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Teaching Case

Teaching Case

Stalled ERP at Random Textiles

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Abstract

Andre Raymond, Executive Vice President of Sales and Marketing for Random Textiles Co. Inc. (RTC), stood in front of the podium to address his team of 70 sales consultants in Las Vegas, NV. The organization had increased market share and achieved record sales over the past three years; however, in the shadow of this success lurked an obstacle that threatened the financial stability of the company. The enterprise resource planning (ERP) software system RTC planned to use for future growth had not been implemented yet. The new ERP software was introduced in 1996 and RTC had planned to roll it out company wide by 2004. Ten years later, no companywide rollout had taken place. The consequences of this problem were beginning to surface in the form of customer complaints due to unexpected stock outs, inefficient business processes, and high employee turnover. This teaching case addresses learning objectives related to recognizing and mitigating problems with IT management in general and IT project management specifically, the importance of evaluating vendors, the importance of IT planning and estimating time and resources required. This case is intended for the undergraduate IT Strategy (IS2010.7) or Foundation (IS2010.1) courses. It could also be used in the IS Project Management (IS2010.4) or an MBA course focused on IT strategy or management.

Keywords: ERP, project management, planning, teaching case

1. RANDOM TEXTILES CO. INC.

RTC was co-founded in 1940 by Todd Weisman and Freddy Benintendi. Todd and Freddy sold various textile products from their 5th street apartment in Cincinnati, OH. In 2014, RTC has expanded to one of the largest, privately owned companies in the world. RTC manufactures reusable textile products for healthcare and hospitality facilities. Their products consist of patient gowns, bath towels, robes, baby blankets, and window treatments. RTC is a vertically integrated company and they own a number of domestic and global manufacturing and warehouse facilities. RTC is known for product development and innovation, they offer a handful of proprietary fabricated products which provide numerous benefits to the customer such as lower cost per use, more efficient textile processing, and increased patient comfort.

Organizational Profile

The business units within RTC are distinguished by two product categories: 1) reusable textile products and 2) decorative products. The organizational structure includes functional units of Accounting, Finance, Human Resources, Legal, and Executive Management which all support both product categories.

In contrast, Sales & Marketing, Information Technology (IT), Product Development, Manufacturing, Sourcing, Customer Service, and Sales Analytics business units are all customized to each product category (Exhibit 1). For example, reusable textile products such as bath towels and bath blankets are relatively small and cotton rich. These products were typically globally sourced and low cost is of chief importance in order to stay market competitive. In addition to these reusables, proprietary textile products were usually manufactured within an RTC owned facility and these products had higher costs since they offered innovative benefits to the customer. Despite the different supply chains, these products were handled similarly on the sales side of operations.

Decorative products were very large and bulky and were made with a variety of materials such as cotton, polyester, wood, and plastic. These items were generally purchased from other suppliers and inventory costs were high given the bigger size and weight to store these at a warehouse. These products required different processing for the sales cycle.

The IT Function

The Sales team at RTC drove much of the company's revenue and they owned the relationship with customers. Most of RTC's internal business units were set up to support the Sales team.

The IT department was no exception to this and they were a large business unit within RTC. In addition to supporting Sales, they also supported all the other business units. IT was responsible for the development and maintenance of the Sales Force Automation (SFA) program which allows sales reps selling reusable textile products to look up pricing, provide quotations, and access historical customer purchase activity. The SFA is a web application that is fueled by RTC's ERP software system.

In contrast, the web-based Sales application on the decorative products side is The Configurator (TC). Here, Sales reps can place customer orders, access pricing, and check inventory and product availability. TC was linked to RTC's ERP software system as well; however, system capabilities for decorative products were more highly customized compared to reusable textile products.

For example, a sales order for decorative products would be billed under one line item which includes multiple products and services such as the window treatment fabric, labor, and installation. In contrast, a reusable textile sales order would have many line items all representing an actual finished product SKU.

ERP System

Starting in 1980, RTC utilized Oracle's JD Edwards for their ERP system needs. At that time they specifically began using the AS400 platform. In 1995, RTC had determined business processes were beginning to become more complex and the current AS400 platform had limited capabilities in supporting company growth and the many manufacturing locations that were being added to RTC's operation. There also was an urgent need to ensure ERP systems were Y2K compliant. Therefore, in 1996, RTC announced they would convert their ERP system to Oracle's Enterprise 1 (E1) solution. The scope of this project was to include all business units as part of the planned migration. RTC thought it was reasonable to target 2004 as the projected full companywide conversion date. After all, this

gave the company eight years to rollout the system to the entire company.

ERP System Implementation Team

The influential leader of the new ERP system implementation team forming in 1996 was Kevin Jones, Chief Financial & Information Officer (CFIO), who managed the Accounting, Finance, and IT divisions at the executive level. The IT associates on the evaluation team consisted of two Vice Presidents, three Directors, and three IT associates from each business unit.

This totaled thirty-six internal IT employees all working on the new ERP system implementation for half of the work week. The other half of the work week was devoted to regular job duties such as refreshing the SFA and TC, writing code and queries for various programs and applications, and regular maintenance of the company's internal web page. The Implementation Team would pull in advanced system users of the current AS400 system at the business unit level on an "as needed" basis to provide guidance regarding the business processes and requirements.

RTC also brought in external consultants that represented Oracle who would work as a third party collaboratively with the internal IT division and with high end business unit system users. RTC would hire new employees as needed if they were falling behind on regular job duties as they did not want to remove emphasis of the new ERP initiative.

2. CURRENT BUSINESS PROCESSES

As mentioned, the Sales team was the primary driver of all other business processes at RTC. They would work with customers to determine which product specifications and quantities were desired. Many times when picking up a new account, products would be designed to meet a custom, non-stock fabrication in order to win the new business.

At that point Product Development and Sourcing teams were engaged to create these products. Accounting and Manufacturing were also involved with forecasting for future customer demand, to identify slow moving inventory, and to make recommendations to sales to accommodate immediate consumer demand.

Customer Service worked with Sales and customers on a daily basis processing orders, expediting product shipments, and approving substitute product shipment when stock items were not available. Sales Analytics worked on strategic projects with Sales and Executive Management; these projects included responses to requests for proposal (RFPs), group purchasing organization (GPO) data analysis, and competitive pricing requests. Legal would also be involved with review of signed contract agreement language.

The Finance team functioned primarily as a back end unit. They would review historical margin and financial performance reports with Senior Management. IT was involved intimately with all business processes and units described above and had at least a general understanding of how each business unit utilized the current AS400 ERP system. Additionally, IT had dedicated teams that supported each business unit. However, many of the advanced users of the AS400 system were within the particular business units. (Exhibit 2)

3. CURRENT SYSTEM STATUS

RTC's current Oracle JD Edwards AS400 ERP system had been in use since inception in the 1980's. Even today (in 2014), RTC still utilized the old AS400 system in most of the business units. The AS400 was referred to as "the green screen" and many of the associates at RTC were very comfortable with this system because they had been using it for the past twenty years.

The experienced associates liked the AS400 system so much that over time when business processes posed a problem the system could not handle; they created custom programming within the current system to "override" other parameters of the system. For example, in 2008 there was a major cotton shortage that slowed supply and increased raw material costs. In response, RTC had to implement price increases to their customers especially in the reusable textile products market. In response to these economic conditions, Sales Analytics had to upload many price increases in the AS400 system. However, Sales commissions were to remain unaffected by market driven price increases. The result was the implementation of many overrides and custom modules (developed by IT and the respective business unit) as a way to "patch" the existing system and keep things running smoothly.

4. SYSTEMS SELECTION & PLANNING

IT planning prior to the ERP system implementation was not a top priority at RTC. Despite identifying and understanding current business processes, there was not a systematic evaluation of all available new ERP system software options. RTC felt that the current system in place had proper functionality and capability to support and integrate all business units. The E1 solution was simply a newer version of their current AS400 platform so why would they need to consider other options?

The intent was to implement the new E1 ERP system within each functional business unit one after another. For instance, the new system would be trialed and tested in Accounting and once it was fully functional and all team members had the proper training then they would "go live" with E1. Then the implementation would move to the next functional business unit and begin the process all over again. The ERP implementation process was driven by Executive Management including the CFIO with a primary objective of minimizing cost.

5. E1 IMPLEMENTATION

The first action taken by the E1 Implementation Team in 1996 was to provide companywide communication describing the ERP migration that would take place. The purpose of this was to generate excitement among the associates and to explain the various internal and external benefits the new E1 system would bring. In the communications, a schedule for implementation by business unit was established (Exhibit 3).

RTC started the E1 ERP system conversion with the Accounting and Finance business units. The justification to start there lied in the fact that most of the Y2K compliance concerns, especially for reporting purposes, were within these two business units. RTC thought E1 could be implemented and "live" in the Accounting and Finance divisions prior to the year 2000. It also made sense to take advantage of the fairly standardized systems within Accounting and Finance since they were made up of more standard business processes without much customization.

The IT associates who supported the Accounting and Finance divisions began partnering with high end system users and leadership of the respective business units. Third party consultants with experience in implementing the software were also brought in to partner with the IT associates. It was imperative that both of these parties understood the current AS400 functionality in the respective business units so that business processes could be successfully transferred to the new E1 system. As anticipated, configuration ran smoothly for the E1 implementation in these areas because most of the current system and business processes were fairly basic and standardized. E1 training was provided to Accounting and Finance associates and the new program was gaining acceptance despite some resistance to the new system. One Finance employee commented:

"I was initially skeptical of using the new E1 system since I was so comfortable using the old system. Why would they change something that was working for us for years? I guess it is the best thing to do given the business has evolved and grown exponentially the last 10 years. It will take me some time to get used to this but I am confident that I can learn."

By summer of 1999, E1 was live and functional in the Accounting and Finance departments. This marked a small victory for RTC and gave them momentum as they rolled the new system out to other areas in the company. The following year they began implementation in Legal, Human Resources, Sourcing, and Manufacturing. They expected the Legal and Human Resources conversion to go much like Accounting and Finance because again business processes in these divisions was in line with industry standards. More time was allocated to the Sourcing and Manufacturing functions because here there was a lot of customization among reusable textile and decorative products. As IT associates and external consultants were digging into Sourcing and Manufacturing business processes in 2001, the E1 project was also initiated in Sales & Marketing, Product Development, Customer Service, and Sales Analytics.

6. SYSTEM CHALLENGES

In mid-2002, IT professionals and Oracle consultants could not understand how some of the current system functionality in the Customer Service area worked (and could not find any documentation related to the programs). They came to the conclusion that there were many legacy systems that were built in-house and ran

exclusively on the hardware (IBM AS400) infrastructure that was in place. Additionally, the external consultants had never seen some of the custom applications.

For example, Customer Service representatives would key in orders and a sleeper batch file would run overnight updating new inventory levels on the Manufacturing side. That same day sales representatives would work with forecasting who would also adjust future inventory levels that impacted Manufacturing. These were two separate, manual processes that would not update in real time. Associates would have to wait until the next business day for inventory availability to update in the system.

Furthermore, the Customer Service application utilized in this process differed from the application that Manufacturing worked with when dealing with inventory quantities. In other words, each functional area had their own definition of "inventory availability" so the actual product supply was incorrectly or inconsistently displayed within the system. This caused Sales Analytics to provide bad information to sales consultants looking for substitute product to ship to customers. This resulted in backorders, customer complaints, and in some cases, lost large new business accounts.

There were also issues identifying current business processes and how the AS400 applications supported those processes. In 2003, many high performing employees left RTC due to non-competitive compensation and a micromanaging leadership culture. IT personnel and external consultants found it difficult to trace how certain business units were utilizing the AS400 system simply because the human capital resources were no longer with the company. This was particularly a problem in the Decorative Product Development division. Since decorative product orders were custom in nature, advanced system users had to manually enter product specific information into the AS400 such as supplier, commission structure, and pricing calculations.

IT determined the data driving these systems was based on exception programming and associates in these business units had to be trained by IT to locate specific system applications to perform their roles. RTC fell so far behind in the trial and testing phase of the ERP implementation in some business units that they reached out to ex-employees pleading with them to return at least part time so they could attempt to regain understanding of key business processes.

In 2008, the only business units that had a functional E1 system in place were Accounting, Finance, Legal, and Human Resources. The initiative was four years behind schedule in the other business units. The problem now was integrating all business units on the E1 platform. RTC had concluded that each business unit that was non-functional on E1 had business processes that were specific to each area, so customized that E1 would not work for them. This prevented a companywide rollout anytime in the near future.
Even worse, associates in Accounting and Finance had to be provided access to the old AS400 system in addition to the new E1 system because they depended on the old system in order to work with Sales, Marketing, and Sales Analytics. For example, Sales Analytics ran sales reports and calculated fees owed to some large customers. Once Sales Analytics came up with a rebate amount for each customer, this had to be entered in the system and accessed by Accounting for budgeting purposes. Accounting could not access this information on E1 because the coding was not linked to the custom AS400 Sales Analytics environment. One employee commented on the frustration he faced:

"If we are to be excited about the new system how do they expect us to believe it is best for the organization when months after we train on the new system we have to go back and keep using the old system. It seems like the company wasted time and money on implementing a system that doesn't work. They should consider abandoning E1 and the money they save by doing that they can give to their poorly compensated employees."

7. THE FUTURE FOR RTC

In 2012, RTC decided to jettison the external consultants they had been working with and hire new consultants. They felt the project was not getting anywhere and that new associates bringing a different perspective could restore the ERP implementation initiative. An IT Vice President and two directors were also asked to leave by RTC. Despite turnover costs, there was some success with E1 implementation in the Customer Service and Sourcing areas. Customer Service was entering orders through E1 and Sourcing was populating product costing through

the new system as well. There were still integration issues and every time RTC tried to "go live" in Sales & Marketing, Customer Service, Manufacturing, and Sales Analytics they still ended up resorting to the old AS400 system so users had dual access to both the old and new systems.

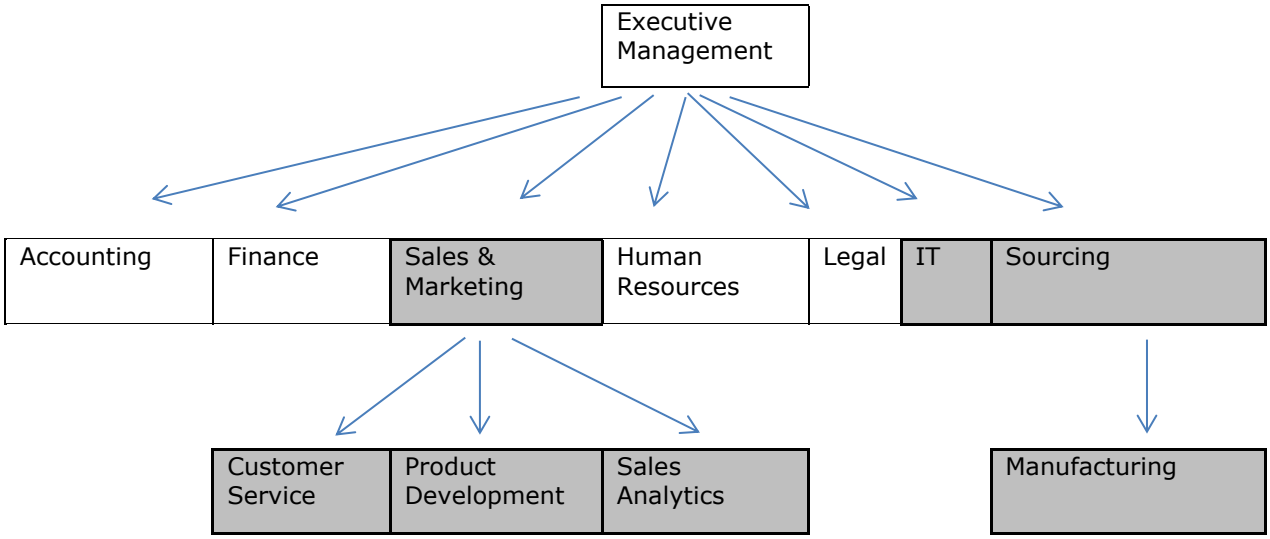
Andre Raymond had much to be proud of as he thought of how to begin his national sales meeting introductory speech. The company had strong sales and many seasoned sales representatives that effectively sold products and built relationships with the many RTC customers. Andre then hesitated and felt disappointment as he knew he had to delivery bad news on the status of the E1 initiative. He looked at Kevin Jones, CFIO, who was also in attendance at the sales meeting, and pondered:

1. Did we take all the appropriate actions in planning the new ERP system implementation?
2. Was the schedule realistic based on the scope and budget of the project?
3. Why have the problems with the old and new systems been dragged out for so long?
4. How can we get this project back on track?
5. Can RTC continue their sales growth and success if internally their systems are in shambles?

Andre took a deep breath and began his inspirational speech to the sales team.

Appendices and Annexures

Exhibit 1: Organizational Chart



Key:

= Unit operates independent from Product Category

= Unit operates with dual subsets based on Product Category

Exhibit 2: Business Processes

Exhibit 3: Schedule by Business Unit

Business Unit	Start of Implementation	Key users interviewed; further understand business processes	Trails and Testing	E1 "Go Live" Date
Accounting	9/1/1996	1/1/1997	1/1/1998	7/1/1999
Finance	9/1/1996	1/1/1997	1/1/1998	7/1/1999
Human Resources	1/1/2000	4/1/2000	4/1/2001	12/31/2002
Legal	1/1/2000	4/1/2000	4/1/2001	12/31/2002
Sourcing	7/1/2000	11/1/2000	4/1/2002	7/1/2004
Manufacturing	7/1/2000	11/1/2000	4/1/2002	7/1/2004
Sales & Marketing	1/1/2001	4/1/2001	9/1/2002	12/31/2004
Product Development	1/1/2001	4/1/2001	9/1/2002	12/31/2004
Customer Service	1/1/2001	4/1/2001	9/1/2002	12/31/2004
Sales Analytics	1/1/2001	4/1/2001	9/1/2002	12/31/2004