A STUDY ON CLIENT’S EXPERIENCE OVER WEB PROTOTYPING FOR A PORTAL WITH REFERENCE TO ITC PRIVATE LIMITED

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Abstract
This project is “A STUDY ON CLIENT EXPERIENCE OVER WEB PROTOTYPE FOR A PORTAL WITH REFERENCE TO ITC PRIVATE LIMITED” The journey of developing a new product involves various steps. While it’s tempting to dive head-first into the project, you’ll do well to remember the adage - “by failing to prepare, you prepare to fail”. Planning and testing your ideas before implementing them is the best way to ensure your brand can release the right products. That is what prototyping does - implement ideas into tangible form and explore their real-world impact before finally executing them.

Let’s get a closer understanding of what, how, and why of prototyping.
A portal is a web-based platform that allows users to access information, applications, and services in one centralized location. Portals are commonly used in the e-commerce industry to manage inventory, track shipments, and monitor sales.
Implementing the wire-frame approach requires careful planning and coordination between businesses and their vendors. It is essential to communicate with vendors to gather accurate information about their warehouse capacity and delivery schedules.
Once this information has been collected, businesses can use the wire-frame approach to identify areas where they can improve their storage and distribution processes to maximize space utilization.

Keywords: Prototype, Web designing, Analysis, Portals and implementing the approaches, Coordination between business and their vendors.

INTRODUCTION
Most of the development processes their uses traditional method. This is a kind of communication using spread sheet prototyping, which help to create a prototype build up an error free documentation.

Gathering, understanding and managing requirements is a key factor to the success of a software development effort. Requirement find out is a critical task in all development methods including the agile development method. There are several development techniques available for requirement gathering which can be used with web portal development methods. These techniques concentrates on a continuous interaction with the customer to address the evolution of developing requirements, changing design requirements, prioritizing developing requirements and delivers the most important functionalities first.
The design and developing requirement gathering methodology suggests developing requirements in stages. The aim of this project is to allow requirements to be developed through web-based support. A prototype can also be used to inform investors about a product or collecting first from the users.

COMPANY PROFILE
ITC Limited is an Indian conglomerate company headquartered in Kolkata. ITC has a diversified presence across industries suchs FMCG, hotels, software, packaging, paperboards, specialty papers and agribusiness. The company has 13 businesses in 5 segments. It exports its products in 90 countries. Its products are available in 6 million retail outlets. As of 2019-20, ITC had an annual turnover of US$10.74 billion and a market capitalization of US$35 billion. In December 2022, their market cap stood at ₹4,22,447.30 crore. It employs 36,500 people at more than 60 locations across India. ITC is one of India's foremost private sector companies and a diversified conglomerate with businesses spanning Fast Moving Consumer Goods, Hotels, Paperboards and
Packaging, Agri Business, and Information Technology. The Company is acknowledged as one of India’s most valuable business corporations with a Gross sales value of ₹ 90,104 crores and Net Profit of ₹ 15,058 crores (as on 31.03.2022). ITC was ranked as India’s most admired company, according to a survey conducted by Fortune India, in association with Hay Group. The company was converted into a Public Limited Company on 27 October 1954.

The first step towards Indianization was taken in the same year with 6% of the Indian shareholding of the company. ITC also became the first Indian company to foray into consumer research during this time.

OBJECTIVES OF THE STUDY

PRIMARY OBJECTIVES
To study about “Building a web prototype for a portal with reference to ITC private limited”.

SECONDARY OBJECTIVES
- To identify that the portal makes works easier or faster.
- To study the barriers faced by the vendors to use the portal.
- To design a automation portal will be better than a manual work.
- To analyse that how important is building a web prototype for a portal
- To test that model design is needed for a confidential portal.

NEED OF THE STUDY
- In today's digital age, web portals have become an essential tool for businesses to interact with their customers and stakeholders.
- A web portal is a website that provides users with access to a variety of information, services, and applications. It is a gateway to a company's products, services, and resources.
- Web portals are used by businesses to streamline their operations, increase efficiency, and enhance customer experience.
- The purpose of this study is to develop a web portal prototype that can be used by businesses to improve their operations and enhance customer experience.
- The study will explore the features and functionalities of web portals and identify the key factors that contribute to their success.
- The study also expertise the balance between how web portal makes the work easier then a manual work.

SCOPE OF THE STUDY
- This study will focus on the development of a web portal prototype, its functionalities, and its potential to improve user engagement.
- The purpose of the study is to explore the scope of the portal prototype and its user experience.
- This study examine the different types of web portals, their benefits, challenges, advantages and disadvantages.
- This study also investigate the design elements that make a web portal effective and eco-friendly.
- It provides a platform for users information, services, and products online.

LIMITATIONS OF THE STUDY
- The purpose of this study is to investigate the limitations of web portal prototype design.
- Web portals are a common way for businesses to interact with their customers and provide them with information. However, designing a web portal prototype can be challenging and there are several limitations that need to be considered.
- Technical Limitations-One of the main limitations of web portal prototype design is technical constraints. This includes limitations in terms of the software and hardware used to design the portal.
User Experience Limitations - Another limitation of web portal prototype design related to user experience. While designers may have a clear idea of what they want the portal to look like, it can be difficult to anticipate how users will interact with the portal.

Content Limitations - A third limitation of web portal prototype design is related to content. While designers may have a vision for the overall design of the portal, they must also consider the type of content that will be included. This includes text, images, videos, and other multimedia elements. Designers must ensure that the content is relevant, engaging, and accessible to users. However, it can be challenging to balance the design elements with the content in a way that is visually appealing and effective.

Budget Limitations - A fourth limitation of web portal prototype design is related to budget. Designing a high-quality web portal prototype can be expensive, particularly if designers need to hire additional staff or purchase specialized software or hardware.

RESEARCH METHODOLOGY
Research Methodology is a way to systematically solve the research problems. It explains various steps that are generally adopted by research in studying the research problems along with logic behind them. Research is essentially a systematic enquiry seeking facts through objective verifiable methods in order to discover the relationship among them and to deduce from them broad principles or laws. It is really a method of critical thinking, it comprises defining and redefining problems, suggested solution, collecting, organizing and evaluating data, making deductions and making conclusions.

REVIEW OF LITERATURE
Evans et al., 2009 However, digital business model (DBM) differs from business model on the basis that it can provide a two-way revenue model for both the customers and the sellers, so we need to lay emphasis on both sides. A good digital business model should make sure that the seller as well as the buyer gets benefited.

Gawer et al., 2010 With the evolution of technology and data, business model, it is not only the area that experienced transformation while other areas which experienced transformation are business strategy, workforce, customer interaction and business operations, and these areas are dependent on each other for their growth and success.

Cearley et al., 2012. With the advent of the new economy, business models (BM) have become an increasingly popular unit of analysis to explain differences in firms.

Sabatier et al., 2012. Furthermore, in a study on role of the business model, Chesbrought and Rosenbloom elated a more detailed definition of business model prototype.

Abdelkafi, 2013 There has been a sharp rise in start-ups building software-based platforms (SBP) for industries that once seemed unaffected by digitization. An important feature of this digital platform (DP) is that their reach is much further than the fields of communication and information, and they do so by making the transportation and hospitality industries better.

Azodolmolky et al., 2013, enlargement has to have a business model, if only in order to fascinate investment, help it recruit faculty and encourage organization and workforce. Conventional businesses have to re-examine and bring up-to-date their business strategies regularly, or they will be unsuccessful to get ahead developments and challenges in advance. Stakeholders need to analyse and evaluate the business plans of corporations that concentrate on web portals.

DATA ANALYSIS AND INTERPRETATION
1. FIGURE SHOWING CHI-SQUARE ANALYSIS
Chi-square is a statistical test commonly used to compare observed data with data we would expect.
to obtain according to a specific hypothesis. It is always testing the null hypothesis, which states that there is no significant difference between the expected and observed results.

**NULL HYPOTHESIS**
H0: There is no significant relationship between automation portal and portal makes works easier or faster.

**ALTERNATIVE HYPOTHESIS**
H1: There is a significant relationship between automation portal and portal makes works easier or faster.

**Chi-Square Tests**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>6.473a</td>
<td>9</td>
<td>.692</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>7.095</td>
<td>9</td>
<td>.627</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.024</td>
<td>1</td>
<td>.876</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count

**INTERPRETATION**
From the Chi-Square Analysis, there is no significant between automation portal and portal makes works easier or faster. Thus it is an Null Hypothesis because the P value e is greater than 0.05 significance level.

**2. FIGURE SHOWING CORRELATION ANALYSIS**
It is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables. It can be studied using various methods like Scatter diagram, Karl Pearson's coefficient and Spearman's rank correlation coefficient.

**NULL HYPOTHESIS**
H0: There is no significant correlation between the mode of automation tools will be better than a manual work and what work can this automation portal can reduce.

**ALTERNATIVE HYPOTHESIS:**
H1: There is a significant correlation between the the mode of automation tools will be better than a manual work and what work can this automation portal can reduce.

**Spearman's rho**

<table>
<thead>
<tr>
<th></th>
<th>@14</th>
<th>@23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>.153</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.129</td>
</tr>
<tr>
<td>N</td>
<td>100</td>
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<td>100</td>
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</tbody>
</table>

**INTERPRETATION**
From the correlation test, there is no significant correlation between the mode of automation tools will be better than a manual work and what work can this automation portal can reduce. Thus it is an
Null hypothesis because the P value is greater than 0.05 significance level.

3. FIGURE SHOWING INDEPENDENT T-TEST

The independent t-test also called the two-sample t-test, independent-samples t-test, or student’s t-test, is an inferential statistical test that determines whether there is a statistically significant difference between the means in two unrelated groups.

NULL HYPOTHESIS
H0: There is no significant between how important is building a web prototype for a portal and does the modern design is needed for a confidential portal.

ALTERNATIVE HYPOTHESIS
H1: There is a significant between between how important is building a web prototype for a portal and does the modern design is needed for a confidential portal.

<table>
<thead>
<tr>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
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</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.003</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-.327</td>
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</tbody>
</table>

INTERPRETATION
From the Independent T Test conclude that there is no significance between how important is building a web prototype for a portal and does the modern design is needed for a confidential portal. Thus it is an Null hypothesis because the P value is greater than 0.05 significance level.

4. FIGURE SHOWING ONE-WAY ANOVA

The One-way Anova of variance (ANOVA) is used to determine whether there are they statistically significant difference between the means of three or more independent (unrelated) groups. This guide will provide a brief introduction of the one-way Anova including the assumptions of the test and when you should use this test.

NULL HYPOTHESIS
H0: There is no significant between what are barriers faced by the vendors to the portal and what work can this automation portal can reduce.

ALTERNATIVE HYPOTHESIS:
H1: There is a significant between what are barriers faced by the vendors to the portal and what work can this automation portal can reduce.
From the One-way ANOVA Analysis, there is a significant difference between what are barriers faced by the vendors to the portal and what work can this automation portal can reduce. Thus it is an alternative hypothesis because the P value is less than 0.05 significance level.

**FINDINGS**

- From the Chi-Square Analysis, there is no significant difference between automation portal and portal makes works easier or faster. Thus it is an Null Hypothesis because the P value is greater than 0.05 significance level.
- From the correlation test, there is no significant correlation between the mode of automation tools will be better than a manual work and what work can this automation portal can reduce. Thus it is an Null hypothesis because the P value is greater than 0.05 significance level.
- From the Independent T Test conclude that there is no significance between how important is building a web prototype for a portal and does the modern design is needed for a confidential portal. Thus it is an Null hypothesis because the P value is greater than 0.05 significance level.
- From the One-way ANOVA Analysis, there is a significant difference between what are barriers faced by the vendors to the portal and what work can this automation portal can reduce. Thus, it is an alternative hypothesis because the P value is less than 0.05 significance level.

**CONCLUSION**

- Designing a web prototype portal requires careful consideration of user needs, functionality, and aesthetics. The process involves creating wireframes, testing prototypes, and incorporating feedback to improve the final product. By utilizing a user-centered design approach and following best practices for web design, designers can create portals that are intuitive, engaging, and effective at meeting user needs.
- Furthermore, the use of responsive design techniques can ensure that the portal is accessible across multiple devices and platforms. Overall, designing a web prototype portal requires a combination of technical skills, creativity, and an understanding of user behavior, and can be a rewarding and fulfilling process for designers who are passionate about creating effective digital experiences.
- A well-designed portal can provide users with an intuitive and efficient way to access information and services. It can also help organizations improve their productivity and streamline their workflows.

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