

## BUSINESS CONSULTING



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#### **Executive Summary**

**Introduction:** Carmen Baker founded Process Design & Development in 2012. For almost 20 years Carmen Baker has spent time in the process of organizational change. Process Design & Development is committed to help organizations maximize their potential. With 20 years of knowledge and experience Carmen Baker provides unique perspectives about her business process consultants. Process Design & Development provides services that include: Enterprise Resource Process design(ERP), business licensing and review & analysis, code enforcement process review & analysis, information technology systems review & analysis, organizational review & analysis, planning & zoning process review & analysis, and private transportation regulatory assistance.

**Method:** Enterprise Resource process design is an integrated system, which first became popular during the 1960-1970s. Enterprise is used to control internal and external resources which consist from financial resources, tangible assets and materials, materials and human resources. There are a couple reasons that ERP uses post-implementing of the system. Maintenance within ERP can have serious defects during the process which causes it to modify some functions. Also, some modification of some of the functions are often insufficient. The post-implementation stage of an ERP system is an on-going process because there will always be a need to improve the system. The effect of ERP post-implementation on business processes specifically reduces the cost of business that is provided to the vendors of choice while also speeding up the connections between corporate connections to other as well. With almost any business, they want to make sure that once they implement a new system, it will be successful and won't hurt their business.

Results: Process Design & Development applied the ERP system and concepts according to the continuous improvements that the specific external customer is looking for. Speaking with Carmen Baker, we got a lot of insight on how to implement an ERP system and also the the some roadblocks. Most of the time spent on the ERP is the implementation and training. A huge amount of the resistance that came in the company's experience was because of the people being set in their ways of doing things. The training would take a significant time in their efforts of getting through to the employees, which eventually happened. Integration of the entire system we found out is harder and can result in a failure of the entire system. Taking this into account, Process Design & Development would focus on the individual departments, making sure it was completed successfully.

**Discussion:** Process Design & Development has a great approach to the implementation of ERP systems. The strengths of the company are their ability to bring significant improvement to the companies they service, provide exceptional consulting and training. Some weaknesses that we addressed were that the system only being able to integrate with the departments and not the entire company. Also, the difficulties of going through a governmental company than a private one because of the need to check and obtain approval for many things. With ERP being difficult in bringing different departments together in a centralized module, we suggest having constant communication with the company possibly bring about an end to this setback. We learned that ERP is not just a system that will work everywhere, but that you must carefully analyze whether the system will improve your company significantly. That there is much more than just adopting a new system, but a full organizational commitment must be taken in order to achieve success.



#### Introduction

Process Design & Development, LLC was established in 2012 in Miami, Florida. Process Design & Development(PD2) Chief Executive Officer is Carmen Baker. She has spent about 20 years in the process of organizational change. Mrs. Baker worked mainly with government and private entity teams to right-align processes and grow in new and changing environments. She's committed in helping organizations maximize their potential. Being the CEO for her company, PD2, she has an advantage of knowledge and years of experience, to provide unique perspectives to her clients. Process Design & Development provides services including:

- Enterprise Resource Process Design(ERP)
- Business Licensing Review & Analysis
- Code Enforcement Process Review & Analysis
- Information Technology Systems Review & Analysis
- Organizational Review & Analysis
- Planning & Zoning Process Review & Analysis
- Private Transportation Regulatory Assistance

Process Design & Development, LLC consults their clients regarding their business process. They focus on recommending organizational efficiencies and build ups by reviewing and analyzing their existing resource, business processes, and systems. Process Design & Development, LLC conducts these reviews in small, medium and large organizations not only focusing on just one specific size of a company. In some cases, Process Design & Development, collaborates with internal staff to conduct reviews and to receive



recommendations to intensify performance. Allowing them to receive internal staff input is important in their process.

When gathering and evaluating the company's current physical layout, they move all information to PD2's Subject Matter Experts (SME). This allows the SMEs to analyze all the required information. When it comes to the SME's, they are required to have prior experience with the industry that they are assigned to.

Depending on the size of the organization being evaluated, affects the span of time it takes to gather information needed to provide a valid recommendation. The great part about PD2 is that they are willing to travel to any location. That can be beneficial to companies who have multiple locations. PD2 requires a deposit from their client, as a fee to travel. Leaving the organization with a balance that must be cleared, when giving the organization their written presentation and their recommendations. PD2 does not accept any engagement, unless a significant return on investment that can be realized by their clients as a result from reviewing and recommending.

Within PD2, they focus on the most efficient way to provide governmental services. Since Mrs. Baker has knowledge on government practices, that allows PD2 to transform the operations. In advantage, PD2 is able to identify all required skills set for employees and understand their required policy changes. Having lean government, they can adopt waste-reducing concepts that are used in the manufacturing environments and apply it to the procedures in government. Being able to involve the workforce is an important element when PD2 provides quality services in a lean environment. Which results in allowing the employees to think outside of the box. They created an incentive system, which rewards all employees for meeting their



customers' needs. Some of the public services that increase the efficiency within PD2 are as listed below.

- Improve the service delivery while reducing operating cost
- Design work processes/business processes
- · Build a culture of efficiency and transparency
- Creating a framework of information for management that can balance management flexibility with control

Some problems that Process Design & Development face is that not all Enterprise Resource Process Design (ERP) are fully integrated. They face problems within each department due to all departments having certain laws and information. ERP for the most part, is negotiated through the finance department. This requires for the organizations to have the latest ERP system. These ERP systems are designed for payroll and human resource budget but when it comes to other departments they generate revenue in silos.

Process Design & Development is a company that was established six years ago. Their staff has worked with clients in multiple regions, not only in Florida. Although most of their clients are in South Florida, they do have clients in South America, the Caribbean and Europe. Process Design & Development, in many cases work with other business consultants. Some of their clients have existing consultants, that do not have complete knowledge in a specific department of their client's organization. In many of the cases PD2 provides their clients with SMEs to provide them with specific skills that are relevant to their clients' needs. Process Design & Development goal is to grow PD2 by helping as many



organizations as possible. Being able to help a lot of organizations increases their overall efficiency, improves customer satisfaction, and improves the level of PD2s client base.

### **METHOD**

## Overview of ERP/History

Enterprise resource planning is an integrated system. According to *Peeters, J. (2009),* Enterprise resource planning (ERP) was first popular during the 1960s and 1970s. Royal Phillps Electronics in the Netherlands, were one of the first to combine such technology to tie multiple functions of the company. They used it to create a relationship between accounting, inventory control and human resources management. Back in the 1940s, it was common to use only carbon-copied forms in regards to any business transactions. However; it resulted in multiple errors, lack of communication and inconsistencies. Later, as stated by *Peeters, J. (2009),* Internal Business Corporation (IBM) developed a version of ERP and MRP systems by announcing *Production Information and Control System (PICS).* 

Enterprise Resource Planning is used to control internal and external resources. The resources vary from financial resources, tangible assets, materials and human resources. An Enterprise Resource Planning system, smoothens the flow of information between all business functions. Along with improving the communication between functions, but it can also reduce the operating cost by having well control over inventory, production and marketing. A lot of the reasons companies implement Enterprise Resource Planning, is due to needing help in their infrastructure management and strategic planning processes. Firms focuses on improving the allocation for the firm's processes into one clear process. The end goal of this new process is to have access through one enterprise-wide information network and creates access to employees in



Realtime. Having an Enterprise Resource Planning allows the process to have standardizing procedures and reduces errors.

According to *Nisula, K., & Pekkola, S. (2018)*, it's best to have organizations worked on by each department rather than just focusing on the core of the business. She mentions how vital it is to separate sections then bring them together once each department improves. Everyone wants a fully integrated company, but it's not realistic or efficient to try to enhance all at once. They emphasized how developing a holistic core with three goals can be a success. Below is a list of the three perspectives.

- 1. Structure to bring intellectual coherence
- 2. People organized in learning communities
- 3. Enterprise resource planning

Throughout history, ERP has been used in just about every type of industry. In the article, *ERP Software Instrumental in Turning One-Man Shop into Multi-Million Dollar Operation*, they focused on achieving new levels of responsiveness, seamless instantaneous access and staying in front of the curve. The article focuses on Precision Production Incorporate. Precision Products Inc is in Greenwood, Indiana. They're a machine shop and by implementing Enterprise Resource Planning they were able to grow from a one-man company to a multi-million-dollar business. They were able to achieve prominent level customer representing the following industries since 1974.

- · Homeland security
- Industrial maintenance
- Automation
- Tooling
- Contract machining industries



## The post-implementation Stage

- Reasons for post-implementation of an ERP system:
  - The post-implementation stage is the most important stage involving the ERP systems. The organization must support the on-going improvement so the weaknesses that are listed will change for the better and processes will evolve overtime. Having many different aspects to focus on, there are two specific reasons for the post-implementation stage:
- 1. According to Mok Ha, Y., & Jun Ahn, H. (2014). "due to the enormous size of ERP systems, its maintenance can often involve dealing with serious defects during implementation that leads to modification or addition of some functions." For example: system and data maintenance activities. Factors affecting the performance of Enterprise Resource Planning (ERP) systems in the post-implementation stage. *Behavior & Information Technology*, *33*(10), 1065-1081.)
- 2. According to Davenport et al. (2004), McGinnis, Huang, Shang and Seddon (2007), Allen (2011) "Simple modification or extension of some of the functions is often insufficient. Instead, on-going reengineering of the business processes is necessary. This is neglected by many companies that conduct only initial process redesign before implementation"
  - i. "It is also often observed that many ERP implementations focus on just core modules initially. These need to be expanded and integrated with other processes or legacy systems afterwards to maximize the benefits (Davenport et al. 2004). Without these efforts, ERP systems may

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inevitably contain many disconnects in the processes (Allen 2011), which may inhibit enterprise-wide process integration. Hence, process transformation by ERP needs to be emphasized in the same way as it is for initial implementation (WelchandKordysh 2007)." (Mok Ha, Y., & Jun Ahn, H. (2014). Factors affecting the performance of Enterprise Resource Planning (ERP) systems in the post-implementation stage. *Behavior & Information Technology*, *33*(10), 1065-1081.)

## Research into the effects on business processes

The post-implementation stage of an ERP system is an on-going process because there will always be a need to improve the system. The enterprise that is utilizing this system will have a change in operations, the data and information that is being collected and used, also addressing specific maintenance of defects plaguing the system (one of the two key reasons mentioned above). Changes overtime of a business will always require continuous improvement. Keeping the system up to date must be done or else the strengths of the company will diminish; creating major setbacks and possibly destroying the company. According to the article, *Rethinking ERP success*, "Many organizations see the start-up of an ERP system as the final goal instead of a milestone, but many ERP have been discontinued 3 months to a year after they were "successfully" completed, which shows that a static view of ERP implementation is inaccurate, not strategic, and potentially costly." (McGinnis, T. C., & Huang, Z. (2007). The costs associated with the implementation of an ERP system were on average 10 million dollars in 1997. That cost goes up significantly, when hiring consulting firms for professional help in the implementation of ERP. Improperly understanding how an ERP system is to be conducted and enhanced,



overtime for the purposes of continuous improvement of business processes, will bring a huge blow to the company in operations and a waste of resources.

## 2 categories: Internal process performance and financial performance

The effect of ERP post-implementation on business processes specifically reduces the cost of business that is provided to the vendors of choice while also speeding up the connections between corporate connections to other as well. The full effect "simplifies work processes, hasten corporate responses, increase validity and timeliness of data, and reduce secretarial work processes... It can also improve output sales value and learn inventory turnover rate" (Tsai, M., Li, E. Y., Lee, K., & Tung, W. (2011). Beyond ERP Implementation. *Total Quality Management & Business Excellence*, 22(2), 131-144.) A study was done which broke down the effect of post-implementation maintenance into two categories: Internal process performance & Financial performance. The hypothesis developed is as follows: "Post-implementation maintenance of an ERP system has a positive and significant impact on business performance." The results of the study are listed below

### Measurement of Business Performance Construction

### **Internal Processes Performance Sources**

- 1. The ERP system will process the daily business data to enhance correctness and instantaneity of information
- 2. A unified language is used to reduce the cost of internal communication
- 3. Processes are improved to make all departments use consistent forms and processes
- 4. The ERP system can rapidly signal abnormal problems and enforce the internal cost control



- 5. The visibility of information is enhanced for enterprises in various locations to transmit information smoothly
- 6. The reports provided by the ERP system can reduce the waste of human resources and time (Sources of this part of the study: DeLone and McLean (1992); Cronin et al. (1994); Dykeman (1997); Bingi et al. (1999)

#### **Financial Performance Sources**

- 7. Increase of inventory turnover
- 8. Increase of receivable turnover
- 9. Decrease of cost of human resources and increase of productivity
- 10. Increase of profit margin

(Sources of this part of the study: Gatian (1994); Cronin (1995); Koushik and Pete (2000)

None of this would be possible if it was not for organizational support. The importance of organizational support in the post-implementation stage is crucial to a successful future of the ERP system. Everyone must be on board and properly trained on how to use the system or chaos will happen immediately. Most ERP implementations go under because many settings of the organization pertaining to the staff structure and roles of employees are not addressed after the go-live stage. Critical success factors must be examined in order for the goal of the business to be achieved in the long run.

## Critical Success Factors



With almost any business, they want to make sure that once they implement a new system, it will be successful and won't hurt their business. According to the article, "65% of executives believe that ERP systems have at least a moderate chance of hurting their businesses because of potential for implementation problems" (Umble, Elisabeth J., Haft, Ronald R., Umble, M. Michael, 2003). Before a company implements ERP, they first want to make sure that the actual implementation will be successful, rather than hurt the company. One way for a company to do this is to identify critical success factors. The article chose the nine most important critical success factors in ERP implementation:

## 1. Clear understanding of strategic goals

a. One way for the company to be successful in this area would be to clearly address what the expectations and goals are. They also need to be able to define why they should implement ERP and what needs the system will address to the business.

## 2. Commitment by top management

a. In order for the implementation of ERP to be successful in each business, the company should have a strong leadership planning committee that is committed throughout the entire implementation of a project. This committee helps the project through the implementation stage and has a full understanding of the ERP system.

## 3. Excellent project management

a. One thing that project management does is that it tracks the progress of the project. Which, in the long run, will help make sure each project is on track with the original schedule. One way to have excellent project management is to make sure that the projects objectives are clearly defined throughout the entire project.



### 4. Organizational change management

a. One of the effects of implementing an ERP system is that it ends up changing the way an organization operates. With the system changing the way the organization operates, it can either go two different directions. If the company was prepared for this shift in the way the organization operates, they will be able to smoothly transition to the new processes. If none of the employees are prepared for the shift, there may be some resistance, or even chaos, when the ERP system is implemented.

## 5. Great implementation team

a. One of the other critical success factors is making sure that the implementation team is made up of the most skilled people in the organization who help take in part of the many critical decisions in the organization. This team will end up creating the project plan and schedule for the project. An example of a task that the team is responsible for is coming up with the due dates for all the tasks that are in each of the projects.

### 6. Data accuracy

a. One way to ensure that there is data accuracy throughout the implementation process is to get rid of the old system, so that no two parallel systems are running. As for employees, they must make sure that they accurately enter in the data into the system. Any data that is entered incorrectly will create a problem for the enterprise.

## 7. Extensive education and training



a. Employees must be able to understand how to the ERP system works in their organization. With the help of training, the employees will end up having a better understanding of how the system works and how to create processes within the system. The article suggests that "reserving 10-15% of the total ERP implementation budget for training will give an organization an 80% chance of implementation success" (Umble, Elisabeth J., Haft, Ronald R., Umble, M. Michael, 2003). With the right education and training of the ERP system, the company has a less of a chance of running into problems after the implementation training.

## 8. Focused performance measures

a. The performance measures help the company figure out how is the ERP system is performing in the organization. One example of a measure would be whether or not, the deliveries were delivered on time or not. The implementation must include the project evaluation measure in the beginning of the project. The employees and management must make sure that they communicate the expectations and time frames of each of the projects.

## 9. Multi-site issues

a. With using multi-site implementation, each of the sites ends up being different to other aspects of the company. Depending on how the ERP system is installed, and depending on the approach of the implementation, it can either make the implementation difficult or easy for the company.



#### Results

#### Introduction

While selecting a business consulting company, we understood that PD2 focuses on improving the overall performance of their clients' company. They are given issues or struggles and work in depth with the company to recommend positive results. We decided to focus on Enterprise Resource Planning due to the fact that it shows how to integrate departments to increase Realtime and overall efficiency. Our group chose to have an interview with CEO, Carmen Baker from Miami, Florida. We felt this company would be a great choice due to their client base being mainly private and government. We held most of the interview over Video Chat and the rest over via phone call. Our interview focused on the overall struggles, successes and experience, that Mrs. Baker attained. She chose to mention a lot about her recent client Miami-Dade Finance Department, Business Tax Collector's office

#### **Overview of Enterprise Resource Planning**

As a process business consultant, Carmen Baker expressed her struggles within Enterprise Resource Planning implementation. A lot of the issues she encountered varied depending on the type of industry. For example, when working with a private company, she was able to get through the job much more efficient and quicker due to upper management allowing her to take over. They received advice, willing. However; when working with a public or government company, it was a struggle to go through the hierarchy and go through the process of the type of regulations set in place. She also mentioned that no matter what kind of industry she would consult within Enterprise Resource Planning, most of the work was done on training and maintaining. Mrs. Baker also expressed her opinion on how there is no such thing on an ERP system being fully integrated in a whole company. She explained, how you receive the best results when you focus on each department as one to have a successful project. She told a story, specifically with *Miami-Dade Finance Department*, *Business Tax Collector's office*, they had issues within their accounting, finance and human resource department. They used the services from Mrs. Baker



to implement the organizational tool to manage information. And overall, after her services they were able to share data in a productive manner, along with increase overall revenue.

## **Practice of Enterprise Resource Planning**

The majority of our interviews focused on implementation, post implementation and overall experience of consulting with Enterprise Resource Planning. We explained what our end goal was for our project and Mrs. Baker was able to discuss with us her opinions on how she runs her company. A lot of the times when clients require more knowledge or work than PD2 cannot sustain, she partners with other consultants. Her process on finding any issues within a company is first done by creating a flow chart on the entire department's process. She evaluated the raw data that the company allows her to see. Then uses her many years of experience within processes development to make recommendations within any defects that she sees. She recommended to follow through with the ERP system in the Finance department due to so many activities that are occurring. She mentioned that most of negotiations occurs through the finance department, in order to ensure that they have the most up to date technology. Mrs. Baker told us that most of her time is spent on training and maintaining. After having employees who are used to a routine schedule, it becomes difficult to completely change their method of working. But she mentioned, it takes continuous improvement to have a successful outcome.

#### Comparison

In order to attain full understanding of full advantages and disadvantages of Enterprise Resource

Planning, we gathered questions in which we asked about Mrs. Bakers experience in different industries,
departments, end user's goals. We used our research to allow us to prepare for the type of answers she was
going to give us. By comparing how successful EPR can improve a company overall. We compared her
answers to Precision Products Inc, from Greenwood Indiana. They offer multiple products and services
that use innovative ideas and technology to create solutions that reduces cost and labor. They realized that
ERP only benefited their warehouse side, rather than their manufacturing side. Like Mrs. Baker



mentioned, "ERP systems are not always going to be fully integrated for all part of a company". They both had similar goals to achieve a high level of responsiveness, increase access of information, and of course be better than their competitor, by staying ahead of the curve.

## **Discussion**

## Strengths/Weaknesses

Gathering all information from above we were able to analyze all information within the company. Within Process Design & Development their focus of weakness relates to not being able to implement a fully integrated ERP system to the entire company. This is due to each department having different values. Most of Process Design & Development clients were unorganized before implementing ERP. Once they implemented ERP to their companies they noticed that many of their companies improved significantly, but they did receive negative results from other departments. They noticed that ERP isn't user friendly for every department. For the most part ERP is negotiated through the finance department. This requires for the organizations to have the latest ERP system. These ERP systems are designed for payroll and HR budget but when it comes to other departments they generate revenue in silos. When implementing their stages, they do face struggles with governmental organizations. With government organizations they must have many approvals due to public regulations. Causing Process Design & Development to take more time on them to get them done. Process Design & Development now focuses on implement ERP to each department separately. Carmen Baker focuses on each department at their own pace and moves on until each department knows how to work ERP.



#### Recommendations:

As we were able to gather all the strengths and weaknesses we have given Process Design & Development solid recommendations for the company regarding the of Enterprise Resource Process Design(ERP). Since ERP implementation has been an issue within different departments we recommended having constant communication with the organization. This allows PD2 to know about the issues they have with ERP and can continue to help the organization out when needing to. Since Process Design & Development has a long-term goal of being able to integrate new automated processes and fit into the ERP throughout interconnected departments to eliminate silos. They can possibly gather together with people who have experience with this issue and have background information about it. Along with our recommendation, we would say is find a similar industry to study. By studying their struggles, PD2 might be able to increase their skills in order to learn from other's mistakes. A weakness they experienced during the implementation phase, which PD2 believes to have the most obstacles in, is that many vendors can get involved. This becomes an issue because many opinions from the vendors can possibly make implementing longer than it should. What can possibly be done is recommend each department to gather their most knowledgeable vendors and having a cap on numbers of vendors that can come. This allows for is to run smoothly and reduce the number of retractions given.

## Effectiveness of PD2's Implementation of ERP

With the two different sectors that Process Design & Development implements an ERP system for, they both have different experiences during the implementation stage. The government sector is a bit more complicated than the private sector. When trying to implement an ERP system for a governmental companies and organizations, it takes them a much longer time to



complete the implementation stage. Due to the fact, that there are many public restrictions for these organizations, that they must get many items approved throughout the entire implementation process. On the other hand, the private sector is a much faster process, since there are less obstacles that Process Design & Development has to go through to implement the ERP system. With each organization, there are also vendors that are put into the ERP system. Depending on the number of vendors that each company has, the implementation stage varies. If each vendor has many different opinions that are about the company, it may end up prolonging the process of having the ERP system implemented.

Most departments in a company don't require or need to have an ERP system implemented in.

With Process Design & Development, the only two departments that drastically improved from having an ERP system implemented were the Finance and Human Resource departments in other organizations. With, there can also be negative effects of having ERP implemented into different departments.

One effect of having an ERP system implemented is that it helps track tasks that are within a company. Allowing the company to figure out what part of the process the product or information may be in. It also helps each department within the organization communicate. With having the entire process in a single system, it allows for other departments know what is going on within each department.

## Effectiveness of PD2's Post Implementation of ERP

Process Design & Development Consulting Firm has an exceptional post-implementation process. Going through the answers to our interview questions, every answer links to a majority, if not all the things listed above of the methods for successful post-implementation and



developing critical success factors. Asking about their objectives of continuous improvement for the companies that they consult with, Carmen Baker said the main objective is the training of employees; making sure they are equipped with the operation and understanding of the latest and new technology. Proper training the number one reason that consulting firms are hired. Giving the organization, a professional understanding of the ERP is needed because everyone including upper management. They must all understand how it works. It is a trickling down effect of information because after the firm departs, the end-users and top management will look to the higher executives for tips on what to do and where to go. The firm also has short-term and long-term goals they set in place for the company they are aiding.

Short term: identify the manual relevant processes and then automate

Long-term: Integrate new automated processes and fit into the ERP throughout interconnected department to eliminate silos.

These goals are important so that the company cannot revert to the old processes. With the resistance that will be encountered during the beginning of go-live point of the system, it is known for employees to go back to the legacy system when encountering difficulties with the new ERP system. Considering these goals, they bring a positive way to make the system adaptation a lot easier to get a hold of. The automation of the data and processes into an interconnected department takes out the non-value adding steps, bringing speed and ease to procedures and customers (internal and external).

During the post-implementation of an ERP system, companies want to see the result, either tangible or intangible, of whether the ERP is meeting their expectations and pushing their productivity up. Process Design & Development measures the improved productivity and



revenue to measure the success of the system since its start. The saying is "you can't analyze what you can't measure" so this gives the customer a data visual of what's going on and if this was a good decision in bringing in the ERP system. The two measures are really the two categories of how one article describes, how to measure the business performance. Also, the firm takes exit interviews of the end-users to measure their satisfaction of the new ERP system. As stated earlier, this is very important that the end-users are able to utilize the system in a feasible manner. The end-users will have the most interaction with the system than anyone else is the company. Assuring they are knowledgeable with the functions will ensure great experiences with customers. Great experiences, internally, will come about as well. According to Mok Ha, Y., & Jun Ahn, H. (2014), "Because user training improves users' understanding of ERP, it can motivate users to be more active and cooperative in communication and collaboration with other departments in the post-implementation stage.". By creating a close relationship between employees, it makes the work place more like home, giving way to more group efforts and barriers being broken down. Most business that have employees that enjoy each other are more likely to thrive. We believe Process Design & Development has a great approach to how they conduct the post-implementation stage of ERP. By not taking shortcuts in their services in anyway, they are improving businesses for the better.

#### Future Direction

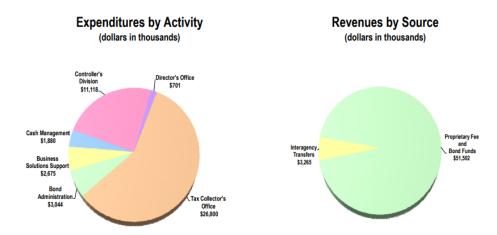
As part of Process Design & Development's continues fruitful, they are continuously improving and planning for future success. Their plans include helping as many organizations improve and help those organizations be successful in the long run. With having Process Design & Development be a consultant for many organizations, this allows them to help those that are currently struggling or need to have improvements within the organization. From speaking with



Carmen Baker, once Process Design & Development helps a client improve processes in their organization, they improve from 10% up to about 30%. In the direction that the company is headed now, this would allow them to increase in the quantity and quality of clients that ask for their help to improve their organizations processes.

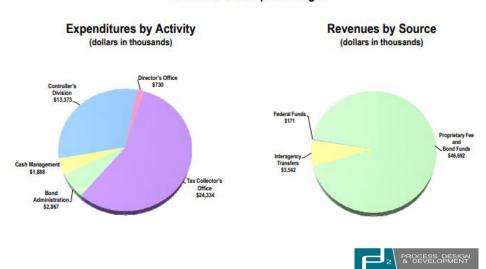


## FY 2017-18 Adopted Budget

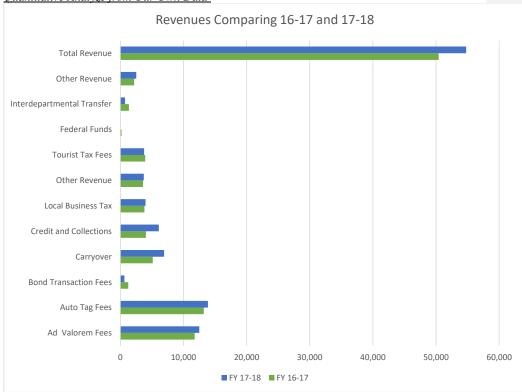


Shown in the pie charts are displays of the expenses and revenues done by Miami-Dade Finance Department, Business Tax Collector's office. Miami-Dade Finance Department, Business Tax Collector's office was one of PD2's recent client. You can see where they invested in *Business Solution Support*, which is the consulting of PD2's. By investing in \$2,675, you can see how they were able to improve their revenue and efficiency.

## FY 2016-17 Adopted Budget



## Quantitative Analyze from Our Own Data



The bar graph above illustrates how the revenues has increased after PD2 consulted Miami-Dade Finance Department, Business Tax Collector's office. Miami-Dade Finance Department showed revenue improvement at about \$4,362 in just one year. Listed are the type of revenues that Miami-Dade focuses on in their financial statements.



### Interview Questions

During the process of researching the company we were able to speak to the Chief Executive Officer(CEO) Carmen Baker. We were all able to ask her the following questions through video chat.

### 1. How is the ERP system used at the company?

Enterprise Resource Planning system has been used in PD2. We have consulted multiple companies to improve their Human Resource Department along with their Finance department.

## $2.\ Do\ you\ have\ any\ experience\ using\ the\ ERP\ technique\ if\ so\ what\ ERP\ system?$ Can you provide us

## with your experience?

Yes, we have experience in the technique of Oracle. In this case, Oracle is functional but has limited integration capabilities and therefore creates silos between departments. Silos between departments are important to increase efficiency in our clients.

### 3. How do your customers and employees react to changes within the company?

The reaction of our customers and employees depends on the selling and buy-in. Employee involvement and buy-in is critical to implementation. Well structure and organization are a vital portion of the implementation phase. If the implementation process is done correctly, we result in having happy customers. Happy customers are the ultimate validation.

#### 4. What is your most recent and biggest project?

Our most recent and biggest project is the business process and staffing analysis for the Miami-Dade Finance Department, Business Tax Collector's office.

## 5. Are you able to provide us with specific information and data from your company about this project?

Sorry, a lot of the information regarding data from our company has confidentiality agreements.

#### 6. How do you ensure customer satisfaction?

We ensure customer satisfaction through requesting weekly feedback. If needs and wants are not yet reached, then we guarantee revisits on the situation.



## 7. How long did it take your company to implement ERP system for your clients operational and technology improvements?

The duration to implement ERP systems for our clients depending on the complexity and the industry, but on an average in our experience it takes 9-18 months.

## 8. What are the company objectives set for your continuous process improvements?

Our company's objectives focus on continuous training. Training is always one of our main priority on the newest and latest technology for the job at hand.

## 9. How has ERP quantitatively shown your company improvement with your customers (internal and external)?

EPR has fully integrated ERP systems that has improved a business process from 10% up to 30%, Conservatively.

## 10. Can you provide recent data supports the previous question?

Yes! I can send you a link that provides the revenue change, along with the budget in my recent project with the Miami-Dade Finance Department, Business Tax Collector's office.

# 11. What are short and long-term goals that have been set to achieve continuous process improvement through ERP?

Short term goals: identify relevant manual processes then automate.

Long term goals: Integrate new automated processes and fit into the ERP throughout interconnected departments to eliminate silos.

## 12. How did you define and measure success once you implemented ERP into the company?

When defining and measure success once implementation is complete is done by having results of improved productivity and revenue.



## 13. When looking into different ERP vendors, what specific things did you look for to make sure the ERP implementation would "line up" with your current practices?

When we investigate different ERP vendors, we look for demos from the vendor and I vet other users with same needs.

## 14. How long did it take to train each employee to use the ERP system successfully?

Too long, it can vary depending on how many employees and the complexity of their department.

## 15. How was your clients company like before you implemented ERP, how was it after you've implemented ERP?

Majority of my client's company was, chaotic before ERP. After the implementation of ERP, we noticed drastic improvement especially within the finance department and Human Resource department but overall, we received negative results from other departments. We realized that is was not user friendly for other very relevant departments.

## 16. Did you originally have ERP when the business started? If not, why did the company decide it was time to implement ERP?

Our clients company did have ERP when the business first started. It was currently in the Finance Department and Human Resource Department. We worked with consulting the portions of wrongly implementation.

## 17. Was there a difference between the implementation stage between governmental organizations and private businesses? If so, can you explain?

There is a difference when implementation stages between governmental organizations and private businesses. When working for a private organization, a lot of the times upper management gets out of the way for the sake of expediency. However, Government organization is much more complicated. When working with government organizations, you have to get tons of approvals due to public regulations.

## 18. How did you choose what portion of your clients' company to focus on, when implementing ERP?

First, from experience I know that a company does not work well with fully integrating an ERP system. There are departments that should be silo. From my recent project, we worked on



implementing ERP in their finance and H/R department. Reason being, they focus more on pay roll and budgets. It's important to utilize ERP systems into having the most up to date technology.

## 19. How does management strive to make sure each employee is focused on implementing and being trained to know how to use ERP?

Management strives to ensure each employee in that department by having initial involvement and combining buy-in training.

## 20. What part of the implementation phase do you find the most obstacles?

The part of implementation phase that has the most obstacles in my opinion is when other vendors must be involved. It's a lot of different opinions to factor in which can prolong the duration of the job.

# 21. Have you ever been in a situation where a government contract as disturbed your implementation phase?

All the time. Government contracts always have some type of distractions due to proprietary issues.

## 22. How do you measure end user satisfaction once your consulting is completed?

We like to measure end user satisfaction through multiple methods but one of our most effective way, is through exit interviews. When we do exit interviews, we like to take surveys on their thoughts before we start the ERP implementation to compare if any satisfaction has changed.

## 23. How do you measure success factors and what part of the implementation phase is this done?

Best results are shown when we measure success in the middle phase, phase 2 of 3. Specifically, this portion of the process due to the instance that the business requirements are vetted.

## 24. What are your guaranteed end results, when offering your services?

We guarantee end results of process improvement with vetted results. For example, higher productivity, efficiency, and greater revenue.



## 25. What are the positives and negatives of having implemented ERP? Were there any negatives to having ERP?

Positives: Greater efficiencies, process consistency, reduced process errors, analytics readily available, and greater productivity

Negatives: Departmental silos, no integration or limited integration, and ERPs that memorialize poor processes.



### Reference

A systematic approach for ERP implementation in the construction industry.

(McGinnis, T. C., & Huang, Z. (2007). Rethinking ERP success. *Information & Management*, 44(7), 626-634.)

(Tsai, M., Li, E. Y., Lee, K., & Tung, W. (2011). Beyond ERP Implementation. *Total Quality Management & Business Excellence*, 22(2), 131-144.)

Nisula, K., & Pekkola, S. (2018). How to move away from the silos of business management education?. *Journal Of Education For Business*, 93(3), 97-111. doi:10.1080/08832323.2018.1425283

Peeters, J. (2009). Early MRP Systems at Royal Philips Electronics in the 1960s and 1970s. *IEEE Annals Of The History Of Computing*, 31(2), 56-69.

Mok Ha, Y., & Jun Ahn, H. (2014). Factors affecting the performance of Enterprise Resource Planning (ERP) systems in the post-implementation stage. *Behavior & Information Technology*, *33*(10), 1065-1081.

 $Process\ Design\ \&\ Development,\ LLC-PD2LLC.COM.\ (n.d.).\ Retrieved\ April\ 03,\ 2018,\ from\ \underline{http://www.pd2llc.com/}$ 

Umble, E. J., Haft, R. R., & Umble, M. (2003). Enterprise resource planning: Implementation procedures and critical success factors. *European Journal of Operational Research*, *146*(2), 241-257. doi:10.1016/s0377-2217(02)00547-7

DeLone and McLean (1992); Cronin et al. (1994); Dykeman (1997); Bingi et al. (1999)

Gatian (1994); Cronin (1995); Koushik and Pete (2000)

