

CHANGE MANAGEMENT AT MARS PUBLISHING HOUSE

*Jacinto C. Gavino, Asian Institute of Management
Edwin J. Portugal, State University of New York
Daisy T. Briones, University of Asia and the Pacific*

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A New Assignment

Dennis Marasigan, the IT manager of Mars Publishing House and its affiliated companies, was given a new assignment: To lead the Enterprise Resource Planning project, also called ERP. Dennis aired his concern, “Ms. Martinez, ten months is a very aggressive timeline to develop our own ERP system. People would cause delays.” Dennis recalled that the past ERP system implementation was not just a project management process but also a change management process full of people’s issues. “The business has grown exponentially and we cannot afford to be in a catch-up mode for too long. Our sales dipped and receivables went up. Besides, I don’t want to hear another complaint from any priority customer again. I trust you can lead this project and you have my full support!” Gina Martinez, the President of Mars, assured Dennis. He thought, “How could I manage change and empower the managers and staff to own the project and collaborate better?”

Introduction

Dennis had been with the company for several years. He understood and believed in technology and attributed Mars’ fast growth to the Board’s knowledge of how and when to use technology. He submitted a business case for a new ERP system. The Board immediately gave the go signal for initial business analysis to proceed and appointed him to lead the project.

In earlier computerization and IT projects, he was appointed as project coordinator. Even in the two former ERP projects, Gina led the process since she had an IT background. For family-owned businesses in the Philippines, it was not uncommon to see owner-CEOs working hands on with operational matters. Dennis was not new to scoping, requirements analysis, and Gantt Charts but one aspect that he disliked was change management. This had never been his strength and he thought that he did not have the authority nor responsibility to tell people how to improve their jobs. Dennis was torn between confidence and pessimism.

Background on the Publishing Industry and Mars Publishing House

A vision-driven family business

Mars Publishing House was an offshoot of Martinez Publishing. The Martinez Publishing in the Philippines was founded by William Y. Martinez and Joy Martinez. The husband and wife founders promoted the publication of quality instructional materials for Filipino students by Filipino authors.

It was only after fourteen years of operation that William Martinez finally gained government support in his crusade when the Department of Education issued the Department Order Number 43, Series 1972. This ordinance stated that, with the purpose of “accomplishing an integrated, nationalistic, and democracy-inspired education system in the Philippines, all schools, colleges, and universities should use, if available, only textbooks authored by Filipinos and published locally in preference to those written by foreigners and printed abroad.”

Martinez Publishing was run as a family business since its founding and when Mr. Martinez passed away, his children continued the family business. Initially there was no formal Human Resources (HR) Department, no formal Accounting Department, and no formal structures. They took care of their customers and considered employees as part of the family. Staff members were loyal to the Martinez family.

Textbook Publishing

The publishing industry in the Philippines was segregated into a) textbook, b) magazine, c) newspaper and d) specialty books. In the textbook publishing sub-sector there were family corporations and large university printing presses. Most textbook publishing companies imported and distributed foreign-authored college, high school and grade school textbooks. Prohibitive tariffs made imported books cheaper than those locally printed.

Despite tough times, the Martinez siblings chose to publish original material rather than import textbooks. They believed that this was in line with their parents’ vision for high quality education for and by Filipinos.

People-oriented President

In October 2000, Maria Gina Martinez, assumed the presidency. She reorganized and improved operations efficiency in Martinez Publishing and its affiliates, and renamed it as Mars Publishing House Incorporated, Mars for short. She was respected by the employees who described her as kind, simple, and generous.

Gina believed that human capital is their most important resource. She kept close relations with talented authors and paid a fair amount for royalties. She ensured that her editors had a clear path for growth in their careers. She believed that educators and school administrators were strategic partners in education and so she gave full support to their advancement and growth by sponsoring education conferences. From her childhood days she personally knew some of the authors and clients as she tagged along with her parents in school visits. She never looked at them as clients for a single transaction. She built long-term relationships with her clients.

Reorganization of Mars

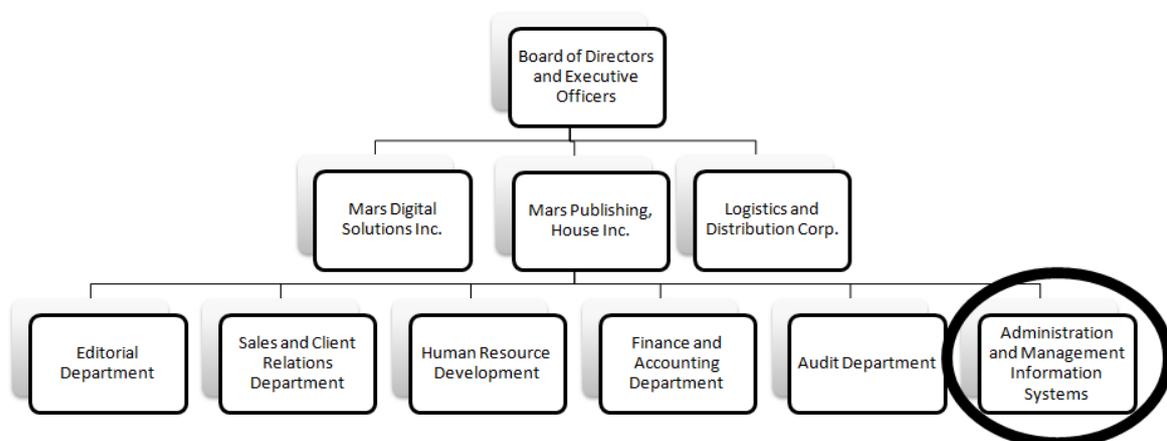
Mars used to print and distribute books through an affiliate but when Gina took over she decided to stick to their core product of publishing. She outsourced printing and eliminated the bookstores in malls which incurred huge overhead costs. Instead, Mars sold books directly to schools, wholesale, and on consignment. By eliminating margins from the bookstores, students benefited from lower prices. Direct delivery to schools guaranteed supply. In the developing economy of the Philippines, the lower textbook prices made a big difference to low-income parents since books were a major expense for low-income families, especially in rural areas. Mars retained the Production and Editorial Departments and published titles in all subjects in elementary and high school.

Before 2002, schools independently developed their curricula. School Heads and teachers reviewed hundreds of books every year and purchased those that fit their curriculum. It was very difficult to find the perfect book-curriculum fit. Most good books were imported, were geared towards a Western audience, available in English, and not in Filipino. The textbooks were printed in expensive high quality paper. In addition, schools found it difficult to get a steady supply that could guarantee a book for every student. Mars was the first textbook publishing company that actively complied with the Department of Education's Basic Education Curriculum implemented in 2002. This curriculum defined the learning competencies each student at each grade level must have on five core subjects: Filipino, English, Science, Math, and *Makabayan* (Love of Country). By publishing complete book series from elementary to high school that conformed to the Basic Education Curriculum, Mars addressed supply, price, logistics and quality constraints faced by schools and parents.

New Structure of Mars Companies

The parent company of Mars group was Mars Publishing House Incorporated which served as the publishing arm and shared services provider. Mars Digital Solutions Incorporated handled the outsourcing of printing. They imported bulk paper and had it delivered to accredited printing companies. Printed books were warehoused in Logistics Distribution Corporation which distributed books nationwide. The structure of Mars companies is shown below in Figure 1.

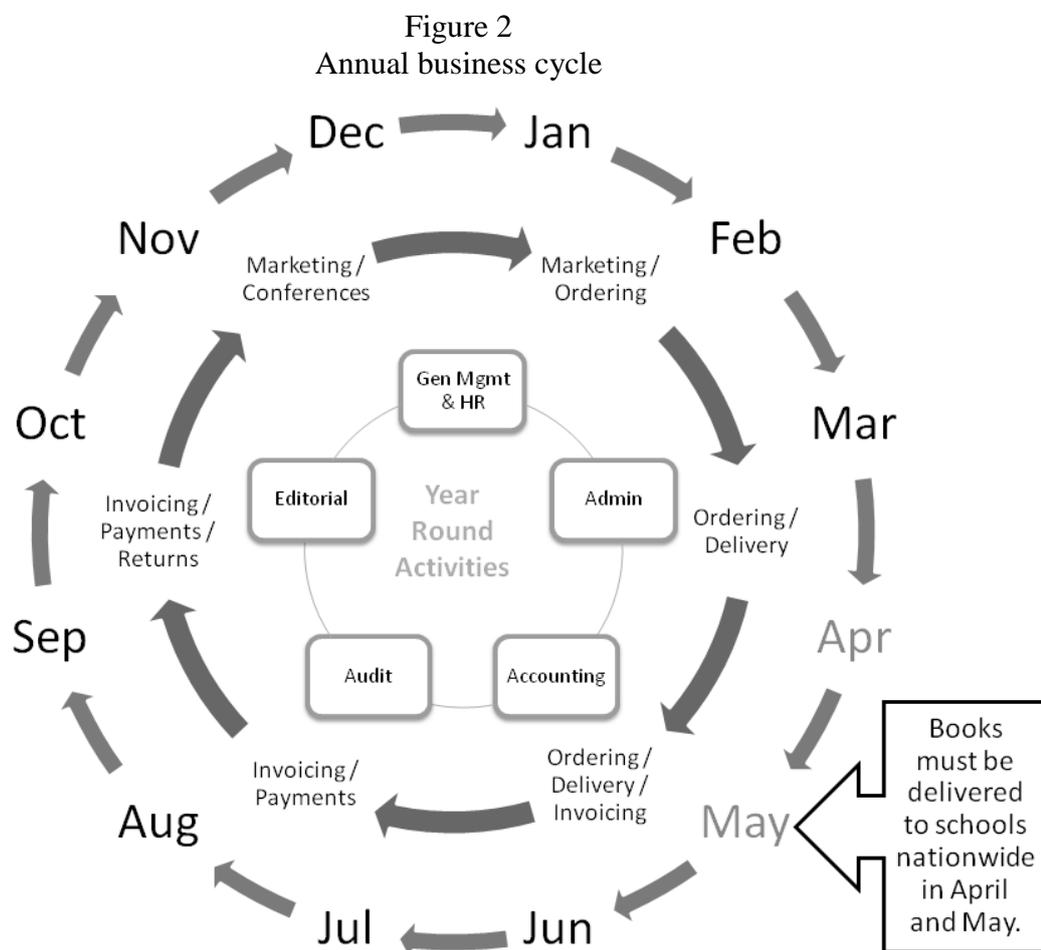
Figure 1
Mars group organizational chart



The new and bigger Mars group of companies were multi-site. The head office, Mars Publishing House, was in Luzon. Dennis, in particular, worked in the Department of Administration and Management Information Systems (encircled) located in the head office. In the Visayas and Mindanao, they set up extension offices that had their own sales personnel, warehouse and trucking capabilities and administration units. (The Philippines has three groups of islands: Luzon, Visayas and Mindanao.)

Annual Business Cycle

Mars's business cycle was synchronous with the Philippine academic cycle. Coordination between Sales and Logistics Departments must be smooth and all other departments must support these two departments especially during the enrollment periods in April and May. Figure 2 below shows that the focal point for book sales occurred every April and May. That peak season was also a potential choke point. Without an all-out support, customer relationships could be strained and accounts may be lost. Each account meant book sales for thousands of students which allowed very little or zero tolerance for error.



Classes began in mid-June every year until March of the following year. Schools, including those in far-flung regions of Visayas and Mindanao order books as early as February. Quality customer service, a priority for Mars, meant that orders must be delivered nationwide before school started which created tremendous pressure on the Sales and Logistics Departments every peak season and would sometimes required 20 to 24 hours of operation.

By June and July, Mars would still receive re-orders when some schools underestimated their first order. By July and August, clients would pay for books sold, based on customized terms. Unsold inventory was sent back to the nearest Mars office. Work in August was relatively lean so they scheduled their employee vacations and training around that time. September to December were devoted to marketing and educational conferences. January was a time for reviewing the past year's performance and fulfilling annual compliance requirements with government agencies. February was the start of another cycle. All throughout the year, new books were produced and edited.

The ERP Systems in Mars Publishing House

Managing Systems

When Gina assumed presidency, each company had its own computerized system which used stand-alone computer terminals. They upgraded their software and network to cover and connect the Visayas and Mindanao operations with the head office in Luzon and then established a web-based ERP system in 2006.

ZEST(Zero Error System Tracker). ZEST was implemented in 2006. ZEST was an ERP system developed and coded by the staff of the Management Information Systems unit. It focused on systematizing operations: from ordering to delivering to invoicing, issuing debit & credit memos, and posting of payments. It also had capability to generate statements of accounts but had limited capabilities for reporting consolidated financial information. The system worked well for everyone since it was user-friendly. It successfully combined the different stand-alone systems of Mars and affiliate companies then. However, with increased volume of transactions from all over the country, and the need for more frequent financial reporting, ZEST was becoming inadequate.

MRX(Multi-Resource Information Exchange, a branded ERP software). Mars procured MRX in 2010. At first, Gina and Dennis considered purchasing off-the-shelf accounting software but found them inadequate. They also considered two globally known brands in ERP: MRX and Miracle. When they went to the United States to know more about MRX, they were very pleased with the presentations. They thought it could address the new financial reporting needs of the company and integrate overall operations. Although it was quite expensive, they signed the contract that jump started the implementation process of a basic business version of MRX with minimal customised features.

When MRX was implemented, the staff felt that there were not enough discussions during the requirements analysis and customization phase. The sentiment was that MRX was imposed on them. When the MRX consultant discussed customizable features, staff members were assured that using MRX will make their work a breeze. With high expectations and after one week of MRX user training, they were given time to do parallel posting in both ZEST and MRX. One month after MRX went live, the Sales and Customer Service Department stopped using MRX. The MRX system was introduced when the Sales Department was flooded with orders. It was a bad time to learn new software. Sales resorted back to ZEST to keep up with orders. Soon, Warehousing and Logistics also stopped using MRX since Sales inputted requests for deliveries in ZEST. They found more impracticalities in the MRX system. Time

quickly passed and the parallel posting had gone on for fourteen months. Finance, Accounting and Audit continued to use MRX. There was no clear migration path and there was no clear transition plan.

ZEST/MRX Hybrid. The combination of ZEST and MRX made up a hybrid system which did not successfully integrate the business processes of Mars and its affiliated companies. The disconnect between the two systems became an excuse for delays and inaccurate reports, and in some cases, inter-departmental conflicts. The companies had again outgrown the two ERP systems.

The Business Analysis Phase

As soon as Dennis was given the assignment to lead the ERP project he came up with a Gantt Chart that enumerated the tasks and deadlines assigned to each person. He presented it to top management and Department Heads. He barely started the presentation when various complaints were articulated about the hybrid ZEST/MRX systems. It became obvious that there was resistance to a new ERP system.

Getting External Help

Fortunately the management consultant hired to look at the financials of Mars was invited to join the first business analysis meeting. When the discussion was getting nowhere, the management consultant suggested that the managers look at the new ERP project not only from a project management perspective but also within the context of change management. This meant that the reasons for change, the needs, and the interests of all users had to be articulated. The users could gain ownership of the project if they got involved and actively participated in the process.

The management consultant advised them to elect a core group of key managers that would become the ERP project team. The team's function would be to review and sort-out cross-functional issues and suggest solutions for collaboration and compromise. This was a necessary component in designing and implementing a new ERP system.

Managing People

Already brewing beneath the negative comments were authority and control issues between Finance and departments who had not been complying with their procedures. The need for smoother coordination between Sales and Warehousing was pinpointed. Data reconciliation across departments for consistency, accuracy and timeliness surfaced. A new ERP system would require change in mindsets and working styles.

Departments were used to working in silos. Systems improvement were left to the Department Head's initiative. Whenever changes affected other departments such as approvals, cut-off dates, or procedures, memos were unilaterally issued by Department Heads. Subordinates just followed. Suggestions were not gathered before implementation and feedback was not collected. The workers were not comfortable voicing their opinions and resorted to indirect ways of communicating disagreement. Unless they were assured that their identity would not be revealed, the reluctance to dissent prevailed.

In previous projects, Dennis encountered similar situations. He had to interview staff members himself, manage meetings and level expectations. He dealt with task forces while working around internal politics. As an IT person he recognized that he knew the technical side of managing projects but the human issues were very challenging to him. He was uncomfortable handling resistance to change, facing negative feedback, mediating, negotiating, and compromising. He thought that it would be better to get help from HR on these matters.

Getting HR to Help Manage Change

When Mars started a formal HR Department in 2006, Edna was hired as the new HR manager. She discovered that although employees were loyal and turnover was low the working environment unintentionally discouraged open communication. Since Edna came in, Dennis saw some progress in communication and transparency among employees.

From a reserved environment. “The atmosphere used to be very reserved and was not too homey”, according to Edna. In the Philippines it was very important for employees to “feel at home” at work, to have some comfort level with co-workers, so that staff members were open and candid during discussions. Otherwise they clammed up and kept their opinions to themselves. Being perceived as approachable and open was necessary for managers to gain the trust of staff members so they would have the confidence to speak their minds without fear of being put down or being shamed. This tendency to “save face” which was a dominant work attitude across the Mars staff members led to conformism. In some cases, expatriate managers who were unfamiliar with this type of indirect communication equated silence with no-opposition. In reality, this apparent silence hid resistance that was brewing from within and deeper issues would only surface when bigger problems arose.

Employees had little initiative and the managers hesitated to make decisions and often these decisions were delegated upwards to top management. This occurred whenever they dealt with cross functional issues. With this kind of an environment, Edna thought that instituting employee evaluation would definitely backfire since staff were not accustomed to getting and giving constructive feedback. Edna had problems in making employees talk openly.

To a more participative organization. Edna introduced activities for employees in cross-functional groups to enhance interactions such as sports classes, tournaments, off-site excursions, and team-building workshops. This created new bursts of energy and new friends from other departments. Edna also introduced giving small tokens of appreciation to the employee of the month or employee of the quarter. Following this lead, some managers initiated their own small incentives to performers within the team. They gave letters of commendation, acknowledged and thanked employees in public gatherings, organized short get-togethers, and provided snacks in the department. These small acts of appreciation helped improve working relations although results were not immediate.

When Dennis asked Edna to join a business analysis meeting, she noticed improvements such as how they became more open to share information, how they objectively analyzed the features of the ERP systems, and how they offered constructive recommendations.

Change Management Through a Core Group of Change Agents

With HR ready and willing to help, Dennis formed the ERP project team composed of key managers and Department Heads that included him, Edna, Chona from Finance and Accounting, May of Audit, Annie of Sales, and Arthur from the Warehousing and Logistics arm.

Dennis was relieved. With a core group by his side, he could concentrate on his IT expertise and not get bothered by HR issues. Although he was optimistic, he still had some reservations. Dennis thought that the management consultant's involvement was particularly helpful. He observed that staff listened and agreed to the consultant's suggestions. He needed an authority figure to tell people to keep things simple, particularly their business processes. He himself did not have the guts to tell Department Heads what to do, because they were more senior in age and tenure. In the Philippine culture, seniority and tenure was highly respected.

Lessons Learned

After several meetings the ERP project team members and their subordinates began to be more comfortable with each other. Dennis summarized his notes on lessons learned from the ZEST and MRX experience and shared it in Table 1. By summarizing the issues, the team found out that instead of getting overwhelmed with negative feedback they could learn from these and solve problems together by classifying them into actionable chunks of tasks. The team became unanimous in identifying the features they wanted a new ERP to have and the mistakes they did not want repeated.

Table 1
 Business case for new ERP

ERP System	ZEST	MRX	Desired ERP must have
Features and Applications	<ul style="list-style-type: none"> • Sales order management • Delivery reports • Invoicing • Posting of payments • Issuance of debit & credit memos • Statements of accounts 	<ul style="list-style-type: none"> • Cash flow management • Cost accounting • Budget management 	All features of ZEST and MRX plus: <ul style="list-style-type: none"> • Point-of-Sale Data Capture: Bar-coding • Account Verification Workflow Support • Real-time inventory and tracking • Real-time financial reporting • Customisable statements of accounts • Editorial Production Costing
Lessons from ERP Implementation Phase		Staff felt that MRX was imposed, very short user training	Adequate user training and ample time per department; both for direct users and end users, Training, testing and go live preferably not during peak season
		No clear migration path	Establish a shorter transition period from the

			current to the new ERP
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Direct User Feedback

Realizing that in larger gatherings the Department Heads dominated discussions, the ERP project team decided to collect individual comments from direct users of ZEST and MRX as shown in Table 2. Their comments were summarized as follows:

Table 2
 Feedback on ZEST and MRX system

Features	User Comments on ZEST	User Comments on MRX
Interface	<ul style="list-style-type: none"> • User friendly • More useful buttons 	<ul style="list-style-type: none"> • Too many tabs and asterisks; a lot of black screens • Unnecessary fields and forms • Difficult to edit • Requires repetitive inputs • Longer data processing time
Printing	<ul style="list-style-type: none"> • Fast printing 	<ul style="list-style-type: none"> • Slow printing • Longer waiting time for customers
Reports	<ul style="list-style-type: none"> • Faster printing of statements of accounts • Returned book reports • Daily delivery discrepancy reports • Had trial balance • Can access financial statements of Visayas and Mindanao but had to consolidate financial reports manually • Had sales information by sales agent, by school and their orders, per grade level, per book title 	<ul style="list-style-type: none"> • Only pre-designed reports can be printed • Good features for consolidated financial statements • No trial balance • Does not have facility to shuttle back and forth from detailed to consolidated data
Security and access	<ul style="list-style-type: none"> • Viewing, posting and editing access available to all direct users in Luzon. Visayas and Mindanao users only saw their portion of ZEST. Must be defined better and delimited per user in Luzon. 	<ul style="list-style-type: none"> • Very strict user access but too difficult to edit and correct • Although there were no known cases of data manipulation, new ERP must have better safety and access features
Training	<ul style="list-style-type: none"> • ZEST was user friendly and required less time for training. 	<ul style="list-style-type: none"> • Each user received one week training. Some were not able to attend because the sessions were given during the peak season.

Dennis used the two tables above as basis for moving forward in subsequent meetings where they discussed detailed approaches and potential solutions and improvements. He converted these user comments into requirements specifications for the new ERP system.

It was evident that the one most critical document needed by all departments, the linchpin of all other data requirements, was the statements of accounts. Since they were very client-oriented they heeded their clients' requests for customized statements of accounts with formats evolving from simple to complex. The new ERP system must be flexible enough to address the changes in content and issuance frequency as required by clients.

Celebrating early victories, big or small

Although the core group initially thought it would be too early to celebrate, the management consultant recommended that this be done throughout the change management process. He said that celebrating small successes improved cross functional relations and facilitated acceptance of change. The ERP project ran for months and required extra workload on top of their daily tasks. Naturally, tiredness, tense discussions, disputes, and stress led to resistance and wore down enthusiasm. Celebrating and acknowledging small victories together renewed the goodwill of each team member which was necessary to refill the social capital among them. Some of their early victories are summarized in Table 3.

Table 3
 Progress and improvements via cross-functional collaboration

Issue	Units Concerned	Progress and Improvements
Accounts Payable	<ul style="list-style-type: none"> - Accounting - Audit - Printing Digital Solutions - Administration - Information Technology 	<ul style="list-style-type: none"> • Printing Digital Solutions agreed to forward invoices no more than one week after receipt from suppliers • Purchase orders for book printing were forwarded immediately to Accounts Payable Unit • Sales invoices, and not purchase orders, were the official reference documents. These were considered valid if it matched audited Receiving Reports
Accounts Receivable	<ul style="list-style-type: none"> - Customer Service Department - Warehouse and Logistics - Accounting - Audit 	<ul style="list-style-type: none"> • Accounts Receivable Unit agreed to wait for the actual proofs of stock returns and Delivery Discrepancy Reports before preparing Credit Memos • All units agreed that new journal entries for consignment transactions would be implemented
Accounting Manual		<ul style="list-style-type: none"> • An addendum to the Accounting Manual was finalized. This one was for "Procedural Guidelines in Letter of Credit Applications".

Moving Forward

Dennis leaned towards a customized ERP system. The new ERP project's focus on cross-functional collaboration would prevent repetition of past mistakes. Although he did not completely discard the possibility of upgrading the MRX system, after the initial business analysis he was convinced that ready-made and branded systems like MRX had rigid business rules. Customizing MRX was painful and expensive. It did not adequately capture the nuances closely tied to their business processes particularly in sales and customer service.

He had not laid down a cost-benefit analysis of a customised ERP system as the comprehensive review of business processes was still ongoing. He believed that developing an in-house ERP system would be more effective. On one hand, the costs of making an in-house system was more difficult to estimate because it would be based on the man-hours required for programming each feature. On the other hand, it had the benefit of being more flexible.

Dennis noticed that the Administration and Editorial Departments were least cooperative in the meetings and they had the most number of absences or latecomers. He recognized that they must also be considered but did not give too much weight on their absences.

Besides technical issues, people issues like resistance to change caused delays. Dennis thought that those who preferred ZEST were too lazy to learn new software. His gut feeling was that 30% were still change averse, about 35% were passive and the remaining 35% were enthusiastic but had guarded optimism. As he looked into his project timeline and calendar of activities, he wondered, "How could I meet the 10-month timeline and get them to own the project and collaborate better?" He could only hope for the best and see whether this new process could really elicit everybody's cooperation and yield a useful ERP system that everyone would adopt.

Appendix 1. Glossary

ERP	Enterprise Resource Planning
HR	Human Resources
IT	Information Technology
Miracle	A disguised name of a branded ERP software that competes with MRX
MRX	Multi-Resource Information Exchange (a disguised name of a branded ERP software)
ZEST	Zero Error System Tracker (Mars Publishing House's proprietary software, the name was also disguised)

Appendix 2. Technical Note on Enterprise Resource Planning Systems and Change Management

What is ERP?

The precursor of ERP is the MRP, short for "Materials Requirements Planning", a production, planning and inventory control system used for manufacturing and engineering systems to provide timely information for procurement and production scheduling.

A similar concept of automated information systems designed for specific needs of other departments soon followed such as financial and accounting systems, human resource planning and information systems, project management modules and others.

ERP is an abbreviation for "Enterprise Resource Planning". It typically refers to a software solution that integrates information requirements of businesses across multiple departments, multiple sites and even multiple business units or industries. An ERP system may be small or large depending on the level of integration, data volume and connectivity the business or group of business units require. ERP systems are very costly and tend to be adopted by larger competitive companies to address time to market delivery speed, transactional accuracy, scale economies, globalization and speedier turnover.

Various software companies have developed generic ERP systems following global business principles and standards of operation in manufacturing, finance, construction, and customer relationship management. ERP systems peaked in gross sales in the 1990s but after the dot com bubble burst, the 9/11 attack, and U.S. market saturation, mergers and acquisitions among them occurred. The key vendors in the market now are SAP, Oracle, Infor and

Microsoft Dynamics.¹ The basic premise of these providers is that they can customise their ERP systems or modules therein for any client.

Steps in ERP Process Implementation

Before an ERP software can be used by a business there are stages before “going live”: planning and requirements analysis, design, detailed design, implementation (going live) and maintenance. O’Donnell of Datacor² simplifies the ERP process in 5 steps as follows:

1. *Strategic Planning*
 - 1.1. *Assign a project team*
 - 1.2. *Examine current business processes and information flow*
 - 1.3. *Set objectives*
 - 1.4. *Develop a project plan*
2. *Procedure review*
 - 2.1. *Review software capabilities*
 - 2.2. *Identify manual processes*
 - 2.3. *Develop standard operating procedures*
3. *Data collection and clean up*
 - 3.1. *Convert data*
 - 3.2. *Collect new data*
 - 3.3. *Review all data input*
 - 3.4. *Clean up data*
4. *Training and Testing*
 - 4.1. *Pre-test the database*
 - 4.2. *Verify testing*
 - 4.3. *Train the trainer*
 - 4.4. *Perform the final testing*
5. *Go Live and Evaluation*
 - 5.1. *Develop a final Go-Live Checklist*
 - 5.2. *Evaluate the solution*

ERP consultants are fielded by software companies to assist clients in all these stages but it is important to remember that they are presumably experts in their software’s capabilities but not necessarily knowledgeable in the nuances of every business operation. Many costly ERP projects have failed for inadequacies in one or two of the above stages. So before embarking on an ERP project it is important to know the critical success factors.

Critical Success Factors in ERP Implementation

Ip (2010) states that change management, user involvement (key users and direct users), participation and teamwork, empowerment of the project team to make decisions, communication across the organization about the ERP (Top-down, bottom-up, horizontal), training, top management support, effective project and risk management are all critical success factors. Similar critical issues were pointed out by Ehie (2005) in addition to process re-engineering and consulting services. He further suggested that ERP implementation should not be viewed as just an IT solution but as a system that would transform the company to a higher level of performance through a streamlined business process.

Ramayah (2007) says that shared beliefs on perceived usefulness and perceived ease-of-use of the ERP have a huge impact on intent to use. Boff (2003) says that ERP is primarily about empowerment. Enabling employees to make better decisions at all levels through information must be the focus. Stephenson (2006) proposes that ERP helps organizational success through operational velocity attainment. He defined operational velocity as the speed in delivering products or services to market, meeting all customer expectations in a timely manner, and decreasing time for the appearance of a positive revenue stream as much as possible.

ERP implementation failure have been attributed to several factors like inadequate pre or post implementation end-user ERP training as proposed by Bradley (2007). Pierse (2010) posits that, in failed ERP projects, at least one of these situations are encountered: 1) The software vendor does not know enough about the client's business to assess how well their product will fit and what customisation may be needed, 2) The client underestimates the complexity of what they do and 3) The right questions weren't asked by a properly constructed implementation team who are sufficiently qualified to cut through the jargon and sales speak.

Inevitably, this points out that the critical factors for ERP implementation success or failure are either caused or mediated by people. Following Ehie's (2005) proposition, ERP is a means to revisit old ways and transform business processes. ERP becomes effective when it induces improvements and re-engineers business processes and works with and through engaged, collaborative and innovative stakeholders.

Endnotes

¹ ERP vendors and their products catering to different verticals. *Management Study Guide*. Retrieved from <http://www.managementstudyguide.com/erp-vendors.htm>.

² O'Donnell, S. W. *5 steps to successful ERP implementation*. Retrieved from <http://www.datacorinc.com/articles/news/erp.pdf>.

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