

Website migration report examples

[Business](#), [Company](#)



The Internet has revolutionized the way system architectures are defined in that it has become a communication channel. This has provided a new front of system development. Internet-based architecture has the culmination of data, application logic and the user interface on the Web server. The user interface is provided by the user interface in the form of HTML codes that perform interpretation and display of the client's browser. The shift in responsibility for the user interface from the client to the server eases the process of data transmission thereby resulting in lower hardware costs and complexities.

The motivation towards an internet-based architecture is founded on the fact that businesses are shifting towards the e-business platform in an attempt to build efficient, reliable and cost-effective solutions. An internal web hosting of the internet is favorable for this architecture as it ensures reliability and efficiency.

An internet-based architecture has an advantage of changing the fundamental concept of how computer systems are designed and developed. The shift into the online landscape is the reason why companies such as Tony's Chips aspire to host their own sites internally. With the right personnel and technical expertise, the company will thrive in its e-commerce business.

In the web-based architecture, the company attains a wide range of flexibility for the company to adapt to the dynamic e-commerce environment. The company gathers more freedom in respect to quick integration with customers and suppliers and less dependency on vendor-restrained solutions. An in-house web-development is crucial for a small

company such as Tony's because it offers a range of solutions suitable for its operation. It provides an opportunity to design and develop a unique website that looks fantastic and feels consistent with the company's other marketing incentives. It gives a full control of the organization of the site, the number of pages and the quantity and size of the files. In addition, it provides a highly scalable option that has the capability to handle increasing sales and items offering in the future. The site is easily modifiable and can be easily managed as the company grows and changes. Finally, the use of an in-house web based system creates room for more savings and better customer satisfaction.

A packaged solution from vendors such as e-commerce service providers solves the challenge of developing in-house e-commerce sites. A packaged solution from a service provider is acquired by the business irrespective of the scale. Therefore, Tony's Chips may procure a complete solution from vendors such as Microsoft and Intershop that provide customized applications that can be managed easily.

Web hosting fundamentals is independent of the decision to use in-house or packaged software's. Internal hosting naturally has the advantages of greater control and security at the expense of higher costs.

Windows Distributed InterNet architecture is an example of Microsoft's latest platform that encompasses both new and existing applications and data sources. These data sources and applications are available to a wide range of clients including web browsers and internet applications. The application can interoperate with the existing legacy systems for small and large enterprises.

OPTIONS FOR THE COMPANY

The option available to the company self-hosting the company is the use of a web hosting company. Internal web hosting may be free, but it consists of its downsides. For instance, the company the company requires a web server.

Web servers are extremely costly as well as excellent technical expertise that lack in most business. The network being used by the company needs to be probed to determine the speed and bandwidth capable of providing effective hosting services. The company network should be able to accommodate both incoming and outgoing traffic in greater magnitudes. Web hosting companies tend to simplify all this complications since they have greater knowledge base in terms of technical and operational requirements. Web hosting companies have considerable processors, lots of memory and large storage space that accommodate a greater capacity of clientele. In addition, it has web administrators that are available 24 hours a day to deal with any problems. Other essentials include security controls, programming knowledge, backup services and general maintenance of the servers. These services can effectively be handled by web hosting companies.

Companies that host their own websites have little competitive advantage to gain in respect to cost of technology and staff expertise. Outsourced of web hosting is far much cheaper and less time demanding. Therefore, instead of the chips company deciding to host its own sites, they have an option of outsourcing it to external companies who have the capability and scalability to provide these services effectively.

GANTT CHART

Delivering data over the web is a cheap and faster method of integrating the internet users and the database. Users will access the database using web browsers to connect to services such as purchase of goods, searching through catalogues, viewing graphics and making payments.

In order for database information to be available to web users from the databases, it must be converted from the database format to a markup language such as HTML or XML. Users requesting information from the database have the data converted from the internal database format to the HTML form so that it can be relayed correctly.

Web server APIs is chosen to be the third party application to be utilized to access remote databases. Web server APIs includes Microsoft information server, Netscape API among others from other vendors.

Server API's provides an alternative to extension and modification of the abilities of server. The user can modify the default behavior and give a new custom characteristic that serves its needs. It addresses the numerous challenges of other methods such as CGI as it gives advanced capabilities for sharing data and communication resources with the servers. Thus, information about a user can be stored and inferred to in the future.

SYSTEM ARCHITECTURE

One of the fundamental components of the application design is the system architecture. System architecture defines the interaction of applications with each other and their functionalities. Web-based applications still rely on distributed application architecture, to utilize the resources of multiple machines at multiple processing points. The distribution of applications up

into pieces leads to the development of a series of layers or tiers.

A distributed application has incorporated n-tier architecture to overcome the limitations of the 2-tier client-server architecture. Three-tier architecture has the user services, business services and data services in individual tiers. This breaking of services is meant to reduce complexity of the application and facilitate increasing demands for operation and efficiency.

A three-tier design has the user interface running on the client while the data is stored on the server. In addition, there is the processing of client requests and translation into data access commands in the middle layer between the client and the server. Thus in this architecture, the middle layer is termed as the application logic. Application logic is necessary in three-tier designs because it provides increased performance on the data server workload. It is typically more efficient and cost effective in large scale systems spanning many organizations with branches. The communication of the data and interface layers is made possible by means of middleware.

Fig. 1 A web-based architecture may use a three-tier design as shown

Middleware

Data communication back and forth the n-tier system is made possible by the middleware. It is essentially defined as the software that mediates application software and network. Through the middleware, the application designer can easily link the human resource department of the pay roll system with to a Web server facilitating access through client computers via the internet or a company network. Likewise, it integrates the web-based applications with the legacy systems. A user will only have to enter the

employee ID on the web-based inquiry for the pay roll system to access the pay roll records and generate the results.

USE CASE: DESCRIPTION OF AN ONLINE CHIPS PURCHASE

The design process of Tony's Chips online website followed the fundamental design elements of human computer interaction. All the elements are discussed briefly to illustrate its significance in application to the system.

Visibility

The location of the buttons on the screen guides the user in the implementation of the next step. This principle is known as visibility and is based on the fact that the more the visible the direction of buttons on the screen, the more the user is aware of what the next operation is. The project involves the user of brightly colored and labeled menus of chips and their prices to give the user a recognizable and friendly interface. The figure below demonstrates the visibility principle meant to give a driving interface that guides the user on the booking and confirmation process of the cars. When the user visits the website, they will be prompted with a welcome page. This makes the user excited of what is offered and facilitates navigation to the next step.

The next page displays to the user some of the purchase options available. The user might decide to pay online or at delivery. All the options are made available to gather for online payment methods, as well as the traditional cash methods.

The buttons are readily available for the user to click on to advance to the next level. This feature removes the memory strain that could have

otherwise been needed to keep the operation in motion. The buttons are large enough but not too detailed to confuse the user of what she is looking for. Navigation is enhanced in this case, and the shopper is capable of depicting the next stage and what he needs to do next.

Feedback

Feedback is the response that the user is feed with once he initiates an online operation to purchase the chips. In order to realize that the process is progressing towards the completion, the system should respond in respect to the inputs of orders and purchases. These responses signify the occurrence of an activity through the transition into new pages, delivering prompts on the input of payment processes, and sequence of opening new tabs.

As the user makes the purchases, the feedback responses inform him to enter the payment details if the method is chosen and provide delivery details. The user interface is as shown.

Consistency

The location of buttons such as purchase keys and confirms card number buttons should be at a consistent position throughout all the pages. This eliminates confusion associated with inconsistent buttons and icons for new users. Therefore, the learning process is quickened, and the user will use similar elements and operations to complete similar tasks. Memorizing the processes is also enhanced giving regular users an easy ride in making orders and purchasing online.

Constraints

According to the use of design element of constraint states that the “ world naturally restricts the allowed behavior of operations on objects such as the order in which parts go together and the way that objects can be manipulated” has been implemented. This signifies that the next operation cannot be implemented without the completion of the existing one. As such, according to the principle, the purchase of the chips cannot be implemented without making the orders. This protects the business from losses and misuse of the company information system through irregular purchases to employees, colleagues and unauthorized personnel (Demetrios, & Louka, 2007).

Finally, after the purchasing transactions is over the web sites appreciates the customer and extends its gratitude for choosing Tony’s Chips. In this way, the shopper feels confident and appreciated and is willing to come back again. It also provides a button for remarks, ease of use and recommendations. In this way, the usability of the site is reviewed so that necessary controls can be implemented.

Usability test

The interaction between humans and the computer system is only beneficial if the usability measurement parameters are favorable. This, thereby, implies that the product under construction has attained its intended use. The major goal of the project includes attainment of efficiency, effectiveness, learnability, memorability safety and utility. It refers to how well the website is performing the online business and returns the company is deriving from the shift. The management will need the records of all purchases at a

predetermined basis to prepare daily sales records, obtain intelligence and plan. It also needs to determine the expenditure and revenue the online business is bringing to the business. Utility is achieved if the intended operation of the web site to transform the business to an online outfit is achieved. Otherwise, the website and systems in place would not be beneficial if more business is not achieved in spite of the shift to the online platform.

SUPPORT FOR A WEB HOSTING SERVICE

The following requirements detail the essentials of internal web hosting;

- Server
- Operating system
- Back-up
- Routine updates of software and hardware to provide the latest releases and technology updates
- Internet pipeline to provide efficient internet connectivity that support internal and external traffic
- Web server administration and knowledge of operating systems
- Personnel available 24 hours a day to provide surveillance and maintenance
- Security protocols and intrusion detection systems to guard against potential viral attacks and firewall penetration

Services such as server maintenance, routine updates, internet pipeline, server administration and surveillance, and security protocols need to be constantly monitored to ensure the efficiency of the site and minimize downtime in case of a problem. Expert staff is necessary to administer the

server 24 hours a day and ensure security protocols are definitions are up to date.

SECURITY CONCERNS

Web-based architectures have a number of issues in terms of securing information in the company's web site. Information security is an essential practice that ensures the safety of information. Information security is founded on three fundamental values; confidentiality, integrity and availability. In order to ensure to ensure the safety of information from unauthorized access, modification, misuse and corruption, safety practices are necessary. Through seamless exchange of information over the internet, security concerns have been raised. The three vital information security areas include authentication, authorization, and confidentiality. These areas have been compromised via the internet through hacking, malware and spyware programs.

Two safety mechanisms and practices are required to ensure the safety of information in computer systems;

- Development of policies that regulate the handling of information.
- Periodic review of information security status through conferences, training forums and assessments

Formulation of security policies is crucial because policies serve as guidelines for the use, access, storage and transfer of information between related parties. Policy formulation processes outlines the mechanisms in which information should be retrieved, used, and stored, and the personnel that are authorized to use it. This regulates the flow of information to the wrong persons thereby reducing the risks of misuse and modification.

Information in the digital age is vulnerable to numerous attacks originating from different sources. Attacks such as viruses, malware, and spyware, among others, degrade the quality and integrity of information (Gao, 2005).

References

Demetrios, P., & Louka, K. (2007). Gaining from migration towards a new mobility system: Towards a new mobility system. OECD Publishing.

Gao, Y. (2005). Web systems design and online consumer behavior. Idea Group Inc (IGI).

Josh DeWind, P. (2008). Rethinking migration: New theoretical and empirical perspectives. Berghahn Books.

Kluwer, O. (2010). Formal methods in system design. Kluwer Academic Publishers.