

# [Systems development life cycle.](https://assignbuster.com/systems-development-life-cycle-essay-samples/)

### SYSTEMS DEVELOPMENT LIFE CYCLE.

### Business Dilemma

There is no potential issue as unique employee identification is important to any business that wants to provide security to its organization and its employees, thus is also convenient.

The issue here is that tracking employee hours worked based on their last name is not suitable as employees might have similar last names. Therefore might be convenient for it to be based on their employee identification as the identification card will have a unique pin number for each employee.

The issue here is that the employees should be given options regarding discretion for working hours since some of the employees might not have the necessary to work 8 hours due to some reason that should be made known at the beginning of employment.

The main potential issue here is that there shouldn’t be a standard rate and that double time and time and a half rates should be taken into consideration.

Managers should be scheduled to work morning and evening shifts. In other words they should be their throughout the day to oversee the running smoothly of the business. Also, when unseen circumstances arise managers are there to offer support, help and make the necessary decisions.

The issue here is that employees might have to attend to unforeseen circumstances so therefore the 8 hours of working time might be a lot for some of the employees because emergencies can occur at any given moment.

Server s should be allowed to work all three shifts as it will provide them with options.

There is no issue here as managers are in charge of who to hire and therefore should also be allowed to delete and change employees from the system.

### MAKING BUSINESS DECISION 1

### 1. ADVANTAGES AND DISADVANTAGES OF USING AN EMPLOYEE TO BUILD A CUSTOM SYSTEM.

### ADVANTAGES

* An employee building the custom system will be cheaper than it being purchased.
* It will be easier for employees to use and understand as it is build by one of their own colleagues.
* There will be less time for training.

(Explain)

### DISADVANTAGES

* It will take valuable business time for the employee to build the custom system.
* The business might have to hire a professional to look at the new system hence will be costly for the business.
* The new system might be prone to error which will contribute to the expense of the business as they will have to refer to professional help.

### ADVANTAGES

* COTS allow for just purchasing of the components and putting it together which will be cheap for the business instead of developing a new system.
* It will include a description of the software functions; hence will be documented to good commercial standards as it will give the names of the resources needed to run the software.
* Decreases the development time for new products.
* The components will be readily available, comprehensive functionality and therefore potentially frequent upgrades.

### DISADVANTAGES

* The initial cost of purchasing the COTS components might be costly for the business.
* The components would be limited to only certain functionalities.
* It might cause potential unreliability.
* There might also be difficulty in the integration procedures.

The older employees will have competency issues because they will have to learn to adjust to the new system as education will become a primary focus. There will be resistance to change by the older employees as a new system might cause insecurity of jobs. Therefore, to ensure a smooth transition training must be offered to the older employees and also ensuring that jobs are not at risk.

### MAKING BUSINESS DECISION 2

From reviewing the employees testimony, it is most obvious that the payroll system is functioned manually beginning from their payroll manager John Tahoe who collect the timesheets, calculates regular , overtime and holiday hours and then sends it for approval by the manager. Finally he adds the staff member’s commissions. From John the payments are sent to Mary Jane the tax manager for the coffee shop. Her task is to calculate city, state and federal taxes; she has to correct the incorrect check amounts issued, employees who have gone pass their sick and vacation time must be tracked by her and lastly she has to generate checks for the salaried employees. Ted Whitetaker is the store manager for the coffee shop. He is the person who signs off on all the time sheets, he checks the staff members schedule so as to validate the times on the employee’s timesheets, tracks vacation and sick time, thus when employees go pass the sick and vacation time when quitting he will sign a form detailing that they have to pay back all negative vacation or sick time.

Adding on, the payroll department must be finding it very time consuming and error prone when most if not all of their tasks are done manually. Firstly, the payroll manager John Tahoe is in need of a system that automatically tracks sick and vacation time and also a system that calculates regular, overtime and holiday hours that will validate the time sheet. If a new system is to be implemented than it would have to be very capable in that it is easy to use and understand. I think it would be wise to put in place a system that calculates working hours on a timesheet that is done by employees and in that they can clock in and clock it when work is done. Hence, at the end of the day John just has to check with the system. The issue here is that the employees are honest in when they clock in and clock out.

Mary Jane the tax manager needs a system that automatically determines taxes and does quarterly tax filing statements, performs audits and allows for employees to perform direct deposits. The main issue here is that even if a system can automatically calculate the taxes at the end of the day it is dependent on the input of the payroll department so as to determine the right tax amount. Thus, the payroll department will have to be very thorough in their input in that it is accurate. A question that should be asked is if there is a system that performs quarterly tax auditing automatically. Additionally the input will still have to be done manually so consistency and accuracy is vital. In the case of the direct deposits, the business can just directly deposit the employee’s salary straight to their bank accounts but some of the employees might prefer receiving their salary from their managers on their pay day which can become an issue for the coffee shop.

Lastly, Ted Whitetaker the store manager requires a system that calculates commissions, handles sales forecast and what if analysis on staff commissions’ rates and also a system that could design promotions for their best customers, repeat customer and customers who have never used their coffee club cards before. The main issue here is a system handling sales forecast in the sense that it is accurate and gives attainable methods of forecasting. A question that should be asked in this scenario is if there is such a system that could design promotions for customers so as to increase sales. Ted I assume will have to do this without using a system; he may have to do some research to find ways in which he can do promotions that will attract customers such as advertising.

In conclusion, the three employees list of requirements for systems they want seem reasonable in that there are systems that can help them with the work but some of their need will just have to be done manually. Furthermore even with systems that could make their jobs easier, the system itself will be dependent on the input of the employees and while introducing a new system an issue that should be considered is the cost the business will have to pay in relation to time and money. Employees in the payroll department need to be accurate and precise with the data that is input into the system so as to get the best reliable and relevant information that is needed and must get the best training possible so as to use the new payroll system if implemented.

### APPLY YOUR KNOWLEDGE

– To involve all relevant stakeholders i. e. 1 from the Management, 1 representative from the IT department and a representative from the user. It is vital to get the system implemented with input from all perspective, mostly the users. This, system specification, is the most important aspect of system implementation.

Risk

– Management can just implement the system without getting feedback and approval from users and other representatives in the company. It is important to interact with users in all stages of implementation, design, testing and ‘ go-live’.

### ENTERPRISE ARCHITECTURES

### BUSINESS DILEMMA

The difficulty in determining the rate of return of components in the enterprise architecture is that components are sometimes not used in the business until circumstances arise when they have to be used. Especially in a small coffee shop where components are used when serving customers are said to fetch a high rate of return on investment but during an emergency then items such as a fire extinguisher can be useful and thus will have a high rate of return as it prevented destruction to the business. For example, coffee cups when purchased are used to serve customers can be said to have a return on investment for the business, thus when not in use can cause a low rate of return on investment for the business. Therefore it is difficult to determine rate of return on investments as it will depend on the structure of the business and when components are in use. Also, damaged components will bring a low rate of investment or no rate of investment at all and components that are always in use will bring a high rate of return on investment.

To determine the cost vs. benefit of the proposed dishwasher, keyboard and mouse, the business will have to look at costs such as how much these three components are, will it need regular maintenance (dishwasher), whether the components are a necessity to the business or not. The benefits can be determined by how much the business will make out of this components, how long it will last the business, the rate of return on the investment of this three components, the ease of use, training is easy to dictate to employees on how to use the tree components and finally if it makes work easier and faster.

### MAKING BUSINESS DECISIONS 1

### BENEFITS OF DEPLOYING A NEW, UNPROVEN TECHNOLOGY

* This will increase revenue for the coffee shop. Broadway Café can have a general rule of space occupation that the customer has to buy a product. Most customers are technology savvy and they need access to internet from time to time throughout the day.
* It can increase productivity in that customers will be attracted to the coffee shop especially since it will offer customers the chance to access the internet from their shop via a power line.
* There will be advancement in communicating such as in emails, thus messages can be received instantly.

### CONS OF DEPLOYING A NEW AND UNPROVEN TECHNOLOGY

* Introducing a new system maybe costly for the business to implement, and especially in this case an unproven technology. The management team will have to perform a cost and benefit analysis and whether introducing a new technology will be an advantage or not.
* Regular maintenance may have to be performed which can be costly to the business.
* Setting up of a new technology might be time consuming for the business and thus might result in unexpected costs.

Based on my findings I wouldn’t implement BPL. The reason being is that it is dependent on power lines that can cause interference for other users. Also, a small coffee shop doesn’t really need an internet access since it will be very costly to the business. Furthermore, BPL might not have a competitive advantage as there are other technologies that can perform better and faster than BPL.

### MAKING BUSINESS DECISION 2

Some of the strategies that can be used to backup a computer in case of data loss are:

* To make regular data security backups of data used in the business and to have it kept away safe in a remote place.
* Make a backup of the hard disk if a new software is being installed hence it will ensure business to get back on track in case the hard disk fails or is corrupted.
* All transaction and records should be well documented and kept in a safe remote place.

The first third party utility that could be used is called Norton Ghost 15 Symantec New PC Backup win 7/Vista/XP.

### Features

1. Protects the PC’s application, settings, folders and files.
2. It has advanced backup and recovery.
3. Provides powerful protection such as offsite backups and Symantec.
4. Offers incremental backups and enhanced compression that help reduce the amount of required storage, thus helps keep everything safe.
5. It works well with most storage devices including external hard drives, networked drives and recordable and rewriteable CD’s and DVD’s.

The price of this is in US dollars cost $29. 95 converted to Fiji dollars is $53. 95 excluding transportation costs to ship it from the US to Fiji.

(http://www. metasearch. com/www2search. cgi? p= third+party+utilities+that+perform+backup%2Crestore+and+ghosting&l= 20&s= o)

Another third party utility is Norton Ghost 15 Backup win 7/ XP/Vista.

### Features

1. It creates full system and file backups.
2. Recovers system and data even when computer cannot be restarted.
3. Enables convenient, secure offsite backups.
4. Lets you decide what is backed up and when to customize backups based on how you use the computer.

The cost of purchasing Norton Ghost 15 Backup is USD 25. 98 (FJD $46. 19). The exchange rate used for this conversion is 0. 555.

The cost of purchasing this software in US dollars is $25. 98 and so when converted to Fiji dollars will accumulate to $46. 19.

(http://www. metasearch. com/www2search. cgi? p= third+party+utilities+that+perform+backup%2Crestore+and+ghosting&l= 20&s= o)

The final third party utility that can be used is the New Norton Ghost 15 Symantec, Backup & Restore, and X/Vista/7.

### Features

1. It has multiple storage options that offer backup to almost any media.
2. Backups your file to network attached storage devices.
3. It has a full system backup that’s back up everything on a hard drive.
4. Incremental and differential backups. Backup’s only files that have changed.

In US dollars the utility would cost $25. 95 and so in Fiji dollars would be $46. 13. These charges are without the transportation and other costs included in getting it to Fiji.

(http://www. metasearch. com/www2search. cgi? p= third+party+utilities+that+perform+backup%2Crestore+and+ghosting&l= 20&s= o)