

An On-Demand Short Video Platform to Save Time

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Abstract – At an age when users are bombarded with tremendous amounts of data on the internet, it becomes difficult for them to find specific relevant content for their queries. Furthermore, the decreasing attention spans of humans make it more likely that the user will not have the patience to get to the most reliable information or solution. The rapid growth in technology has also caused the information to get outdated at an extremely fast rate, which is difficult to keep up with. In this paper, we will attempt to find a solution by devising a platform that relies on an open-source community that will record short, to-the-point videos to answer questions asked by a user. The platform will use a rating and a voting system to rank multiple videos in response to the question. The paper will in-depth discuss how this will save a huge amount of valuable time for the users by pinpointing their queries and finding the corresponding videos in response. The system will reward contributors with a native Cryptocurrency.

I. INTRODUCTION

The platform is elaborated through the Information Technology Infrastructure Library (ITIL) framework. This paper explains the application of all the stages of the ITIL lifecycle. The five stages of the ITIL lifecycle are ITIL Service Strategy, ITIL Service Design, ITIL Service Transition, ITIL Service Operation, and ITIL Continual Service Improvement [1].

The guidelines established in the ITIL framework are used in this paper to plan resource allocation, business breakthroughs, financial strategy, market research, project management, and the evaluation of risks.

The platform aims to reduce the time the users spend on the internet, trying to find a solution to their problems by providing them with short videos that are sharply specific to the problem they are facing or the information they are looking for. The platform will have a user-friendly interface that will enable users to search for anything they want. Their question will be compared to the existing questions that exist in the database using advanced search algorithms like Google's search algorithm [2]. The most relevant video will be shown to the user. Moreover, the

user will be asked for feedback so that the quality of the service can be improved. In case there is no video available on the platform, the question will be posted on the platform and the community of the platform is expected to answer the question in the form of a short video. They will be compensated for the videos they post following the demand, and engagement of their video. The platform will use its cryptocurrency as a means of compensation, which will have the ability to be exchanged against any fiat currency at designated online crypto exchanges [3].

II. SERVICE STRATEGY

Service strategy defines plan for the service, market analysis, resources needed for service realization, costs and budget during process and progress, customers, and the value that's created [1].

According to Smallbizgenius, 69% of people prefer videos over text [4]. Considering the statistics, most of the people amongst that 69% would prefer our proposed platform. According to Microsoft Canada, "digital lifestyles are changing the brain, decreasing the ability for prolonged focus and increasing their appetite for more stimuli" [5]. According to this report, people would prefer our short, solution-focused videos compared to other platforms that encourage longer videos due to the more revenue from advertisements [6].

The following resources are needed to develop the platform:

Human resource from disciplines including Software Development, Product Development, UI/UX Design, Blockchain Development, Marketing, Sales, and Growth

Hardware including machines for the development of the platform for the development engineers

Software including CRM, Cloud Services like Google Firebase for the backend, and Figma for UI design

Cryptocurrency inside an existing crypto wallet for the development and deployment of the payment token on the blockchain.

The utility provided by the platform is that it will save a lot of valued time for the users since they will get answers to most of their questions, and solutions to most of their problems under one platform. It will also cater to the shorter attention spans the users are adapting to since it will provide short, engaging videos [6].

Service portfolio management is defined as "the complete set of services that are managed by a service provider. The service portfolio is used to manage the entire lifecycle of all services and includes three categories: service pipeline (proposed or in development), service catalog (live or available for deployment), and retired services" [1]. The service pipeline in play is the process of token generation and distribution, and the setting up of the token at different cryptocurrency exchanges. The service catalog will consist of one primary service: the on-demand videos for the users.

Financial management is the process responsible for managing an IT service provider's budgeting, accounting, and charging requirements [1]. Furthermore, it will be responsible for bringing investors to invest in our platform and the cryptocurrency, which will pay for the services and the content creators.

Demand management deals with customer needs, customer potential, and service differentiation [1]. From a strategic level, demand management involves pattern analysis of business activity and customer profiles [1]. In context to the platform, demand management would consist of gathering data to make meaningful decisions that make sure no resources are wasted. A lot of strategic planning would be needed for cost recovery and scalability of the platform and resources according to the demand.

III. SERVICE DESIGN

Service design is the second stage of the ITIL life cycle. The goal of service design is to ensure that the services are designed to meet the needs of the business [1]. "Key activities within this stage of the lifecycle include the planning and coordination of design activities, ensuring consistent designs of services, service management information systems, architectures, technology, processes, information and metrics, production of service design packages (SDPs), management of interfaces, and improvement of service design activities and processes" [1]. It is important to have efficient utilization of the following: people, products, processes, partners [1].

The effective use of programmers, marketers, blockchain developers is important and the process needs to be designed to enable asynchronous development from

all departments. All the product subscriptions should be given special attention so that none are wasted. The same goes for all business-to-business (B2B) partnerships.

Service catalog management will be a crucial part of the business because it will enable the potential community of the platform to have an insight into the features like payment through the cryptocurrency token and the ease of use of that token due to the fast and easy conversion into fiat currency.

Service level management (SLM) "negotiates, agrees and documents appropriate IT service targets with the business in service level agreements (SLAs) and then monitors and produces reports on delivery against the agreed level of service" [1]. The platform needs to have strict quality management and a quick response system that provides customers with quick support in case of any problem. SLM will make sure all the services have always maintained the ideal quality level.

Availability Management consists of reactive and proactive activities [1]. Reactive activities will make sure the service is available at times of crashes, or problems by solving that problem. Also, in general monitoring and measuring events related to service unavailability. Proactive activities will provide recommendations regarding the optimized design that will lead to a reduction in the failure rate of the platform. It could compare existing backend servers and technologies with other, newer technologies that will reduce the failure rate.

Capacity management provides a point of focus along with management of capacity of the platform with performance-related issues [1]. Capacity management at the design stage will enable the platform to focus more on high-priority tasks and to provide a better performance in those areas. This will enable the platform to do a single task with excellence, which will increase the chances of success.

Information security management (ISM) will enable security features at the design phase of the platform so that there are no vulnerabilities left for exploitation since the platform will be dealing with financial assets so this phase will make sure those assets are secured. Moreover, there will be a lot of user data collected by the platform, this phase will also take measures to prevent data leakage in the future. It will ensure measures for the availability, confidentiality, integrity, authenticity, and non-repudiation of the platform.

The supplier management process ensures that suppliers and the services they provide are managed to support IT service targets and business expectations [1]. At this phase, there will be policies set in place so that the open community stays engaged with the platform and that there are enough incentives for them. It is extremely crucial

because the platform's success depends upon the quality of content generated by the open community of the platform.

IV. SERVICE TRANSITION

The third stage of the ITIL life cycle is service transition. The goal of service transition is to ensure that all services meet expectations of key goals documented in service strategy and service design [1]. Service transition consists of transition planning and support, change management, service asset and configuration management, release and deployment management, service validation and testing, change evaluation and knowledge management [1].

The transition planning and support part consist of coordination of resources and capabilities needed to provide smooth operation of the transition stage. Moreover, planning and coordination of individual service transition to provide the anticipated benefits of the services [1]. In the case of the platform, it is important to analyze if we have enough bandwidth in the servers to cater to all the expected users after the release. It is also important to look at individual services like minting of the token and the distribution of the token. Decisions like a market cap for the token should be reevaluated at this stage.

Change management is the process of controlling the lifecycle of all the changes, which enables improvements to be made without disrupting the service [1]. It also deals with the planning, testing, implementing, documenting, and reviewing changes in a controlled manner [1]. The initial design of the platform will go through a process of changes so that it can improve the user experience. It will be making changes to adopt better technologies, better algorithms, changes in the UI based on the feedback that is given by the testers and users, so change management will be a key stage in the production of the platform.

The next important stage of service transition is service asset and configuration management (SACM). It ensures that the assets required to provide the services are managed properly, along with precise knowledge about those assets is available when needed [1]. It also covers the configuration of the assets and their connection with each other [1]. This phase is crucial in the creation of the platform because there will be many online services being used to design and develop different aspects of the application. So, documenting their relationship with each other and the mechanism of how it all works together will save time in the future. It will hold elaborate information regarding the services and technologies that are being used for each of the processes along with their versions since confusion about versions could potentially be extremely difficult to debug in the future.

Release and deployment management deals with the plan, schedule, control, building, testing, and deployment

of the releases. Another key function is to deliver new features required while protecting the existing services [1]. This stage will look at the application under a microscope so executing it well, especially the testing part will deliver enable us to deliver a better product at the end during the time of deployment.

The service validation and testing process ensures that the service matches its design specification and meets the needs of the business [1]. The platform will undergo rigorous testing and validation since there is no room for error in the token generation and distribution process. Everything needs to work perfectly before deployment and this process will ensure that is the case before it is deployed.

The change evaluation process provides a formal, standardized means to determine the performance of a service change in a way it will impact business outcomes and on other existing or proposed services along with the whole infrastructure [1]. This phase will provide deep insights into the impact each change in the services of the platform will have on the whole platform at a macro level. It is important to look at the whole image instead of looking at an individual service alone. This stage will prevent changes that might end up affecting the platform application negatively.

Knowledge management makes sure that ideas, experiences, and all other kinds of knowledge are available at the right place at the right time [1]. In the development of the platform, knowledge management will play a crucial role to make sure all the development and design departments of the platform are on the same page and have access to the latest knowledge.

V. SERVICE OPERATION

The fourth stage of the ITIL life cycle is Service Operation. It provides a connection between service providers and users. Service Operation's key processes and activities are Event Management, Incident Management, Request Fulfilment, Problem Management, and Access Management [1], [7].

Event Management ensures the status of the infrastructure and the components of it. Event Management also manages the events by determining and detecting the correct control action [1]. Since the platform is on the internet, most of the components are going to be taken care of with software.

Incident Management's purpose is to make the service run normally as rapidly as possible and minimize the negative effect on the service or platform [1]. Incident Management is one of the most crucial parts of the platform because the main purpose of the platform is to provide

video-based answers to the questions of users which should be available from the beginning of the whole process until the end.

Providing the appropriate service and information on demand is a huge part of the platform. The purpose of the Request Fulfilment is to enable users to request and get standard access to the service [1]. This operation is going to be carried through by ensuring the quality of each service given.

Problem Management aims to manage problems through the life cycle of the service. Identification through investigation and reporting or documentation to the removal of the problem can be defined as the life cycle of Problem Management [1]. Many problems may occur during the usage of the platform which might be because of the mistakes of the platform or caused by the users. Removal of the problems is a crucial part of the platform.

VI. CONTINUAL SERVICE IMPROVEMENT

Continual Service Improvement has seven important improvement processes which are identifying the strategy for improvement, defining what you will measure, gathering the data, processing the data, presenting and using the information and implementing improvement [1].

The platform will use the vision, strategy, and goals to make improvements in service with the help of IT services. Defining the measures according to the limitations of the platform to achieve its goals is an important part of continual service improvement. Data will be collected to improve the service and general quality of the platform.

Gathered data should be processed to gain meaningful information. Analyzation of the data and information collected into knowledge that are affecting the platform is one of the important improvement processes. This process should help to identify whether the platform meets the targets or not. It needs to show the clear trends and necessary corrective actions to take and the cost of it. This knowledge should be transferred into presentations and reports to get a better understanding and make better strategic, tactical, and operational decisions.

Gained knowledge is used to optimize, improve and correct services, processes, and all other supporting activities and technology [1]. Continual service improvement will bring many opportunities for improvement, and the platform will resolve the priorities according to its goals, resources, and funding.

VII. CONCLUSION

Use ITIL lifecycle to develop and build an on-demand video platform that solves the problems of the users by providing them with answers to their queries in the form of short, easily consumable videos. The platform will rely

upon the open community to answer the questions of the users. The content creators will be rewarded with a native cryptocurrency token. The token can be exchanged into fiat currency by using the partner exchanges. The paper breaks down the process of developing the platform using the ITIL framework. It explains the crucial steps of the ITIL framework. It further breaks down the crucial steps and their advantages that are needed to be taken at each stage of the ITIL framework for the creation of the platform.

LITERATURE

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