



**SOFTWARE PROJECT MANAGEMENT**

**SWE 2006**

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**ONLINE SHOPPING SYSTEM**

## 1. PROBLEM STATEMENT:

This project aims to develop online shopping for customers with a goal so it is easy to shop from the shopping sites that are available on the web. With this help of online shopping you carry out from your house or offices. You just simply require internet, laptop, PC or mobile. It is very simple, you pick your favorite items looking cost and quality of the product. You can buy using net banking, credit card, or debit card. Now a days we can pay amount using online apps like Gpay, Phonepe, and Paytm etc.

It also helps us with the current issue “COVID-19”. People no need to go to the shops and crowded places, to buy the things physically. With the help of this system we reduce the spreading of virus around and can also maintain social-distancing.

To get to this online shopping system all the customers will need to email and password or mobile number and it's password to sign up the website and get logged in. If you are already a user you just need to login the website. The security to the login credentials are highly secured, so that nobody can crack it.

Upon the successful login the customers can browse and purchase the items such as mobiles, books, apparel, jewellery, gifts, tools, and cosmetics etc. can be dispatched using online shopping system and you get your order items to your given address and be delivered at your doorstep.

## 2. FEASIBILITY STUDY:

The Feasibility study is divided into the following sections:

### **2.1. LEGAL FEASIBILITY**

Various permissions and licenses from the concerned authorities are required to conduct business operations. Business operations may be also affected by specific regulatory restrictions. A legal feasibility study analyses the impact of legal and regulatory environment in the execution of a business project. This could include environmental laws, laws pertaining to anti-monopoly and restrictive trade practices, rules and regulations governing company registration and trade licenses, labor laws and so on.

- i. Adoptability and scalability of the product is necessary. For instance, selling some items are legal in some country but it is illegal in our country with given current state of law.
- ii. Banking and online payments. In some areas or in some businesses online payments are accepted from some applications like Gpay, Phonepe and Paytm etc. but in some areas only credit card, debit card and net banking are acceptable.
- iii. Project Financial Aspects.
- iv. Commercial Viability.
- v. Project Bankability.
- vi. Land and Existing Asset Usage.
- vii. Alternate Ownership Claims on Land.
- viii. Other User Rights.
- ix. Issues Concerning Employment.
- x. Tax and Accounting Issues.

## **2.2. TECHNICAL FEASIBILITY**

Technical issues involved are the necessary technology existence, technical guarantees of accuracy, reliability, ease of access, data security, and aspects of future expansion.

- i. Technology exists to develop a system.
- ii. The proposed system is capable of holding data to be used.
- iii. The proposed system is capable of providing adequate response and regardless of the number of users.

- iv. The proposed system being modular to the administrator, if he/she wants can add more features in the future and as well as be able to expand the system.
- v. As far as the hardware and software is concerned, the proposed system is completely liable with proper backup and security.

To deploy this application, the only technical aspects needed are:

Operating Environment: Windows XP/10

Platform: Java

Database: SQL Server 2005.

### **2.3. ECONOMIC FEASIBILITY**

It refers to benefits or outcomes we are deriving from the product as compared to the total cost we are spending for the developing the benefits more or less the same as the older system then it is not feasible to develop the product.

The product is economical feasible. The online shopping system provides the following benefits:

- i. Administrative will be effective.
- ii. Only cost involved here is internet.
- iii. Reduces work load and processing time.
- iv. The cost of hardware and software is affordable.
- v. High increase in the amount of profit earned by going global.
- vi. Easy and cheap maintenance of the system possible.
- vii. Very cheap price for going global.

### **2.4. OPERATIONAL FEASIBILITY**

If the system meets the requirements of the customers and the administrator we can say that the system is operationally feasible.

The proposed system will be beneficial only if it can be turned into a system which will meet the requirements of the store when it is developed and installed, and there is sufficient support from the users.

- i. The proposed system will improve the total performance.

- ii. Customers here are the most important part of the system and the proposed system will provide them with a convenient mode of operation for them.
- iii. The proposed system will be available to the customers throughout the globe.
- iv. The proposed system will provide a better market for different dealers.

## **2.5. SCHEDULING FEASIBILITY**

Schedule feasibility study analyses whether a project could be made operational within a reasonable and objective time-frame. Scheduling feasibility can help to understand whether the project can be done within its deadline. In this project the time frame is decided by the company, clients and customers. If the deadline is not carried out properly company may lose clients and employees may lose company.

This Feasibility also helps to determine the speed of development process. If it is slow, you can accordingly increase number of members in team. But, if you are not able to afford new employees then you can train your current employees in a better manner to increase their speed and performance.

## **3. STAKEHOLDERS:**

### **3.1. INTERNAL STAKEHOLDERS**

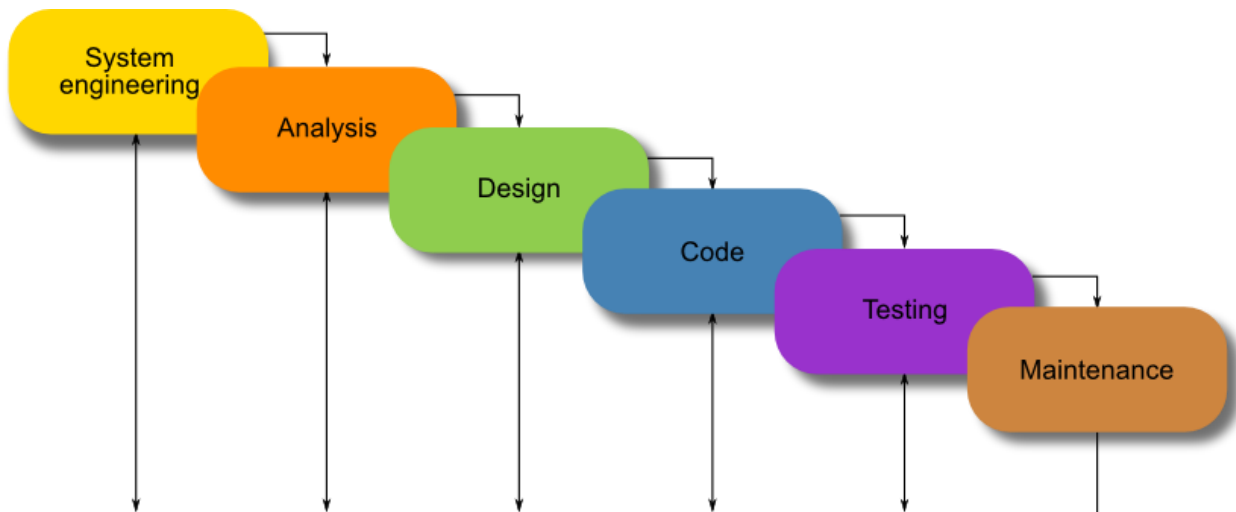
- 1. Audit
- 2. Board Members
- 3. Chief Executive
- 4. Project Designer
- 5. Human Resource
- 6. Project Manager
- 7. Programmers
- 8. Project Development Team
- 9. Team Leader
- 10. Project Maintenance and Testing Team
- 11. Security Maintenance Team
- 12. Employees

### 3.2. EXTERNAL STAKEHOLDERS

1. Customers
2. Suppliers and vendors
3. Investors
4. Creditors
5. Social Media
6. Communities
7. Trade Unions
8. Government Agencies
9. Key stakeholders
10. Marketing

### 4. LIFE CYCLE MODEL USED FOR THIS PROJECT

**WATERFALL LIFE CYCLE IS USED HERE.**



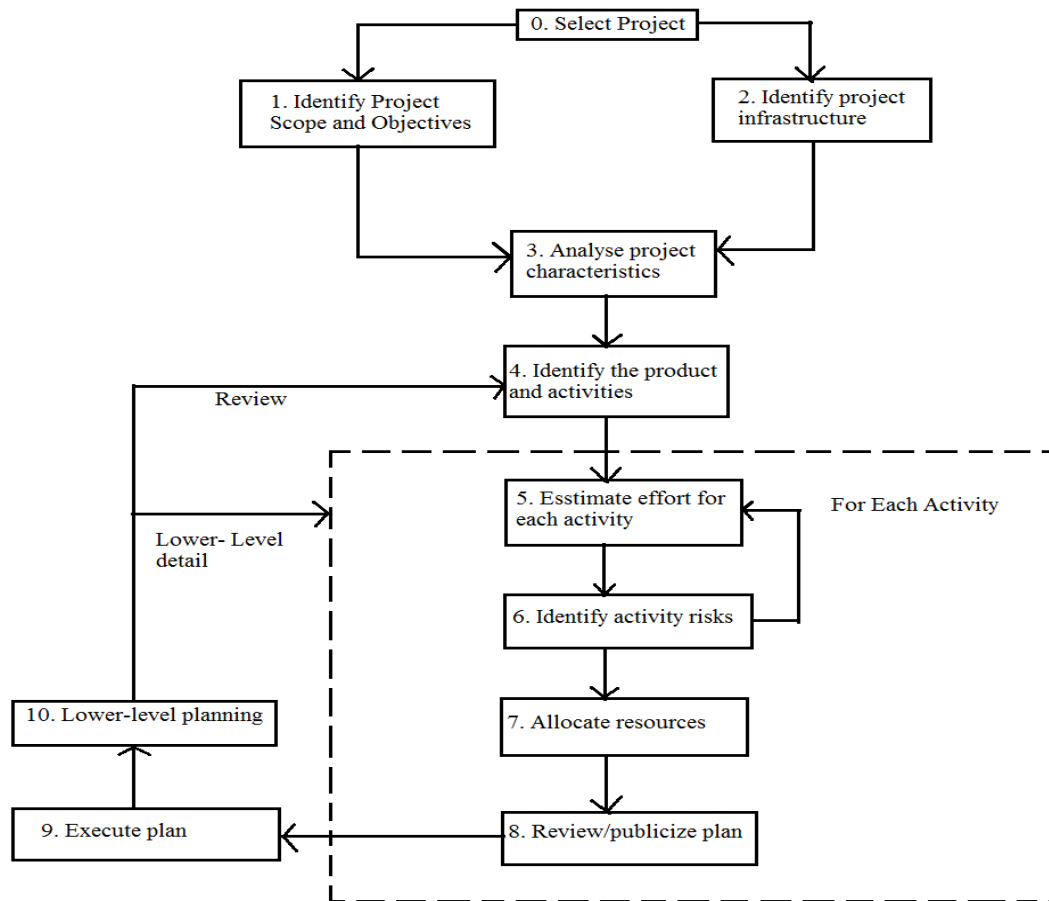
- The waterfall model are that documentation is produced at each phase and that it fits with other engineering process models.
- Disciplined approach.

- Careful checking by the Software Quality Assurance Group at the end of each phase. (Or testing in each phase).
- Documentation available at the end of each phase.
- Linear model.
- Easy to understand and implement.
- Identifies deliverables and milestones.

➤ **Why waterfall model:**

- Requirements are very well known clear and fixed.
- Product definition is stable.
- Technology is understood.
- There are no ambiguous requirements.
- Ample resources with required expertise are available freely.
- The project is not so long.

## 5. STEPWISE PLANNING



## 0. SELECT PROJECT: Online Shopping System.

### 1. Identify project scope and objectives:

- The objective of the project is to make an application in android platform to purchase items in an existing shop. In order to build such an application complete web support need to be provided. A complete and efficient web application which can provide the online shopping experience is the basic objective of the project. The web application can be implemented in the form of an android application with web view.
- This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains. The system recommends a facility to



accept the orders 24\*7 and a home delivery system which can make customers happy. If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as flip kart or eBay. Since the application is available in the Smartphone it is easily accessible and always available

- **Stake holders in the project and their interest:**

- i. **Buyers**

- Advantages: can easily shop online and able to buy products overseas

- Disadvantages: Safety and privacy are issues

- ii. **Designers**

- Advantages: Can sell products online without a store.

- Disadvantages: it is hard to convince people to buy their products

- iii. **Companies**

- Advantages: Can quickly and easily inform customer of their new products

- Disadvantages: Sell might decrease since people start buying online.

- iv. **Competitors**

- Advantages: easily find out its competitors' sells and cost. Also can improve itself

- Disadvantages: customers might go to their shop

## **2. IDENTIFY PROJECT INFRASTRUCTURE:**

- **Organizational Structure:**

- i. Design: Homepage Design, Browsing products design, Searching products design, Shopping cart design, Advertisement and Banner section design.

- ii. Development: Homepage Development, Browsing products development, Searching Products Development, Shopping cart Development, Advertisement and banner section implementation.

iii. Testing: System Integration, Website Functionality, User Interface Testing, User Acceptance Testing, Results Reporting.

iv. Deployment and Documentation: Hosting, web integration, switching over operations, end-user documentation, legal and copyrights documentation.

- **Process Structure:**

- The customers opens the online website and browse the product under the item name and brand name. Later the customer adds the item to the cart list. To buy the product the user can pay the amount via UPI pin, PayPal, online transactions etc.
- The administrator records all the history and details of the customer for the security purposes and all legal documentation of the companies.
- The product is delivered by the delivery people near to your house within the specified time.
- To develop the product, here we used waterfall lifecycle methodology.

- **Tools:**

- Front end- Html, CSS, JavaScript, Android
- Back end- MySQL

### **3. ANALYZE PROJECT CHARACTERISTICS:**

- Keep website intuitive and organized, keep graphics optimized for quick load times, and keep an eye on your analytics. If the web host has a traffic cap, your success can eventually work against you. More traffic can mean slower page loads, especially if your CDN (Content Delivery Network) tapers your bandwidth as you reach your limit. Don't buy a more copious plan than you can afford, but make sure your site is optimized for your current traffic, with extra wiggle room for growth.

- **One-Page Checkout:** Pave the way to your cash register. An easy checkout process can be managed with just a one-page checkout, a fairly common feature among shopping cart software providers.
- **Allow Guest Checkout:** When you require customers to create an account before placing an order, you create a barrier between your customer and the purchase said customer wants to make. By allowing guests to make purchases on your site without making them register, you bypass this potential chokepoint and ease the path toward your customers completing their purchases. Of course, you still want to give customers the option of creating an account so that they can save their payment information and other preferences.
- **Display All Charges Before Checkout:** The most common reason given by people who abandoned their carts during the checkout process was that they found the extra costs (shipping, taxes, and fee) to be too high. Consider displaying all pricing information upfront before checkout, so your customers won't be hit with any surprises.
- **Keep Your Checkout Page Simple:** You don't want your customers to get distracted and leave your checkout page, so consider removing such things as your header/footer and your menu options during the checkout process.
- Get to know all of the shipping couriers available to you and which of them can best handle your products. Also, set up your cart to auto-send Order Shipped emails when your carrier scans in your package.
- Good Customer Support.

#### 4. IDENTIFY PRODUCT AND ACTIVITIES:

- **Customer:**
  - This customer module is the first main module in this project. In this module is fully based on the customer process. This module is start from the customer registration. After customer registration customer can view all product information. Customer can purchase the

product whichever customer like and also customer can send feedback to Support team.

- Customer Registration: This customer registration module is used for new customer. New user can register their all information.
- Customer Login: This module is containing customer login information. Authorized customer can login.
- View products: This module is used to view all product information. Customer can view all new products as well as the existing product information before purchasing.
- Purchasing products: This module is used to customer can purchase the product which was customer like to buy.
- Apply feedback: This module is used for customer can send the feedback to the support team. This feedback is used to support team to increase accuracy.
- Search product: This module is used for customer who can search product .He/she can search Product by1. Product Name2. Product Cost.

- **Supporting Team**

- This Support team Module is the second main module in this project. In this module is fully based on the support team Vs Customer module. This support team module has provision to view all customer details and also Support team member can view all feedback information which was customer send regarding the particular product. This support team can prepare the customer profile for all customers. This Customer profile is contain two main child parts one loyal customer and another one is un-loyal customer.
- Supporting Team Modules

- View Customer Details: This module is used for support team to view all information regarding the all customer. All customer information will be sorted in the database for future use
- View Feedback Information: This module is used for support team to view all feedback information from the all customer. All customer feedback information will be sorted in the database for future use. By using these customers feedback information support team give suggestion to the admin.
- Build Customer Profile: This module is used for support team to build the customer profile. Support team can view information about the customer with from the starting date to ending date as an input. This customer profile is used to divide the customer in loyal and un-loyal.
- Profit Calculation: This profit calculation module is used to support team to construct profile for the customer regarding profit. Profit is calculated by giving some inputs like (duration of time, sending time, purchase etc...)
- Listing Action Sets: Support team can list all action sets and all suggestion will be send to the admin module regarding the action.
- **Admin Module**
  - Admin module is the third main module in this project. This admin is the controller of the all modules. Admin has a full provision for view all customer, Support team suggestions and action set. Admin can select the exact suggestion from the current customer, support team suggestion for increase customer in the management process and also apply the particular action for increase the accuracy.
  - Admin Modules View Customer Feedback: Admin can view all customer feedback information to get and set the exact action for the customer.
  - View Support team Suggestions: Admin can view all support team suggestion. This support team suggestions is used to get the exact suggestion for increase the customer profile and make customer to loyal

- View Action Set: Admin view all action sets these action set is made from the support team for the customer.
- Selecting Action Set: Admin can select the exact action based on the support team suggestion and the customer feedback.
- Apply Actions: This module is used to apply the selected action for increase loyal customers.
- Add New Product: This module is used to add new Product in the product list as well as modify existing product.
- View Graphical Reports: This module helps administrator to see performance of the product and loyal and Un-loyal customer by graphical representation.

#### **5. ESTIMATE EFFORTS FOR EACH ACTIVITY:**

- Bottom up estimating is the project management technique of estimating individual tasks and then combining them into an overall project estimate.
- This project is grouped into related tasks into phases. The phases represent groups of tasks, and the overall project is a group of phases. This is called a Work Breakdown Structure (WBS). Here the tasks are designing the customer page, admin page and support team page. Under these three phases there are several activities divided.
- Each task, phase, and the overall project each have an estimate. They are each “rolled up” into the higher level and represent the sum of the lower level. This is the key to bottom up estimating.
- The accuracy of a bottom up estimate in this project is the average of the lower level components of the estimate. For example, if task #1(customer module) has an accuracy of 10% and task #2(Admin module) has an accuracy of 20%, the overall estimate will have an accuracy of 15%.
- The bottom up estimate can be tracked on any level. The most detail, as well as complexity, will exist at the lowest level. On the other end of the spectrum,

only the entire project cost could be tracked. This is the least work but sacrifices the ability to find and fix problems.

## **6. IDENTIFY ACTIVITY RISKS:**

- **Online Security**

Online Security is a set of protocols that safely guide online transactions. Stringent security requirements must be in place to protect the online companies from the most prevalent cybersecurity threats.

Risks- Phishing, Data Errors, Unprotected Online Services, Credit Card Fraud, Hacking.

Solutions: Multi-layered security on the online platforms, Monitor all transactions from ordering to delivery, Deploy PCI scans and updates, Request a non-storable CVV, Get Strong passwords from users and Get trust marked with SSL certification.

- **Online Intellectual Property**

It is a legal form that refers to industrial property and to copyright and related issues of your online website.

Risks- LOGO, MOTTO, Product Description, eBooks.

Solutions- Safeguarding your own intellectual property, violating someone else's property, and legally perform an intellectual audit and patent for your online website.

- **Customer Disputes and Chargebacks**

There are several customer disputes that arises from time to time from ordering to delivery.

Risks- The product never delivered, the purchase was made with stolen credit card, the product didn't meet customer's expectation, the product didn't meet the website's description, the retailer shipped the wrong product and the order billed twice or there were other clerical errors.

Solutions- Swiftly respond to chargeback notice, online shop owners ensure full authorization for an order before shipping, not charge the customers until items are shipped and clear refund policy and information.

- **Product warehousing and Logistics**

Running high performing online warehouse and logistics can be risky. And if it's not done right, it can result in time, money and customer satisfaction.

Risks- Run out of stock in warehouse when orders come in, product shipment decline, and shipment delivered wrong.

Solutions- Updates of stock management, barcode scanner to speed up the process, consider a professional drop shipping service, ensure proper order tracking to orders, and cross check whether the right delivery details are entered on the package.

- **Customer Service**

Personize and create better customer experience, Respond to customer complaints quickly and gracefully, exceed customer expectations and Chabot's are learning quickly to provide great customer service 24/7.

## **7. ALLOCATE RESOURCES**

- For an online-shopping, whether it can provide its customers with customized service is the key to enhance its customers' experience value and its own competence. A good customized service requires effective integration and reasonable allocation of the company's supply chain resources running in the background. Based on the analysis of the allocation of supply chain resources in the customized online shopping service mode and its operational characteristics, this project puts forward an optimization model for the resource allocation and builds an improved ant algorithm to solve it.



ACTIVITY	WEEK													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Discuss Topic Project														
Create Blog														
Discuss Flow Project														
Analyses Problem														
Design Diagram														
Design Application Interface														
Build Interface														
Build Database														
Insert Coding														
Link Coding with Database														
Complete the Coding														
Make Report														
Prepare for Presentation														
Presentation														

## 8. REVIEW/PUBLICIZE PLAN

- A slick, speedy website
- An easy checkout process
- Competitive shipping policies
- Multiple payment options
- Quality images and solid product descriptions
- A mobile-friendly site design
- Good customer support
- Multichannel storefronts
- Call-to-action buttons
- Offer special promotions

## 9. EXECUTE PLAN

- Any member can register and view available products.
- Only registered member can purchase multiple products regardless of quantity.
- Contact us page is available to contact Admin for queries.
- There are three roles available: Visitor, User and Admin.
  - Visitor can view available products.

- User can view and purchase products.
- An Admin has some extra privilege including all privilege of visitor and user.
  - ✓ Admin can add products, edit product information and add/remove product.
  - ✓ Admin can add user, edit user information and can remove user.
  - ✓ Admin can ship order to user based on order placed by sending confirmation mail.

## **10. LOWER LEVEL PLANNING**

- Once the project is under way, plans will need to be drawn up in greater detail for each activity as it becomes due.
- Detailed planning of the later stages will need to be delayed because more information will be available nearer the start of the stage.
- It is necessary to make step-by-step plan for the more distant tasks.

## **6. Risk Planning and Controlling**

Since the Internet is here to stay, the best approach is to conduct a risk analysis of your information systems, paying particular attention to those associated with your website.

The purpose of this risk analysis will be threefold:

- Identify the risks
- Quantify their impact, and
- Balance the economic impact with the cost of countermeasures.

Beyond the obvious benefit of identifying exposure to loss within the organization, a risk analysis provides long range planning guidance to your company concerning hardware configuration and procurement, software systems, and internal controls. It can also make valuable contributions to the criteria for contingency and security plans for the organization.

### **Risk Analysis**

Two basic types of risk analysis to consider are Quantitative Risk Analysis and Qualitative Risk Analysis. Quantitative Risk Analysis attempts to assign independently objective

monetary values to the components of the risk assessment and to the assessment of the potential loss. Conversely, a Qualitative Risk Analysis is scenario oriented.

To conduct a Quantitative Risk Analysis, you must first estimate the value of the potential losses associated with delayed processing or the theft or destruction of property or data. The next step is to determine the probability of the occurrence and calculate the annual loss expectancy. Input sources for the analysis can be gathered from interviews with users, system administrators, auditors, security officers, and by reviewing facility and industry sources, such as Gartner Group. By assembling the data, you may assign a monetary value to the risks and compare the cost of countermeasures against the expected loss reductions.

Qualitative Risk Analysis does not attempt to assign numeric values to the components. In this method, scenarios are created that outline the potential threats to the business and rank these threats according to their seriousness. The procedure includes writing scenarios for the major risks, estimating the effects of the occurrences, and evaluating the use of countermeasures and safeguards.

### **How Do You Establish a Financial Value for Identified Risks?**

In order to complete any risk analysis, it is necessary to develop a value rational for information worth. This is not always an easy task but it is critical in the analysis process. This information is used in cost benefit analyses for countermeasures and as a basis for possible risk transfer through insurance. Three bases for evaluating information worth include the following.

- The costs to acquire, develop, and maintain the information
- The value to its owners, custodians and users
- The value the information currently has in the present in the world

Current price refers to what others are willing to pay for the information, such as mailing lists, and the value of intellectual property, such as trade secrets, patents, and copyrights. Methods for collecting this data include developing a questionnaire, conducting interviews, and reviewing accounting documents as well as statistical information.

Be aware that the value of information is often influenced by its attributes. Some of the questions you should consider while making your evaluation include the following.

- Is the information exclusive to your organization?
- How useful is it to the organization?
- What is the cost of recreating the information?
- What is the liability to the organization if it is disclosed or made available to the public?
- What is the impact to the organization if it is unavailable?

In addition, in our business interruption scenario cited above, it would be necessary to determine the financial impact to your company of your website being unavailable to customers for various timeframes. Would the financial losses differ for different times of day? How long could your website be down before it would seriously affect your organization?

Okay, now that you know how to conduct a risk analysis, exactly what type of risks are you looking for? These can generally be defined as losses by people or losses by acts. Losses by people refer to physical access as well as access to capabilities. Losses by acts involve the concepts of modification, destruction, disclosure, stealing assets, and denial of use.

Malicious code and viruses have recently cost companies large amounts of revenue as they have shut down distribution channels for hours, resulting in lost

business. Viruses have been used to destroy valuable data as well. Customer credit card information may be unlawfully obtained either by the monitoring of unsecured transmissions or by the unauthorized access to computer databases. Disgruntled employees may sabotage key systems or embezzle money or information from their employers using Internet accesses. Natural disasters, equipment damage, and failure of computer hardware may produce profound losses in revenue by making Internet access unavailable to your customers.

### **How Do You Identify Effective Countermeasures?**

In order to deal with these risks to your organization, an inventory of countermeasures needs to be prepared. The most effective countermeasures consist of the following elements.

- Cost effectiveness--a cost benefit analysis of the safeguards, including selection, acquisition, placement, maintenance, testing, and repair
- Minimal human intervention--aids in the prevention of tampering since manual functions are the weakest point in any safeguard
- Completeness and consistency--contribute to universal application imposing uniform safeguards
- Sustainability--the ability to maintain the system
- Audibility--permits the system to be monitored and tested
- Accountability--allows for at least one person to be directly responsible for performance
- Recoverability--designed to avoid asset destruction

What are some specific countermeasures that may be used to deal with the risks? The most common security measure in place for dealing with Internet security is to erect a barrier to your internal systems, called a "firewall." If your organization already has Internet access, it most probably has a firewall. Firewalls can be implemented either physically or by the use of software. Not

all firewalls are created equal, however, and it is important to determine if your organization has adequate firewall protection in place. One way to judge is by working with your internal information technology staff or by hiring an outside security professional.

Additional security systems may also be used to augment your current computer network. Security systems can be implemented in either hardware or software, and provide access control either physically or by the use of passwords or tokens. The decision to purchase additional security systems depends on the sensitivity of data within your organization.

Most organizations can benefit by either the creation or augmentation of security policies. Depending on the size of your organization, it may be important to create a position--security officer--to be responsible for creating, implementing, and maintaining a security plan. Risk analysis can pinpoint the areas on which to concentrate in the security plan. A security officer provides accountability for security policies and will regularly monitor the risks associated with computer systems in your organization.

Contingency or disaster recovery plans are invaluable in providing a smooth recovery in the case of system outages or failures that result in business interruption. Plans should include the resources, actions, and personnel needed to minimize the downtime and recover from business interruptions. Risk analyses can provide the framework for designing your contingency plans by identifying the risk exposures.

An additional remedy that may be considered by your organization is risk transfer through insurance. If your organization anticipates acute losses resulting from extended downtime of your computer networks, it may be cost effective to purchase additional insurance coverage for these business

channels. As with all countermeasures, this alternative needs to be evaluated for its cost effectiveness.

TYPES OF RISK	RISKS	SOLUTION
<b>ONLINE SECURITY</b>	<ul style="list-style-type: none"><li>• Phishing</li><li>• Data Errors</li><li>• Unprotected online services</li><li>• Credit card fraud</li><li>• Hacking</li></ul>	<ul style="list-style-type: none"><li>• Multilayered security on online platform</li><li>• Monitor all transactions from ordering to delivery</li><li>• Deploy PCI scans and updates</li><li>• Request a non-storable CVV</li><li>• Get strong password from the users</li><li>• Get trusted mark with SSL certification</li></ul>
<b>ONLINE INTELLECTUAL PROPERTY</b>	<ul style="list-style-type: none"><li>• LOGO</li><li>• MOTTO</li><li>• Product Description</li><li>• E-books</li></ul>	<ul style="list-style-type: none"><li>• Safeguarding your own property</li><li>• Violating someone else's property</li><li>• Legally, platform an intellectual property audit and patent for your website</li></ul>
	<ul style="list-style-type: none"><li>• Product never arrived</li><li>• The purchase was made with stolen credit card</li><li>• The product didn't meet customer's expectation</li><li>• The product didn't meet the website's description</li></ul>	<ul style="list-style-type: none"><li>• Swiftly respond to chargeback notice</li><li>• Online shop owners ensure full authorization for an order before shipping</li><li>• Not charge the customers until items are shipped</li></ul>

<b>CUSTOMER DISPUTES AND CHARGEBACKS</b>	<ul style="list-style-type: none"> <li>• The retailer shipped the wrong product</li> <li>• The order billed twice or there were other clerical errors.</li> </ul>	<ul style="list-style-type: none"> <li>• Clear refund policy and information.</li> </ul>
<b>PRODUCT WAREHOUSING AND LOGISTICS</b>	<ul style="list-style-type: none"> <li>• Run out of stock in warehouse when orders come in</li> <li>• Product shipment decline</li> <li>• Shipment delivered wrong.</li> </ul>	<ul style="list-style-type: none"> <li>• Updates of stock management</li> <li>• Barcode scanner to speed up the process</li> <li>• Consider a professional drop shipping service</li> <li>• Ensure proper order tracking to orders</li> <li>• Cross check whether the right delivery details are entered on the package.</li> </ul>
<b>CUSTOMER SERVICE</b>	<ul style="list-style-type: none"> <li>• Reviews</li> <li>• Culture</li> <li>• Services</li> <li>• Social Media</li> <li>• Negative PR</li> </ul>	<ul style="list-style-type: none"> <li>• Personalization can create better customer experience.</li> <li>• Respond to the customer complaints quickly and gracefully</li> <li>• Exceed customer expectations</li> <li>• Chabot's are learning quickly to provide great customer service 24/7.</li> </ul>
<b>TAXATION</b>	<ul style="list-style-type: none"> <li>• Taxes</li> </ul>	<ul style="list-style-type: none"> <li>• Location- office, warehouse, store, other physical places of the business</li> </ul>



		<ul style="list-style-type: none"> <li>• Personnel- employee, contractor, salesperson, installer, and other persons doing work for business</li> <li>• Most states consider storing <b>inventory</b> in the state to cause nexus even if you have no other place of business</li> <li>• Someone who advertises your product in exchange for a cut of the profits creates nexus in many states</li> <li>• If you have 3<sup>rd</sup> party ship to your buyers, this may create nexus</li> </ul>
<b>WEBSITE SEO AND MARKETING</b>	<ul style="list-style-type: none"> <li>• With regular google algorithms update, your website might be risking insufficient traffic and decline in sales conversion</li> </ul>	<ul style="list-style-type: none"> <li>• Find keywords for your home page or product pages</li> <li>• Perform competitor research and analysis like which keyword they are targeting</li> <li>• Market your product on your social media, both organic and paid by approaching it with a planned strategy</li> <li>• Consistency is the key to marketing your business successfully.</li> </ul>

## 7. Contract between Organization and Client

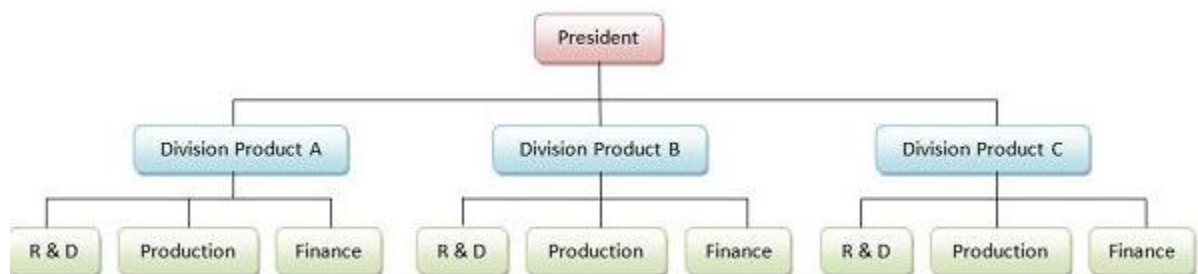
**Organization**- Organization refers to a collection of people, who are involved in the developing of the product. It can be understood as a social system which comprises all formal human relationships. The organization encompasses division of work among employees and alignment of tasks towards the ultimate goal of the company.

**Formal Organization Structure:** The organization structure of jobs and positions, with specified activities and relationships, is known as formal organization structure. It is created by management, to attain the objectives of the company.

### 1. Line Organization:



### 2. Functional Organization:



### 3. Line and Staff Organization:



**Informal Organization Structure:** The relationship between the employees, that relies on personal attitudes, prejudices and interests rather than procedures. It is system of personal and social connection, whose creation is not needed by formal organization.

**Client-** In sales, commerce and economics, a **customer** (sometimes known as a **client**, **buyer**, or **purchaser**) is the recipient of a good, service, product or an idea - obtained from a seller, vendor, or supplier via a financial transaction or exchange for money or some other valuable consideration.

#### **What client's wants?**

1. Your clients want you to understand their business and their strategy.

Part of understanding their business is also understanding their business model. Without that, your strategy suggestions may not work. You may end up being focused on the wrong things.

2. Media Strategy

There is a marked difference between what clients value most and what agencies value most about the services they provide. **It's media strategy.** 23.5% of clients in a Forbes survey said media strategy was the most important area their agencies provided them with. This is exactly the sort of specialized skill that makes hiring an agency a smart move.

Clients are right to value it, and agencies might want to be more vocal about explaining how their media strategy skills can help their clients.

### 3. Creativity

As clients' industries get more competitive, it becomes harder and harder to get a message out. And so clients rely on their agencies to come up with the big idea that transcends bulk media buys and broadcast-style advertising. In other words, they don't want you to help them be the loudest voice in the room. **They want you to help them be a unique voice in the room.**

### 4. More consumer insights

This point often gets overlooked by agencies, but **clients would like to see far consumer insights from their agency partners.** 23% of clients in a Forbes survey mentioned this as their top priority, yet only 10% of agencies say they want increased involvement in consumer insights. Perhaps if agencies knew how important this was to their clients, they'd be more motivated to offer it.

### 5. Communicate what you are best at

This point is more for the beginning of the client relationship, but it's very clear that "clients want a website to quickly show them what the agency is best at". In a 2017 survey of UK agency clients, 90% of the respondents mentioned this. It's a big deal.

But there's another real zinger to this: Clients believe most agency websites fail to communicate this difference.

### 6. Get more results with less budget

Everybody knows clients want this. And though it's brain-dead obvious that our clients want us to keep costs low while we still get even better results, it still needs to be said. You need to know all that. You and your client need to be in 100% agreement on it, too.

### 7. Show them quantifiable results

This is basically the second phase of the prior point. Once you know what your client really considers to be "results", you need to work with them or to guide them to tie some concrete, trackable metrics to those goals. And then you need to track those goals.

### 8. Activity Network

***Calculate the expected duration and standard deviation for each activity***

**Expected time (te) =  $(a+4m+b)/6$**

**Activity standard deviation (s) =  $(b-a)/6$**

Activity	Optimistic time (a)	Most likely time (m)	Pessimistic time (b)	Expected time (te)	Activity standard deviation (s)
Browse catalogue	10	15	21	15.16	1.83
Make order	8	16	32	17.3	4
Receive order	10	11	12	11	0.3
Process order	12	15	21	15.5	1.5
Report	10	16	17	15.16	1.16
Confirm bill	18	20	22	20	0.6
Shipment	13	16	20	16.16	1.16

**Expected duration** = te (browse catalogue) + te (make order) + te (receive order) + te (process order)

+ te (report) + te (confirm bill) + te (shipment)

= 15.16 + 17.3 + 11 + 15.5 + 15.16 + 20 + 16.16

= 110.28 → (1)

**Standard Deviation** =  $\sqrt{(\text{browse catalogue})^2 + (\text{make order})^2 + (\text{receive order})^2 +$

$(\text{Process order})^2 + (\text{Report})^2 + (\text{confirm bill})^2 + (\text{shipment})^2}$

= 4.97 → (2)

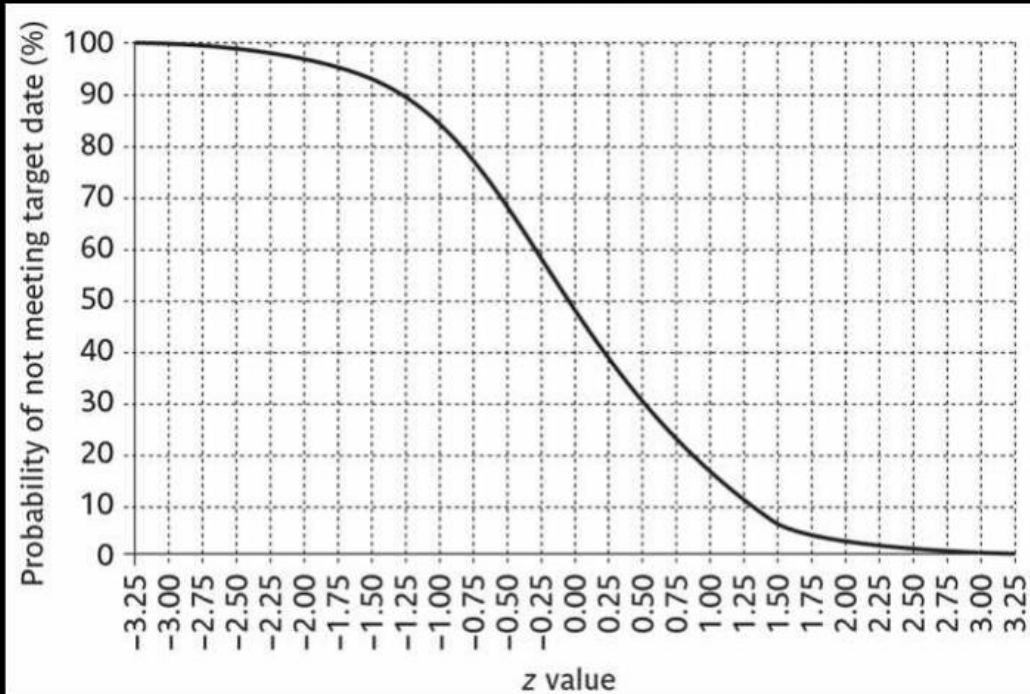
**Target of completing the Activities is (T) = 120 days**

**Z(Value) = (T- te)/s**

= (120 – 110.28)/4.97

= 1.95

## Graph of z values



Therefore, there is about 0.5% chance of not meeting the target of 120 days.

### *Identify the critical path*

Activity	Duration	Precedents
A- Browse catalogue	6	
B- Make order	4	A
C- Receive order	3	B
D- Process order	4	C
E- Report	10	D
F- Confirm bill	3	E
G- Shipment	2	F

ES – Earliest Start

EF (Earliest Finish) = ES + Duration

LF (Latest Finish) = Latest task can be computed without affecting project end

LS (Latest Start) = LF – Duration

Float = LF – ES – Duration

