

Online Shopping System

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Abstract— The Online searching may be a net based mostly application supposed for on-line retailers. The main objective of this application is to create it interactive and its simple use. it might build searching, viewing and choice of a product easier. It contains a complicated search engine for user's to look for product specific to their desires. The computer program provides an easy and convenient thanks to look for product wherever a user will look for a product interactively and therefore the computer program would refine the product on the market supported the user's input. The user will then read the entire specification of every product. They can also read the merchandise reviews and conjointly write their own reviews. the appliance conjointly provides a retardant and drop feature so a user will add a product to the cart by dragging the item in to the cart. the most stress lies in providing a user-friendly computer program for effectively showing the required results and its drag and drop behavior.

Keywords: Online Shopping System

I. INTRODUCTION

My project "Online Shopping" is predicated on electronic commerce. Electronic commerce, unremarkably referred to as E-Commerce. it's commerce in product or services victimisation laptop networks, like the net. E-Market attracts on technologies like mobile commerce, electronic funds transfer, offer chain management, web promoting, on-line dealings process, electronic information interchange, inventory management systems, and automatic information assortment systems.

Means that E-Commerce is method of doing business through laptop networks. the first goal of associate degree e-commerce web site is to sell product and services online. Online searching could be a kind of electronic searching store wherever the client is directly on-line to the seller's laptop sometimes via the net. someone sitting on his chair ahead of a laptop will access all the facilities of the net to shop for or sell the product. Online searching system helps in shopping for of products, product and services on-line by selecting the listed product from web site. The cart is especially helpful for United Nations agency haven't time to travel to searching. cart could be a important feature utilized in e-commerce to help individuals creating purchases on-line. The sale and get dealings is completed electronically and interactively in period of time. User will login into E-Commerce (E-Market) web site, once he logged in then mechanically one cart are going to be created, once user choose associate degree item it'll raise cart. just in case user thinks the chosen item isn't helpful for him, then he will delete that item kind the cart. E-commerce is successively driven by the technological advances of the semiconductor trade, and is that the largest sector of the industry. fashionable electronic commerce usually uses the globe Wide net for a minimum of one a part of the transaction's life cycle though it should conjointly use alternative technologies like e-mail. Typical e-

commerce transactions embrace the acquisition of on-line books (such as Amazon) and music purchases (music transfer within the kind of digital distribution like iTunes Store), and to a less extent, customized/personalized on-line shop inventory services. There area unit 3 areas of e-commerce: online retailing, electronic markets, and online auctions. E-commerce is supported by electronic business.

II. LITERATURE SURVEY

A. Title: *A Study on the COVID-19 Awareness Affecting the Consumer Perceived Benefits of Online Shopping in Vietna*

Author: Pham, van Kien

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Description- The Covid-19 outbreak has turned out an opportunity for a recent noticeable increase in online shopping in Vietnam. Hence, this paper aims to discover how online shoppers react to their purchasing behaviour during Covid-19 time in terms of perceived benefits perspective. Based on the collected data from 427 Vietnamese online respondents during the social distancing period due to Covid-19, the research analyses the role of Covid-19 as a moderator variable in the relationship between benefits perception of the consumer and their online shopping activity. The result shows Covid-19 plays a moderating role in consumer's awareness of utilities, which encourages shoppers towards online shopping. However, the affection of society could be a reason that consumers become more hesitant to shop online. In the meanwhile, awareness of the Covid-19 pandemic and marketing policies do not impact on online shopping significantly during the Covid-19 pandemic which is a conflict with previous researches. These findings can contribute to understanding consumer behaviour comprehensively, help companies deal with similar situation as well as recommendations for the government to support businesses effectively in the future.

It should be clearly stated that online shopping is growing as a popular modern channel for Vietnamese consumers in recent years, fuelled by high internet penetration. Vietnamese now are spending more time online and are also shopping more online. Among consumers using the internet, up to 98% of consumers have purchased their commodities through online platforms (Nielsen.). The average online time of Vietnamese internet users is 48 hours per week which means about 6.5 hours every day. Thus, with connection to the internet, e-commerce and online shopping is growing strongly in Vietnam. Almost 50% of respondents of a recent survey by Nielson Vietnam said that they were "using" or "ready to use" e-commerce platforms, utilities such as home delivery to FMCG products (Hawley & Huynh.). Market research firm ComScore also explored that the number of consumer access to retail websites in Vietnam reached 71% of all Internet users surveyed (Ngoc.). The recent growth of online shopping has been explained by

various studies. According to previous researches, online shopping behaviour is not only influenced by the demographic characteristics of customers such as age, gender, and occupation, etc. (Baubonienė & Gulevičiūtė, ; Fang et al., ; Ganesan-Lim et al., ; Yan & Dai,), but also perceived benefit factors (Häubl & Trifts, ; Katawetawaraks & Wang, ; Lee et al., ; Masoud, ; Yan & Dai, ; Zhang et al.,). In 2020, Vietnamese businesses have been facing challenges, like many other countries, caused by Covid-19, which is an epidemic that spreads quickly through normal human-to-human contact and occurred in Vietnam around the end of 2019 (Hawley & Huynh,). As a result, COVID-19 impacts not only general behaviors but shopping and out-of-home consumption. Vietnamese consumers start recognizing the benefits of online shopping, especially during the pandemic period. According to a Neilson's survey on how Covid-19 has impacted on Vietnamese consumers, 25% of respondents said that they have increased their online shopping and have reduced their out-of-home consumption occasions (Neilson,). The Vietnamese government has also taken strong solutions to prevent the disease, including social isolation, encouraging online shopping to prevent crowds and social exposure.

B. Title: Online Shopping Motives during the COVID-19 Pandemic—Lessons from the Crisis

Authors- Julia Koch, Britta Frommeyer and Gerhard Schewe
Published year: 8 December 2020

Description- History shows that the world has been repeatedly affected by pandemics over the past decades; these pandemics have included the “Spanish Flu” of 1918–1919, the “Asian Flu” of 1957–1958, the “Hong Kong Flu” of 1968, SARS-CoV-1 of 2002–2003, and the “Swine Flu” of 2009–2010. To prepare for future pandemics and other global crises, insights drawn from scientific research of different disciplines conducted during these events are needed. The novel SARS-CoV-2 virus that started to spread across the globe at the start of 2020 provides such a research opportunity. Within a few weeks, the situation surrounding this virus developed into a pandemic, paralyzing economies as well as financial markets all over the world and bringing national health systems close to collapse. Secretary-General of the United Nations, António Guterres, described the COVID-19 pandemic as “a global health crisis unlike any in the 75-year history of the United Nations—one that is spreading human suffering, infecting the global economy and upending people’s lives”. To slow the rapid spread of the virus, most countries dramatically restricted social life. These restrictions ranged from bans on large events and the closure of schools and universities to a temporary shutdown of the economy. In countries that imposed a shutdown, most retail stores and services had to close. Simultaneously, consumers faced growing levels of economic uncertainty because of rising unemployment and short-term work. Due to the closure of stationary retail stores, online shopping has become the only means for consumers to satisfy their consumption needs. We argue that it is important to study e-commerce consumption during the COVID-19 crisis for three reasons. First, we assume that the circumstances related to the pandemic will affect consumer behavior in the long term and that e-commerce companies need to thoroughly understand

consumer behavior patterns during this time to maintain a competitive edge. Therefore, the role of established drivers of e-commerce purchase behavior during a global crisis such as the COVID-19 pandemic must be clarified. Second, there is a lively public debate on how to address the pandemic at the global, national, and individual levels. However, it remains unclear whether external influences, such as media reports on the current economic situation and calls for unified action during this crisis, shape consumer behavior. Third, measures of social distancing, such as quarantining, must be investigated to understand how they affect behavioral patterns. E-commerce has been predominant during the COVID-19 pandemic, and retailers have put much effort into building, improving, and promoting their online stores. Some small retailers that did not manage online stores before the shutdown developed temporary solutions to sell their products online, e.g., by posting products on social media sites and by offering product pick-up or delivery services. Others have offered discounts for their online channels and started promotion campaigns on social media. A major German online platform acquired a large number of new partners in the second quarter of 2020 and thus substantially expanded its offers. Due to increasing demand, the company also invested in new technical solutions that improve platform performance and enable partners to better manage their business on the platform. To ensure that these efforts succeed, it is important to investigate consumers’ online purchase motives during this pandemic. Previous research on the determinants of purchase intentions in the context of e-commerce underlines the importance of both hedonic and utilitarian motives. While utilitarian motives refer to the usefulness of a behavior, hedonic motives describe the entertainment and enjoyment experienced from engaging in a behavior. However, the COVID-19 pandemic represents a unique situation, and determinants beyond those involving utilitarian and hedonic motives must be considered. During the crisis, there has been a high degree of media coverage relating to the pandemic, and consumers are exposed to a large amount of information regarding the current economic situation. The current crisis reveals the need to account for the normative influences of these authoritative third parties. Growing levels of economic uncertainty during the COVID-19 crisis provide a unique opportunity to investigate the ways in which both pressures stemming from information on the current economic situation available in the media and pressures stemming from close social networks influence consumers’ purchase behavior. Therefore, this study investigates shopping motivations that drive online purchase behavior during the COVID-19 pandemic. We analyze how hedonic and utilitarian motives, previously found to influence consumers’ e-commerce purchase behavior, apply under these extraordinary circumstances. Additionally, we examine the relationship to normative influences. We complement our study with mean comparisons to investigate how quarantining as a measure of social distancing and sociodemographic characteristics affect consumers’ shopping motivations. Our findings show that hedonic motivation is the best predictor of online purchase intentions, followed by utilitarian and normative motives. With regard to the latter aspect, we find that external normative pressures such as media reports impact consumer behavior, while pressures stemming from

the close social networks of families and friends do not. Furthermore, individuals practicing social distancing, generation Z, and women show higher levels of hedonic motivation to engage in online shopping during the pandemic.

III. SYSTEM ANALYSIS

A. Introduction: -

Online-Shopping refers to the buying and selling of products or services over electronic systems such as the Internet and other computer networks. The Shopping Cart is very important feature used in E-Market to help folks creating purchases product on-line. It additionally includes the complete on-line method of developing, marketing, selling, delivering, mating and paying for product and services. so as to buy a go-cart is provided to the user. The amount of trade conducted electronically has grownup very with widespread net usage. The utilization of commerce is conducted during this approach, urging and drawing on innovations in electronic funds transfer, offer chain management, net selling, on-line dealings process, electronic information interchange, inventory management systems, and automatic information assortment systems. The E-Market website can let customers to look at and order product from any a part of the word.

The main advantage of E-Market over ancient commerce is that the user will browse on-line retailers, compare costs and order merchandise sitting reception on their laptop. Secure registration and profile management facilities for purchasers. Go-cart feature permits on-line looking customers to "place" things within the cart. It Decreases the price of making, processing, distributing, storing and retrieving paper-based data. Expands the marketplace to national and international markets. Upon "checkout" the code calculates as total for the order together with shipping and handling postage, packing and taxes, if applicable. Reduces the time between the outlay of capital and therefore the receipt of product and services. The day, all year spherical from virtually any location. It are often accessed over the net.

Purchasing of products on-line, user will opt for completely different product supported classes, on-line payments, delivery services and therefore covering the disadvantages of the prevailing system and creating the shopping for easier and serving to the vendors to achieve wider market. It Provides shoppers with a lot of selections. client should purchase product on-line. Proposed system helps in building a web site to shop for, sell product or merchandise on-line mistreatment net association. allows shoppers to buy or do different transactions twenty four hours .

B. Data Gathering Techniques:

Data assortment is that the method of gathering and mensuration info on targeted variables in a longtime system, that then allows one to answer relevant queries and judge outcomes. Knowledge assortment could be a part of analysis all told fields of study together with physical and social sciences, humanities, and business. Whereas strategies vary by discipline, the stress on making certain correct and honest assortment remains constant. The goal for all knowledge

assortment is to capture quality proof that permits analysis to guide to the formulation of convincing and credible answers to the queries that are display. no matter the sphere of study or preference for outlining knowledge (quantitative or qualitative), correct knowledge assortment is important to maintaining the integrity of analysis. each the choice of acceptable knowledge assortment instruments (existing, modified, or new developed) and clearly portrayed directions for his or her correct use scale back the probability of errors occurring. a proper knowledge assortment method is critical because it ensures that the information gathered square measure each outlined and correct. This way, ulterior selections supported arguments embodied within the findings square measure created exploitation valid knowledge. the method provides each a baseline from that to live and in sure cases a sign of what to boost.

C. Process Models With Justification: -

The repetitive model is employed during this project. Repetitive method starts with a straightforward implementation of a set of the software system needs and iteratively enhances the evolving versions till the complete system is enforced. At every iteration, style modifications are created and new purposeful capabilities are value-added. the essential plan behind this methodology is to develop a system through recurrent cycles (iterative) and in smaller parts at a time.

1) Iterative Model – Application: -

Like different SDLC models, unvarying and progressive development has some specific applications within the code business. This model is most frequently employed in the given below scenarios: -

- Requirements of the whole system area unit clearly outlined and understood.
- Major necessities should be defined; but, some functionalities or requested enhancements might evolve with time.
- There may be a time to the market constraint.
- A new technology is getting used and is being learnt by the event team whereas engaged on the project.
- Resources with required ability sets don't seem to be out there and area unit planned to be used on contract basis for specific iterations.
- There area unit some bad options and goals which can modification within the future.

IV. PROPOSED SYSTEM

Through our detailed analysis and Design service, we take our goals and the abstract vision of a working system and transform that information into the final automation design. To round out our system's final design, we specify the hardware and software that will be critical components of our OT (operational technology) infrastructure. In today's modern automation systems, hardware and software are closely coupled to provide agile integration as well as the ability to quickly harvest data, transforming it into actionable intelligence through advanced software platforms. Our systems use the most advanced hardware and software technologies available today, and we make it a goal to choose components that work together well as a cohesive system as

well as provide a path for future growth and sustainability. To be used efficiently, all computer software needs certain hardware components or other software resources to be present on a computer. These prerequisites are known as (computer) system requirements and are often used as a guideline as opposed to an absolute rule.

A. Software Requirement: -

We have used following softwares for development of our project.

B. Sublime Text3: -

Sublime Text is a text editor written in C++ and Python available on windows, Mac and Linux. A text editor is a program developers write their code in. Sublime Text is a fast, powerful and easily extensible code editor. Check out some visual demos for a quick demonstration. Sublime Text editor is a sophisticated text editor which is widely used among developers. It includes wide features such as Syntax Highlight, Auto Indentation, File Type Recognition, Sidebar, Macros, Plug-in and Packages that make it easy for working with code base

C. Django: -

Django is a free and open source web application framework written in Python. A framework is nothing more than a collection of modules that make development easier. They are grouped together, and allow you to create applications or websites from an existing source, instead of from scratch. This is how websites - even simple ones designed by a single person - can still include advanced functionality like authentication support, management and admin panels, contact forms, comment boxes, file upload support, and more. In other words, if you were creating a website from scratch you would need to develop these components yourself. By using a framework instead, these components are already built, you just need to configure them properly to match your site

D. Python: -

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse

1) Python is Interpreted Python is 2. Python is Object-Oriented 3. Python is a Beginner's

E. HTML5:-

HTML is a language for describing the structure of Web pages. HTML stands for Hyper Text Markup Language. Web pages consist of markup tags and plain text. HTML5 is the next generation of HTML. HTML tags label pieces of content such as "heading", "paragraph", "table", and so on. Browsers do not display the HTML tags, but use them to render the content of the page.

F. CSS3: -

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts.

G. JAVASCRIPT: -

JavaScript is one of the core technologies of the World Wide Web. It is a programming language that is characterized as dynamic, weakly typed, prototype-based and multi-paradigm. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities

H. SQLITE: -

SQLite is a software library that provides a relational database management system. The lite in SQLite means light weight in terms of setup, database administration, and required resource. SQLite has the following noticeable features: self-contained, server less, zero-configuration, transactional. SQLite is self-contained means it requires minimal support from the operating system or external library. This makes SQLite usable in any environments especially in embedded devices like iPhones, Android phones, game consoles, handheld media players, etc. SQLite is developed using ANSI-C. The source code is available as a big `sqlite3.c` and its header file `sqlite3.h`. If you want to develop an application that uses SQLite, you just need to drop these files into your project and compile it with your code. SQLite uses dynamic types for tables. It means you can store any value in any column, regardless of the data type. SQLite allows a single database connection to access multiple database files simultaneously. This brings many nice features like joining tables in different databases or copying data between databases in a single command. SQLite is capable of creating in-memory databases which are very fast to work with.

I. Minimum Specification Required:

1) Hardware

- Processor: Intel i5
- RAM: 4GB
- Hard Disk: 500GB

2) Software

- Operating System
- Web Browser
- Text Editor
- Django
- Pycharm
- Python

V. SYSTEM DESIGN

System design is that the method of process the weather of a system like the design, modules and parts, the various interfaces of these parts and also the information that goes through that system. it's meant to satisfy specific wants and

necessities of a business or organization through the engineering of a coherent and well-running system. Systems style implies a scientific approach to the look of a system. it should take a bottom-up or top-down approach, however either method the method is systematic whereby it takes under consideration all connected variables of the system that has to be created—from the design, to the specified hardware and code, right right down to the information and the way it travels and transforms throughout its travel through the system. Systems style then overlaps with analysis, systems engineering and systems design. The systems style approach 1st appeared right before war II, once engineers were making an attempt to unravel complicated management and communications issues. They required to be ready to standardize their work into correct} discipline with proper strategies, particularly for brand spanking new fields like scientific theory, research and technology normally.

A. Data Flow Diagram:-

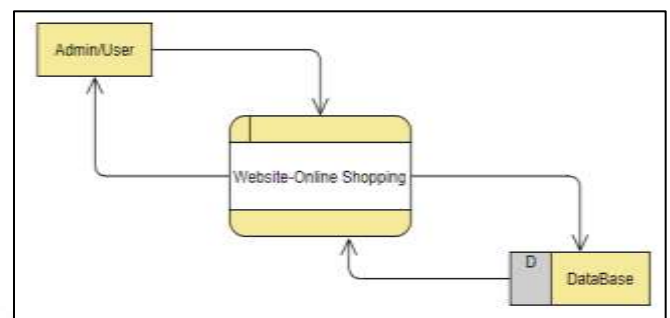
Data Flow Diagram is a process modeling tool. It traces the flow of data through different processes in the system. It helps in easy understanding of the system. Data Flow Diagram is a graphical representation of the 'Flow' of data through an information system. Often they are preliminary step, used to create an overview of the system which can later be elaborated. DFDs can also be used for the visualization of data processing (Structured design).

A DFD shows what kind of information will be input to and output from the system, where the data will come from and go to and where the data will be stored. It does not show

the information about the timing of the process or information about whether the process will operate in sequence or in parallel. It is a technique, we are benefitted from, particularly before we go through business process. A Data Flow Diagram looks at how data flows through a system. It concerns things like where the data will come from and go, as well as where it will be stored. But we won't find information about the processing timing.

We usually begin drawing a context diagram, a simple representation of the whole system. To elaborate further from that we drill down to level 1 diagram with additional information about the major functions of the system. This could continue to evolve to become a level 2 diagram when further analysis is required. Progression to level 3, 4 and so on are possible but anything beyond level 3 is not very common.

B. 0 Level DFD



C. 1 Level DFD

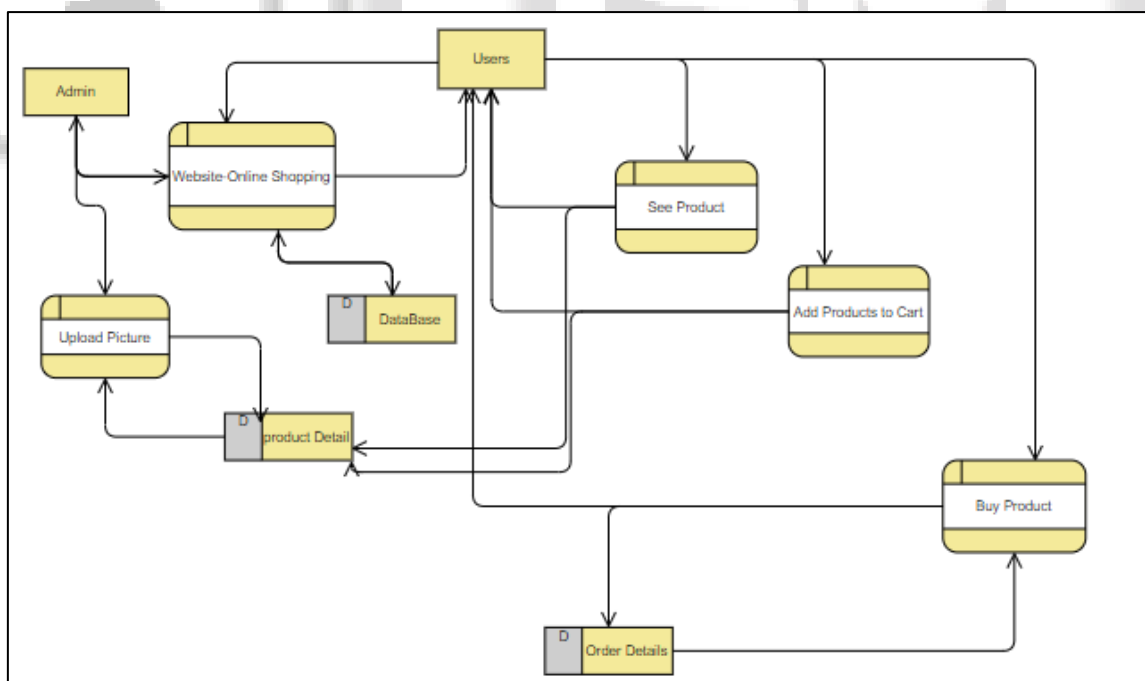


Fig. 2: 1 Level DFD

is used to check all possible combinations of execution paths through the code at every module level.

VII. LIMITATIONS AND FUTURE ENHANCEMENTS

A. Limitations:

Although compared to the market, this software system “E-Market” internet application immediately has various limitations however in future with sweetening it are often substituted for a true world. Here is listing of legendary scope below this application:

- As this can be a web-based application, like fashionable Portals gift on {the internet the internet the net} or web this Portal isn't providing glorious program and GUI options. However, tries are maintained to supply a kind of fine program.
- though security algorithms area unit being employed to cypher or decode the username and secret, there area unit still probabilities that the guidance provided by the user could get leaked or tampered with.
- web site is unable to supply the power of making Associate in Nursing Email account at this point.
- This project is unable to try and do monetary tasks. like acceptive payments check as Draft/Credit Card.

B. Future Enhancements:

This developing web site hasn't facility of on-line enlisting tests. In more improvement this facility could also be doable. In more improvement, it should be doable to supply info on demand. there'll be no got to search page by page. In future, management will offer at the time a response regarding all kinds of queries which can be asked rather than some fastened list. In more improvement this E-Market are often viewed in several languages means that this E-Market are often trilingual portal.

C. RSS feed:

RSS feature may be further during this project. RSS may be a family of net feed formats accustomed publish of times updated works entries like user profile, in a very standardized format. Associate in Nursing RSS document includes full or summarized text, and information like commercial enterprise dates and authorship. net feeds profit publishers by belongings them syndicate content mechanically. In further enhancement, management will offer SMS alerts facilities to customers regarding jobs. In more improvement, management will offer info regarding job fairs and media coverage photos to customers. In future management will offer technical support through live chat.

VIII. SUMMARY

The major objective of the projected system is to produce users means a far} higher way of get digitalized. The projected system helps in building an internet site to shop for, sell merchandise or product on-line victimization web affiliation. Allows customers to buy or do different transactions twenty four hours daily, all year spherical from virtually any location. It is accessed over the net. Net based mostly application is that the magic of today's world. The thing of “E-Market project is to harness the ability of the net for our sensible and potential one. This report explains to

extensively cowl this idea and plant a seed of wonder within the mind of users. We hope that IT Customers would maximize utilization of our project and that we carry

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