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FOXMEYER CASE: A FAILURE OF LARGE ERP IMPLEMENTATION

1. BACKGROUND OF FOXMEYER

1.1 BUSINESS

FoxMeyer was the fifth largest drug wholesaler in the United States (1995) with annual sales of about 5 billion US\$ and daily shipments of over 500,000 items. The business of the company was principally in healthcare services, which included the followings:

- 1. Distribute a full line of pharmaceutical products and health and beauty aids to chain stores, independent drug stores, hospitals, and other health care facilities. In other words, FoxMeyer's customers were retailers and dispensers.
- 2. Provide managed care and information-based services to health care facilities, pharmacies and physicians.
- 3. Conduct business in franchising variety stores and the franchising and operation of crafts stores, and wholesale distribution of products to those stores.

1.2 DISTRIBUTION

The company had 25 distribution centres located throughout USA. It conducted business mainly through two operating units: FoxMeyer Corp. and Ben Franklin Retail Stores, Inc. The latter was engaged in franchising and wholesaling to the franchised stores; while the former was engaged in the distribution to the individual units and chain stores and in the provision of managed care and information-based services.

1.3 BUSINESS STRATEGY

FoxMeyer business strategy was a mix of 'Cost Leadership' and 'Differentiation'.

Cost Leadership

- a. Cost efficient operations e.g. automating the physical warehouses
- b. Efficient inventory management and implementation of cost cutting program.
- c. Effective Information System Management, e.g. providing customers with electronic data entry.

Differentiation

- a. Provide innovative services, mostly computer based.
- b. Focus on quality.
- c. Complement distribution activities with marketing programs and computer-based services.
- d. Maintain local responsiveness and national coverage.

- e. Strengthen sales and marketing efforts at new customers by expanding value added services.
- f. Expand private labels, generic brands and specialty distribution programs.

2. THE PHARMACEUTICAL DISTRIBUTION INDUSTRY

The pharmaceutical industry in the US is one the most dynamic and important segments of the national economy. Due to advances in medical sciences, prescription drugs have become an essential element of modern health system. For example, in 2000, over \$125 billion dollars worth of prescriptions drugs were dispensed in the US. Over the last twenty years, there was a continuous growth followed by merger and acquisitions in the industry. Major players have also begun to integrate vertically by acquiring businesses related to the distribution of drugs and related health care products. Only handful wholesalers, included FoxMeyer, were able to provide national coverage through a network of distribution centers.

The pressure to reduce cost in the industry as a whole has led wholesalers to use economy of scale. Over two decades, wholesalers have increasingly lowered their price and profit margin in order to compete. For example, from 1980 to 1996, wholesalers' margins declined from 5.5% to 0.35%, while the retailers' margin increased from 5.35% to 5.5%. This reflected the increase bargaining power of the retailers. The competition at the wholesaling level, where FoxMeyer operated become very strong.

2.1 COMPETITION

FoxMeyer faced competition from traditional competitors such as distributors and manufacturers, as well as from new competitors such as mail order and self-warehousing chains. As of 1999 a large number of companies started to conduct both retail and wholesale on the web.

WHOLESALES: Wholesalers like FoxMeyer act as intermediaries between manufacturers and retailers (dispensers). They provide fast and cost effective mean for the purchase and sales of prescription drugs. Wholesalers also have a broad range of value added services such as storage facilities and large varieties of drugs that they can provide to their dispensers and other customers. These value-added services are often not provided by the manufacturer and would be difficult and costly for dispensers to replicate. In additional, wholesalers have sophisticated ordering systems that allow retailers (or other customers) to electronically place and confirm orders instantly. Because of these systems, customers were able to reduce their inventory-carrying costs while maintaining minimum inventory to meet their customers' need.

In the early 1990's, 40 major wholesales competed in the market, but the following wholesalers dominated over 80% of the drug business. (Figures are US\$ annual sales)

McKesson	Bergen's	Cardinal	Amerisouce	Foxmeyer
\$20.8 Billion	\$11.6 Billion	\$11.5 Billion	\$7.8 Billion	\$5.5 Billion

MANUFACTURER DIRECT: Manufacturers may sell directly to dispensers, bypassing any intermediaries. The distribution of prescription drugs from the manufacturer to the dispenser is not an easy task. It involves not only quick and efficient transportation of drugs on a daily basis but also maintains large storage facilities to keep a constant inventory of over 18,000 brands of drugs. Therefore, dispensers and pharmacies have significantly decreased the percentage of pharmaceutical purchased directly from the manufacturers in term of the total dollars.

MAIL AND INTERNET ORDERS: End customers (patients) can receive their prescription drugs by mail e.g., ordering by phone or online, without going to a retail pharmacy or an hospital. As a result, mail order operation can save overhead on inventory cost and storage cost. HMO's and insurance companies encourage end users to buy by mail. The dispensing of drugs by mail order from pharmacies of HMO's centers, is the fastest growing segment of the industry. From 1990 to 1996, the sales in this segment increased from 5.1% to 9.7% and the 2001 estimated figure is over 12%, of the total industry sales. Yet, mail order operators frequently do manufacture the drugs. These companies operate warehouses buying directly from manufacturers, or use the services of another distributor.

SELF-WAREHOUSING: Self-warehousing occurs when retail or institutional dispensers take on the task of distribution themselves. Instead of relying upon an outside distributors, the retailers or health care institutions buy direct from the manufacturers; store the drugs in one or more of its own warehouse and then delivers the drugs to its retail stores and hospitals as needed. This method places pressure on the wholesalers since more HMOs and medical centers are increasingly use this approach, which enable thus also to dispense directly to patients via the mail (Internet).

2.2 CUSTOMERS

Basically, there are three major types of customers: independent pharmacies, institutions, and retail chains.

INDEPENDENT PHARMACIES: Mom and pop stores which amount 27,000 in US (2001 data) purchase 95.4% of their prescription through wholesalers. Over the year, most independent pharmacies have joined the **group purchasing organization** ("GPO") to aggregate their purchasing power to negotiate favorable contracts with wholesalers. This action added significant pressure to wholesalers to reduce selling price in order to maintain sales volume.

INSTITUTIONS: Institutions include HMOs, hospitals, clinics, nursing homes, home health care etc, which account to about 70% purchase of the wholesalers business. Over the years, HMOs and hospital consolidated to form integrated delivery network ("IDN") in order to enhance their bargaining power. For example, in 1996, the period that FoxMeyer was in trouble, 35 IDNs posted gross revenues in excess of one billion dollars. In the late 1990's, a number of institutional GPOs have combined to increase their purchase power even further. These changes also further weaken wholesalers' bargaining power.

RETAIL CHAINS: While they rely on wholesales to deliver certain percentage of their drugs, they also maintain contact with self-warehousing chain and manufacturers to provide popular drugs in bulk, storing the drugs in their own

warehouses, for distribution to their retail outlet. Manufacturers also agree to sell drugs directly to large retail chains, which also affect wholesalers' sales. During last several years, retail chains have increased the purchase percentage of their pharmaceutical drugs direct from manufacturers from 60% to 66%.

Most pharmacies can fill a prescription on the spot, or guarantee next day delivery. These dispensers of prescription drugs include the neighbourhood pharmacies, chain pharmacies such as CVS and Rite-Aid, hospitals, nursing homes, and care sites. Unfortunately, most of these retail outlets and institutions that dispense prescription drugs do not have the ability to store the large number and variety of drugs that they need to sell. Due to the improved logistic system, most of the above competitors can reduce delivery time. Customers seem to choose suppliers who can offer lower price.

3. ERP AND THE SELECTION OF SAP

3.1 FoxMeyer's Bold Decision to Use ERP

Due to the intense competition, FoxMeyer was in a great need of a solution that would have helped it to make a complex supply chain decisions and meet the increased cost pressure head on. In the early 90's, management decided to focus on a business strategy of transferring the company into low cost distributor to increase competitive advantage and at the same time provide differentiated services to diversified target customers. Based on a supply chain analysis, it was decided that an ERP would offer a perfect solution for FoxMeyer to provide real time information and automate and integrate inventory systems. This was expected to eliminate unnecessary activities, establish appropriate inventory levels and provide responsive customer services. Ideally, with an ERP system, the company would be able to manage ordering, inventory and sales activities in one system which was expected to streamline operations and provide efficient distribution of prescription drugs which is a critical component of the pharmaceutical industry. In 1992, the company decided to hire Arthur Andersen consulting company to implement SAP (R/3), an ERP software (using their Anderson Consulting Group). FoxMeyer selected both a top consultant and the most widely used software to assure successful implementation.

3.2 THE SELECTION OF SAP

SAP (systemanalyse and programmentwicklung) was the largest ERP software vendor at that time. In 2001, SAP is still the largest supplier of software in the world and the world fourth largest software vendor.

The R/3 software includes over 70 integrated modules in accounting, logistic HR, sales and distribution etc. (see appendix). The software is built from a business point of view. By collaborating with business and IT experts, SAP gradually developed a unique understanding of the challenges faced by users and provides a total solution to its customers. The software helps companies link their business processes, so the whole enterprise can run smoothly. In the early 1990's R/3 was a hot commodity. FoxMeyer, like many other companies, jumped on the bandwagon to capitalize the benefit of using the software because of the software reputation and the consultants' recommendation.

4. THE CONSULTANT—ANDERSEN CONSULTING

Anderson Consulting (now Accenture) is a large and diversified IT consulting company. In the area of enterprise business software it provides solutions to clients on a global basis. Andersen had at that time over 15,000 IT consultants dedicated to help clients improve their business result by implementing IT solutions. The strength of Andersen's global capability with respect to SAP was embodied in the wide breadth of methodologies and tools offered to their customers with their SAP implementation. Because their clients' strategies vary widely, Andersen actively investigates and evaluates both SAP tools and third party tools. Andersen also has invented its own tools to fill specific SAP functionality gaps or to meet specific customer requirements. Furthermore, Andersen tools are always consistent with SAP approach and complementary to SAP tools. In other words, Andersen seemed to be a most trusted consultant for implementing SAP systems.

5. THE IMPLEMENTATION OF SAP R/3 AT FOXMEYER

In September 1993, FoxMeyer contracted with SAP, Andersen Consulting and Arthur Andersen & Co. (AA), the parent company of Anderson Consulting, to implement the R/3 software. This multi-million dollar project covered the entire supply chain—warehouses, inventory control, customer service, marketing, strategic planning, information system, shipping and handling. SAP R/3 was the first information system launched in the pharmaceutical industry that utilized extensive technology coupled with automation of warehouse functions.

The implementation cost for SAP was budgeted in 1994 at US\$65m. The budget included:

- US\$4.8m client/server computer system from Hewlett Packard,
- US\$4M SAP software.
- several millions of dollars for consulting fees for Andersen Consulting, and
- US\$18m for a new 340,000 square-foot computerized warehouse in Washington Court House, Ohio, where *computerized robots filled orders* received from hospitals and pharmacies.

The ERP system was projected to save FoxMeyer US\$40m per year.

In the summer of 1994, FoxMeyer signed a large distribution contract that required it to add 6 warehouses. SAP and Anderson scheduled the implementation at these warehouses for January and February 1995. Then they planned to implement R/3 at the remaining 17 old warehouses. However, in November 1994, SAP informed FoxMeyer that R/3 could only be implemented at the new warehouses. The other warehouses had a volume of invoices larger than the system was able to process. The R/3 system at the new warehouses was able to handle 10,000 transactions per day, while the legacy system was able to handle 420,000 transactions per day. FoxMeyer started the R/3 on time in the new facilities and customers orders were filled. However, due to data errors, the customers sales histories were inaccurate. On top of that the physical move of inventory was done carelessly. Therefore, the benefits from forecasting inventory needs was limited. FoxMeyer had to spend about US\$16m correcting errors

in orders during the first 6 weeks after the opening of the new warehouse. Thus, FoxMeyer realized only half the projected savings. Several of the problems were not correctable, forcing, as will be seen later, a bankruptcy.

The final implementation bill was more than US\$100m, but the R/3's performance was still unacceptable. It was completed late, went over budget, and failed to deliver the expected benefits. For a company in a low-margin business with a heavy debt burden, the shortfalls were overwhelming.

After taking a US\$34m charge to cover uncollectable shipping and inventory costs in 1996, FoxMeyer was forced to file for bankruptcy. It was overwhelmed by huge expenditures for new computers, software and the consultants who were supposed to make it all work. In November 1996, McKesson Corp., FoxMeyer's largest rival, acquired FoxMeyer for only US\$80m.

In 1998, the bankruptcy trustee of FoxMeyer launched two separate, US\$500m each, lawsuits against SAP and Andersen Consulting. FoxMeyer charged SAP with fraud, negligence and breach of contract for persuading them to invest in a system that failed to deliver, leading to the demise of FoxMeyer. Andersen Consulting was charged with negligence and breach of contract for failing to properly manage the implementation. Both defendants denied the allegations, blaming FoxMeyer for mismanagement. The cases were still in court the time this case was written (summer 2001).

6. Poor Planning and Implementation

The failure of the ERP can be viewed from two perspectives: Planning and Implementation:

Planning

- (1) *Poor selection of the Software*—SAP R/3 was originally designed for manufacturing companies and not for wholesalers, especially those doing large number of transactions. R/3 has never been used by a distributor until that time. It lacked many requirements needed for successful wholesale distribution. SAP R/3 was inflexible software, and any modification required time and financial investment. R/3 was unable to handle the large number of orders. FoxMeyer filled orders from thousands of pharmacies, each of which have had hundreds of items, totalling up to 500,000 orders per day. The legacy system handled 420,000 orders per day, but SAP only processed 10,000 orders daily (2.4% of that of the legacy system).
- (2) No consideration of other consultants' advice—FoxMeyer did not listen to other consultants' advice in the early stage of the project, A Chicago-based consultant firm warned FoxMeyer that SAP would not be able to deliver what FoxMeyer needed. FoxMeyer selected SAP mainly because of its reputation.
- (3) Lack of contingency planning—there was no contingency planning to deal with changes in the business operations. For example, a major customer, Phar-Mor Inc. that accounted for more than 15% of FoxMeyer's business, declared bankruptcy shortly after FoxMeyer's launched SAP. Much of the Phar-Mor business was gone to competitors.
- (4) *No end user involvement*—The project was done using a top-down approach. The planning were performed by FoxMeyer's upper management, Andersen

Consulting and few technical people. Only few end users participated in the analysis, and design process. So there was a communication gap between the users and the system planners.

Implementation The implementation process suffered from the following problems:

- (1) *No restructuring of the business process* was done—SAP was not fully integrated because FoxMeyer was incapable of reengineering their business processes in order to make the software more efficient. FoxMeyer signed a 5-year, US\$5 billion contract with a new customer, University HealthSystem Consortium in July 1994, on the assumption that a projected US\$40m in benefits from the SAP implementation would be materialized. They placed a higher priority on meeting that customer's need than on making the SAP implementation success. The delivery was scheduled to start in early 1995, but FoxMeyer pushed the implementation deadline forward 90 days to meet their customers needs. Thus, FoxMeyer sacrificed the needed business reengineering processes.
- (2) *Insufficient testing*—Due to the rushed schedule, some modules testing was skipped. Besides, the system was not properly tested to identify its short-coming in handling large amounts of orders. There was inadequate testing and insufficient time to debug the system to ensure its functionality.
- (3) Over-ambitious project scope—the project team members and information system staff were unfamiliar with the R/3 hardware, systems software and application software. The project scope was enlarged with simultaneous implementation of a \$18m computerized warehouse project. Some technical problems of great complication and were not managed well by the IS people, so additional expenditures and time were incurred.
- (4) *Dominance of IT specialists' personal interest*—since the project was new for the wholesaling industry, the IT specialists wanted to learn the system and secure their employment in the SAP technology business. (The SAP experience made them more employable). They placed their personal interest of getting experience in SAP implementation over the company's interest in getting suitable software technology. So some system problems were hidden and not reported to management until it was too late.
- (5) Poor Management support—initially management were supportive and committed to the project. However, once the implementation started, management was reluctant to acknowledge the system problems. Management failed to understand the complexity and risks in the process and agreed to have 90 days early implementation although the system was not fully tested. Management failed to recognize the timelines and resources required in the implementation process.
- (6) Lack of end-user cooperation—the user requirements were not fully addressed and there was no training for end users. Employees had no chance to express their priorities and business needs. Workers especially at the warehouses were threatened by the implementation. The automated warehouse created many problems. Employee morale was low because of the layoffs. They knew their jobs were soon to be eliminated. As the end users were not fully involved, they felt they didn't have the ownership for the project and did not work closely with the IT specialists to solve problems.

7. LESSON LEARNED—How TO AVOID SUCH FAILURES?

The failure of FoxMeyer can be used as a lesson for companies who plan to implement an ERP system. The following recommendations could eliminate the incurrence of a similar failure.

Planning

- (1) *Software selection*—A project steering committee should possess high level of expertise, both technical and operational in the software selection process. They should compare different softwares, evaluate their pros and cons and identify the one which best fit the business needs. It may be advisable to seek the advice one or more consultants. Tests on the site can be helpful.
- (2) *Contingency plan*—Develop contingency plan of how to survive in case of system failures. Stipulate clearly the roll back procedures or develop new contingency plans to prepare for the breakdown of any system modules and for the total new system.
- (3) Stakeholders' involvement—An ERP project should get the involvement of all stakeholders, including end users and customers of the company. All stakeholders should understand the goals and expectation of the project and need to be encouraged to voice out their opinion, especially in the earlier stages when critical issues are just evolving. Organizational impact analysis could be conducted to determine the nature and extent to which different units will be affected and changes required in procedures and staffing, accompanied with the proper documentation for the system staff and the end-users.

Implementation

- (1) Inclusion of the necessary business process reengineering—ERP cannot be expected to improve profits without the prior accomplishment of improved supply chain planning systems, enterprise optimization systems, customer relations management, transportation and logistics management and warehouse management. Installation an ERP system is not the end process; business processes and systems must always keep pace with changes to enhance competitive advantage.
- (2) *Thorough testing*—Develop an organized comprehensive testing plan, encourage user participation in the testing, and make sure adequate testing scenarios are conducted to the new system.
- (3) *Realistic project scope*—Project scope should be clearly identified with realistic time targets. Critical milestones should be set. If necessary, implementation can be piloted in a certain section or rolled out in phases.
- (4) Close monitoring of project status—Top management and the implementation team should have a close communication with the software vendor, consulting firms and IT people, ensuring that the project progress is running on the right track, and the project goals are continuously adhered to. When problem incurs, do not trade business requirements for time; accept the discrepancies on condition that the new system can still meet the primary goals.
- (5) Seek end user support—All employees should be well-trained in the new software. Address to the concerns of the end users and minimize their negative feelings to the new systems. Identify the change agents and create a high morale to meet the new challenges.
- (6) *Post implementation review*—Develop quality assurance and control programs to ensure system checks are in place. Develop business metrics to measure

project's intended benefits versus what has actually been achieved, assign an owner to track each metric. Balance the benefits of all stakeholders after new system implementation.

QUESTIONS FOR THE CASE

- **1.** Enter google.com and final information on the legal status of the pending court cases.
- **2.** Enter mckesson.com and look at some press releases and Web pages. Identity their e-commerce initiatives.
- Explain how the proposed system was supposed to improve the supply chain.
- **4.** It is said that this is that the system the company was trying to build was an e-commerce. What kind of e-commerce is this?
- **5.** Analyze the process of selecting SAP R/3. Could it have done differently?
- 6. Discuss the relationship between SAP and Anderson. What role Anderson played? Was its choice by FoxMeyer logical? (check both companies' Web sites); Anderson is now accenture.com; see sap.com and mysap.com.

- **7.** Examine the advantage of the legacy system over the client/server system.
- **8.** Examine the error that occurred in the initial implementation. How to eliminate such errors?
- **9.** Go carefully over the four planning problems cited in section #6. For each discuss who is to be blamed: FoxMeyer, Anderson or SAP. Support your opinion.
- **10.** Go over the problems of implementation in section 6. The party in fault in each problem area.
- **11.** Suggest more ways to improve planning. Follow the four problem areas of section 6.
- **12.** Suggest additional ways to improve the implementation of ERP. Follow the six points of implementation cited in section #6.
- **13.** Enter accenture.com and find information about online medicine.

APPENDIX

Enter a closer Look Box 4.1 from Chapter 4, 2nd revised edition, including Lieber's reference and figure.

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