, and the IT officers. The key users were at the core, the consultants acted as coaches, and the IT officers provided task support to users and consultants. Success or failure hinged on the key users, since they dictated the future workflow.

Because Zhu believed that ERP was about people more than technology, once the ERP solution vendor was on board, Zhu focused on assembling the rest of the project team, which was a painstaking process. In recruiting departmental representatives, Zhu made sure to involve vital representatives, such as departmental managers and essential operational staff, who possessed a comprehensive understanding of the operations and needs of the departments. His approach emphasized user involvement as a critical success factor:

> In assembling the project team, we insisted that the "top dogs" of the various departments be involved. Also, we tried to pick those who were deemed indispensable by the departments. We relied on how vehemently departments opposed to the particular person's involvement in the ERP project to judge how indispensable he was.

The more indispensible employees were to their department, the more Zhu wanted them on the team. He also made sure all members had a clear idea of their roles and responsibilities in the project.

Exhibit 3 illustrates the team composition and assignment of responsibilities. In brief, top management would provide overall project direction and make critical decisions; consulting support would be provided by personnel from Digital China; project managers would be assigned from both Keda and Digital China; departmental representatives would oversee the business process redesign and system design aspects; and the IT department would provide all necessary technical support.

Each ERP system module was assigned an owner from the associated department, who was fully responsible for the workflows and operational details of that module. These key users ensured that the system's design correctly reflected business practices, and they also played a crucial role in training users within their respective departments.

On a more tactical note, Zhu went to great lengths to ensure that the project team worked as an integral unit. He believed that a determined team effort was not only beneficial but essential for project success:

> The arrangement was for the head of each module to work together with the IT department, with the marketing manager representing the marketing department, the purchasing manager representing purchase department, etc. At one point, their computers were moved to our office, and we literally worked together.

This physical collocation of ERP team members meant that departmental managers would have time to work on their departmental tasks only after 5:00 p.m. Not surprisingly, this scheme was not popular. According to Zhu:

> There was a lot of resistance to this arrangement. Some reasoned that if they were required to work with the project team and had to be away from their offices for five months, and their departments continued to function normally, then they should probably all quit since that proved they were of no value to their departments!

Fortunately, senior management was supportive. After Zhu reported the opposition and concerns to the director, a reward system was constructed to resolve the issue. Because departmental managers had to work longer hours to keep their department afloat, they would be compensated with bonuses. On the other hand, employees who were unsupportive of project work and missed project meetings would be assigned to serve at the canteen during lunch hours for a week! Zhang explained:

> This arrangement was highly effective as no one wanted to be embarrassed! After all, this would be a senior management decision, and if anyone really got punished this way, to serve at the cafeteria for a week, his career in Keda would be all but over.

IMPLEMENTING SAP

With key decisions having been made and the team assembled, the ERP implementation project at Keda was finally underway. In many ways, the challenges had only begun.

The operations and workflow in many departments had to be modified and streamlined, and the organization structure required adjustments to accommodate the ERP system. In particular, as-is processes had to be studied, and to-be processes designed. This responsibility was given to the key users, who were tasked with writing the specific requirements for the system by describing the inputs and outputs. Keda IT specialists would then implement the requirements.

Key users were also responsible for specifying the data model. As Zhang explained:

> Data was a main issue. The sheer amount of data was one issue, and the data model was another. We had to devise a data model to support all the operations and workflow. Since operational experience was needed in this specification, we assigned this responsibility to the key users.

Much work was put into effecting these changes. For instance, as Tian, the person-in-charge of the materials management (MM) module, recalled: "Data preparation was the most difficult task. We spent a lot of time taking stock and renumbering stock codes so as to ensure data accuracy in the new system."

With major change came major disagreements, both between different module owners and between module owners and consultants. According to Tian, if discussions among departmental representatives did not result in an acceptable compromise, the matter would escalate to the project management staff who would try to balance the way users wanted to work with the way the system was designed to work. Zhang added:

> The critical issue was balance. Consensus could not be reached every time. In practice, because SAP was such a well-established system, we adopted the consultants' recommendations almost

100 per cent of the time. We were more inclined to adopt the model the system was originally designed for, and make changes to the workflow and its management.

Implementation was relatively smooth and speedy. Zhu again stressed:

> There was no way the IT department alone could have achieved so much. Take BOM [Bill of Materials] module for example. We had over 30,000 products. If each was to have merely three levels of raw materials and sub-parts, we would end up with 90,000 levels to specify in the system. There was no way the IT department alone could do that.

Top management support was critical throughout the implementation. The chairman of the board himself was present at five meetings, four of which dealt with the progress and status of the computerization project. He was also present for some of the regular project meetings, blueprint design briefing and the project launch ceremony. When asked about his success on securing top management support, Zhu offered this advice:

> You cannot let the Director's support remain verbal; it must be realized in actions. Firstly, he should be involved in the major events, milestones, and decisions making. Secondly, you should report to him all challenges and difficulties faced in the implementation process promptly, and not wait until the issues have already surfaced, so that you don't appear passive.

Staff training was conducted in parallel with system testing. Zhang explained:

> The first level of training was provided to selected key users by the consultants. The selected key users then transferred their acquired knowledge and skills to other users. At the same time, selected key users were responsible for preparing operating manuals for all users.

By conducting system training and system testing in parallel, time was saved, and users were able to identify potential malfunctions and gaps. Through testing, users also picked up important skills in using the system. As Zhang put it, "Testing was training."

GOING LIVE

Five months after the project team was formed, Keda prepared for system deployment. Timing was carefully chosen to mitigate risk and minimize business disruptions. Zhang explained the reasoning for rolling out the new system in August: "Every industry has its peak season and low season. For us, the months of August, September, and October were the low season when production pressure was lower."

At this point Zhu was faced with another strategic choice related to deployment. While a phased implementation would be less risky, a higher risk "big-bang" implementation had the potential to offer Keda immediate, full functionality. To expedite the entire process, an aggressive big-bang approach was adopted. Zhang explained:

> We did a rough assessment and we did foresee the possible problems immediately after cutover, such as delay or even suspension of production. However, if we were to do a parallel rollout, it would take a month at least to stabilize, during which all data and work would need to be processed twice. Given the huge amount of data and the already heavy workload, parallel rollout was not viable.

Work did not stop at cutover. Problems surfaced immediately and quickly translated into production delays. While anxiously working through the technical problems and trying to circumvent production delays, Zhu once again had top management reassurance:

> We notified the Director himself before rollout about possible delays in production, and explained that the ERP rollout represented a fundamental change in how our staff operated. The Director was extraordinarily supportive and said that he could tolerate ERP-affected deliveries in the first year.

The implementation team was uncertain how open users would be toward the new system. Because most prominent ERP systems were originally developed for users in North America and Western Europe in mind, some had suggested that cultural complications might arise in the Chinese setting. In particular, opposition to technological changes might be especially pronounced in the Chinese context due to feared loss of both status and discretion and the use of unrecognized performance metrics. Indeed, when the system went online, workflow and operations changed dramatically, and users in some departments were unsupportive of the ERP initiative. Resistance started to surface once again. Zhang pointed out:

> When our ERP system first went online, some felt that work became more tedious. For example, materials for production now had to be checked in to and out from the warehouse, before taking it to the production plant.

He attributed users' resistance to a power struggle brought about by the drastically reengineered business operations:

> Resistance mainly stemmed from the redistribution of power. For example, inventory management was previously decentralized and each workshop had its own inventory. Now, inventory management was centralized so that resources could be shared and better managed. On the third day after rollout, a workshop manager came to us and said that this centralization was wrong and he needed to set up his own inventory separately once again. Of course we said no, since that would be in conflict with our ERP workflow. But on the fourth day, he shut down the workshop anyway. The senior executives had no choice but to replace him.

Zhang recounted another incident:

> We had new designs and new production orders every day, and these placed a lot of pressure on the Purchasing Department and its manager. After one month, he could not cope anymore and decided to bypass the ERP system. Senior executives promptly replaced him.

Zhang justified the rationale behind these forced compliance actions:

> This is how things work in China. When a new person is promoted to a new position he will have no conflict of interest with the new system, and will therefore be willing to comply. Then everything else is easy, and can be solved by an increase in resources.

In the Chinese context, organizational culture is imposed. In China, workers look up to those in authority to provide direction. When top management demanded changes, they were accepted. In other words, country-specific culture was exploited to attain project success.

Of course, forced compliance was not the only way Keda dealt with issues. For instance, after system rollout some users were not completely satisfied with system operations and interfaces, and they requested system modifications to the IT department. However, because the users were the same people who originally specified most of the system operations, Zhu was able to fend off these requests temporarily, until system was stabilized. He elaborated:

> Imagine if the IT department were originally responsible for specifying the requirements and system flows? In that case, key users would demand endless changes, causing major delays in the project. Fortunately, since end users were responsible, they had no excuses. They had to accept and adapt.

Within months of going live, the ERP implementation effort was clearly a great success. Data accuracy, including that for production planning and inventory management, was estimated to have improved from 85 per cent to 98 per cent. Zhang explained:

> Information was much more transparent after system rollout. Before ERP it was very difficult to trace price paid for materials purchased, but after ERP, price analysis could be done conveniently.

As a result, Keda enjoyed improved market responsiveness, decreased stock holding costs, a significantly better product delivery time and faster monthly financial reconciliation. Zhang offered one example:

> We used to struggle with machine press production, where delays were common. Previously we produced about six machine presses per month, and faced constant pressure from senior management. However, one year after the ERP implementation, with exactly the same facilities, we were producing over 30 presses per month. This dramatic improvement in production capacity is attributed to the ERP information system.

Due to improved information dissemination, decision quality also improved. Zhang described another example:

> After ERP rollout, through cost analysis, we realized that the cost of a polishing machine we sold for US$50,000, was actually CNY400,000 (US$52,512)! These orders did not bring high profits, and management shifted its focus from developing foreign markets to controlling costs.

FUTURE OF ERP

The ERP implementation project had been successful; however, Keda had not yet fully capitalized on the centralized data and processes that were now possible because of the ERP system. The company was facing significant information needs, and needed to improve productivity and decision-making.

ERP is an enabling technology. By implementing ERP, Keda was strategically positioned to reap the benefits of computerization. ERP served as the core on which systems, such as customer relationship management, business intelligence and supply chain management, could be built to enhance customer management, optimize decision-making and coordinate vendors, respectively. To Keda, ERP was a beginning, rather than an end.

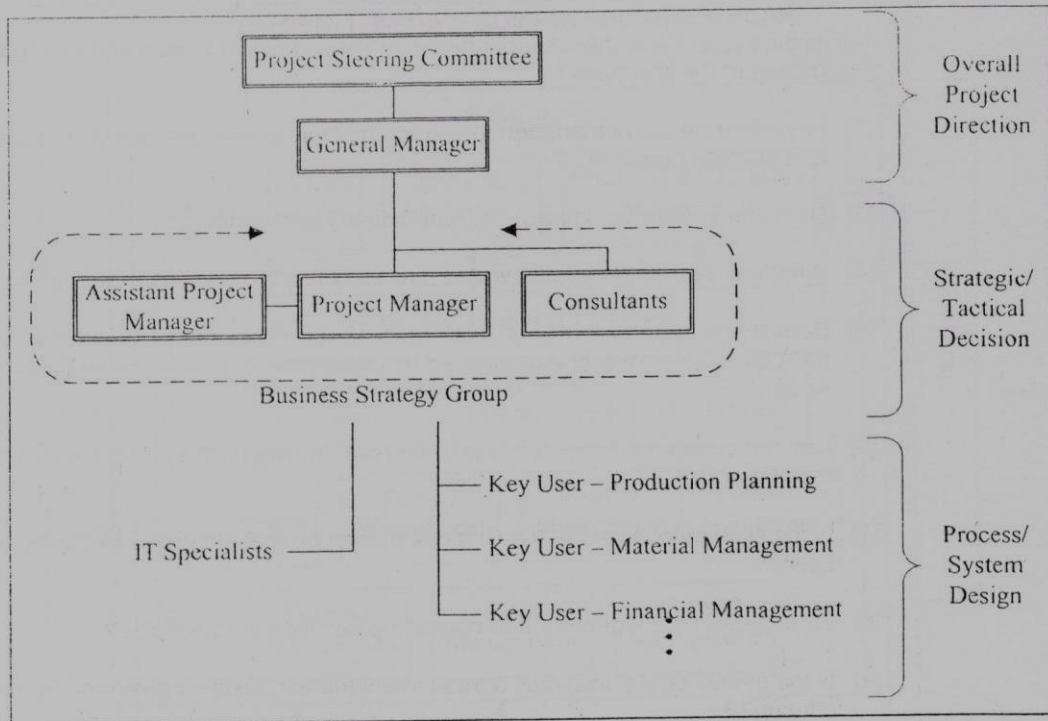**EXHIBIT 1: KEDA'S COMPUTERIZATION PLAN**
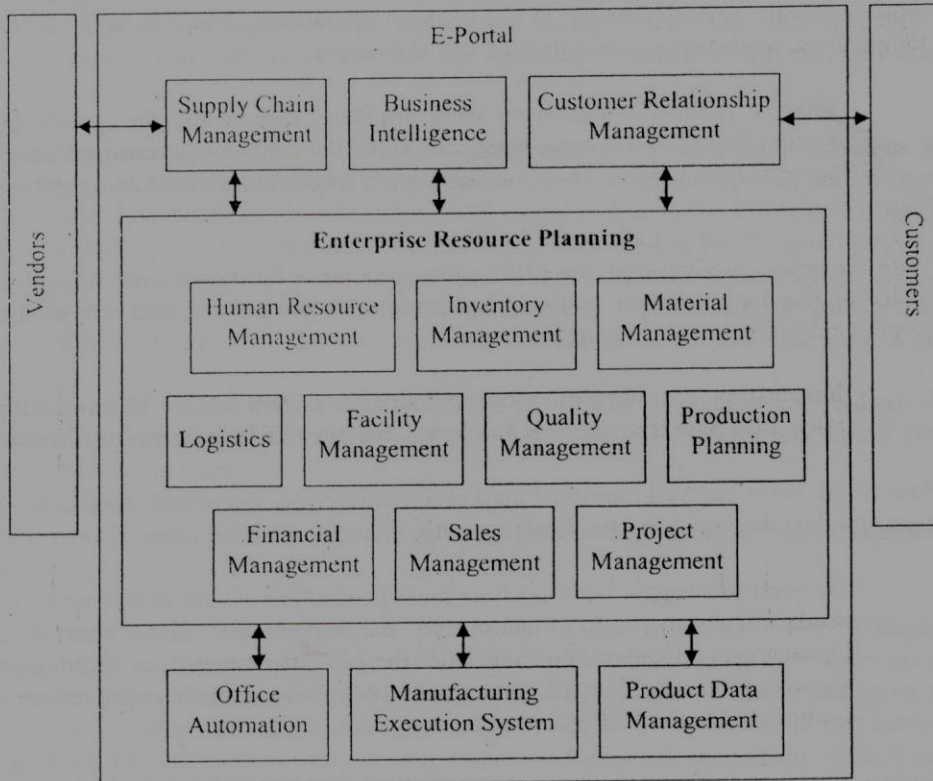
Source: Keda Industrial Co. Ltd.

EXHIBIT 2: KEDA'S ERP VENDOR SELECTION CRITERIA

[1] Is the system scalable in supporting current and future transaction load given the rapid growth of the company?

[2] Is the feature set rich enough to support multiple production plants, multiple divisions, and multiple currencies?

[3] Does the system workflow represent industry best practices?

[4] What are the reports available and how easy is it to generate new customized reports?

[5] Does the vendor have a good track record in previous implementation projects? In particular, is the vendor experienced in implementing similar systems in companies like Keda?

[6] Can the vendor be expected to provide reliable long term system support and maintenance?

[7] Is the system localized to the Chinese market so that it can be effectively used by local users?

[8] What project management and consulting services are available?

[9] Is the overall cost (initial plus annual maintenance) justified given the functionalities offering?

Source: Keda Industrial Co. Ltd.

EXHIBIT 3: KEDA'S ERP PROJECT TEAM STRUCTURE

Source: Keda Industrial Co. Ltd.