



#### Global Journal of Research in Engineering & Computer Sciences

Volume 01 | Issue 01 | Sep-Oct | 2021

Journal homepage: <a href="https://gjrpublication.com/journals/">https://gjrpublication.com/journals/</a>

**Original Research Article** 

## **User Analysis on Digital Adoption Platform**

\*Dr. Bhagya R<sup>1</sup> & Bharathi R<sup>2</sup>

<sup>1</sup>Department of Electronics and Telecommunication RV College of Engineering, Bangalore, India

\*Corresponding author: Dr. Bhagya R

#### **Abstract**

With the rapid progression of technology and related software's in all fields of engineering, manufacturing, medicine and many such areas of study and service, the problem encountered is with the adoption of these ever changing technologies to the end user as well as the faculty responsible for enabling alterations based on the identified requirements. The task may be as easy as to create an account on a website or understand an entire complex business process, both of which require some amount of training for the user in order to do the expected task. This process however, is time and resource consuming at the expense of the company, but still very essential. It is almost impractical to let the user learn these tasks themselves or navigate them to various popular video apps and articles to gain sufficient knowledge. Thus, it would make sense to compile all the documentation, videos, links, pop-ups and walkthroughs within the web application page for the user to refer to enabling their deeper and faster understanding of the work at hand. This paper presents the efficiency of Digital adoption for an application and the user analysis using the analytics tool.

**Keywords:** Digital Adoption platform, User analysis, Whatfix, Whatfix analytics.

#### Introduction

As we advance into an age of complete digitisation of all standard processes, the end users of most organisations encounter a set of new challenges. Understanding a business process in itself is a challenging task and it becomes a bigger challenge when it has to be done remotely without any assistance other than documentation available to the end User. The problem lies with the adoption of these ever changing technologies to the end user as well as the faculty responsible for enabling alterations based on the identified requirements. The task may be as easy as to create an account on a website or understand an entire complex business process, both of which require some amount of training for the user in order to do the expected task. The documentation given to the end user is often lengthy, unnecessarily technical and not to mention, very time consuming to understand and implement. Documentation may be in the form of articles, text files or even video links from popular video sharing websites or the organizations' own web application. Another issue encountered is navigation between the parent document and the video or documentation links present in the application or general website help. This is a major setback for company time as well as resource allocation and thus it is essential to provide immediate optimization to end user learning with the rapid increase in online transactions. This would not only decrease company resource drain but also make the end user learning experience quick and effective. This is where a Digital Adoption Platform comes into picture. DAPs help in improving onboarding of new users, training for employees, resource optimization and other applications, effectively and efficiently. Digital adoption refers to the state where someone can use tools (programs, websites, apps, or software) to their full capacity to perform various types of digital processes. When employees are given access to web-based applications and other technologies and don't leverage all their features to make work easier, broader digital transformation initiatives can suffer as a result. Early versions of DAPs offered some type of on-screen assistance to users in conjunction with web-based applications. Today, they are an essential part of the process.

<sup>&</sup>lt;sup>2</sup>Department of Computer Science Engineering BMS Institute of Technology and Management, Bangalore, India

## **DISCUSSION**

A digital adoption platform (DAP) is software that integrates completely with a host application in order to help the user learn the application. The digital adoption platform uses walk-throughs, videos, self-help menus, and more to guide the user through every aspect of the application. Digital adoption platforms (DAPs) are a type of digital adoption solution that integrates fully with enterprise applications. The DAP is virtually placed over the top of the web application to assist users who are learning how to use the software. The DAP's help feature integrates seamlessly with the software to avoid distracting the user. There are a few bottlenecks like lack of technology and many digital tools to be chosen from, that prevent companies from successfully achieving digital adoption. Sometimes companies offer user guides and other resources that would improve their employee experience and user experience, but those alone don't offset the impact of application clutter.

The software walks users through different parts of the application, offering step-by-step instructions to help them complete specific tasks. DAPs also have self-help menus with links to articles, videos, and guided walk-throughs so that users can effectively learn every aspect of the application. The role of a DAP is to facilitate digital adoption, either by customers or within a company. DAPs help people quickly and easily learn to use new technology by guiding them throughout the application and offering extensive resources to answer any questions. The software helps ensure that users won't get stuck when trying to learn certain tasks in the platform and won't overlook vital features. Inappropriate software use and issues with onboarding and other user processes cause more than 91% of enterprise software errors. Digital adoption platforms help prevent user error in the application by walking people step-by-step through different processes and tasks. DAPs also help increase end-user adoption. One of the top benefits of digital adoption platforms is increasing end-user adoption rates. Dimensions UK, a British nonprofit, increased its three-month user-adoption rate from 10% to 50% using Whatfix's DAP. DAP helps ensure that everyone in the company is taking advantage of the new technology and that the customers see maximum value from tech investments in any product. Some DAP features to look out for are adaptability, user-friendly, user analytics and process automation.

There are several reasons why technology adoption is important to the success of a business:

- Technology improves the overall employee experience by making work easier.
- Technology allows employees to be more efficient when performing work tasks.
- Companies that embrace new technologies are able to attract and retain high-quality employees.
- Companies that embrace new technologies experience increases in customer service quality and revenues.

Whatfix is one of the leading Digital adoption platforms and has been used for the analysis in this paper. Whatfix is an interactive tool which helps the user in effective training of the application. It will help the user through walkthroughs and complete all the tasks. Guidance will be provided for doing the tasks. In addition to being an interactive tool, Whatfix is a multilingual application providing assistance in all major national and international languages. There are several instances where users need the assistance to perform some activities where the application is complex and the user isn't aware of a certain business process. Whatfix can be the one solution to all these challenges by being live all the time and on all browsers.

Whatfix provides an interactive walk through tool that helps users in completing a set of predefined tasks on client web applications with the help of various widgets such as Self Help, Task List, Pop-Ups and Smart Tips that are chosen intuitively based on the nature of work involved. With the help of the Whatfix dashboard, a fully functional set of guided walkthroughs and step by step process explanations can be injected into the client web application without modifying the underlying code related to the client website. Whatfix acts like a layer on top of the external application providing all the necessary information to the end user to understand the task at hand without any human contact.

What is the role of Digital Adoption in User onboarding?

Digital Adoption is one of the key disruptors for onboarding and user training in the current era of technology. Digital Adoption aims to solve all user onboarding and training needs specially curated for each client.

The interactive walkthroughs and other functionalities on the application are fulfilled with the help of flows. Various widgets such as Self Help, Task List, Pop-Ups and Smart Tips that are chosen intuitively based on the nature of work involved are used. All the documentation, videos, links, pop-ups and walkthroughs are compiled within the web application page for the user to refer to enabling their deeper and faster understanding of the work at hand. The flows help in revolutionizing the way Application Support and

Learning content is consumed by providing Contextual and Interactive walk-throughs inside the application at the exact time a task is being performed.

Benefits of Introducing a Digital Adoption Platform for Enterprises include: Increased Efficiency and Productivity, more Innovation in the Workplace, higher Customer Satisfaction Rates, improved Employee Experience. It has been

evaluated that a newly hired employee takes on an average 8 months to reach full productivity in a company. This is the direct consequence of 35% of the companies not having any sort of onboarding or training programmes readily available to the candidate at their time of joining. An average of \$37 billion is spent annually to keep unproductive users or employees who don't necessarily understand the job assigned to them. Moreover, it has been observed that manager satisfaction improves almost 20% when a professional training or a similar programme is available. To overcome this major cause of revenue and resource loss, a Digital Adoption drive has been initiated by Whatfix to solve all user onboarding and training needs specially curated for each client. Digital Adoption is one of the key disruptors for onboarding and user training in the current era of technology. If the employee experience and customer relations can be improved, then productivity and company profits can potentially increase. Forbes reports that startups that implement this type of "digital-first" strategy have been able to boost their revenue by 34%.

With the increase in businesses and processes being made online, user onboarding becomes an unambiguous requirement. The quality of user onboarding defines the prosperity of a company's future in the market. The following are the reasons behind increased interest in this domain:

- TIME CONSUMING USER ONBOARDING Newly hired employees take on an average of 8 months to reach full productivity in a company that has little or no user onboarding program.
- LACK OF INITIAL TRAINING 35% of the companies having no onboarding or training programs readily available to the candidate at their time of joining. This results in employees or end users to learn and understand all the business processes by themselves with the help of limited documentation.
- RESOURCE OPTIMISATION An average of \$37 billion spent annually to keep unproductive users or employees
  who don't necessarily understand the job assigned to them. This is an unnecessary financial drain for a company
  that has a massive user base and evolving technology.
- SATISFACTION User satisfaction improves almost 20% when a professional training or a similar program is available at the initial stage.

#### RESULTS

The User analysis was achieved using Whatfix analytics tool. The Self Help engagement gives a broad overview of user reach. User engagement can be defined as the involvement of the user in participating with a widget or tool that can be in the form of clicks, hovers or any other trigger action defined at the time of coding to initiate some process. The fluctuating nature of peaks in Figure 1 in the user engagement with the Self Help is a clear indication that the user is interacting with a particular flow for a few days and then a different set of flows on a periodic basis.

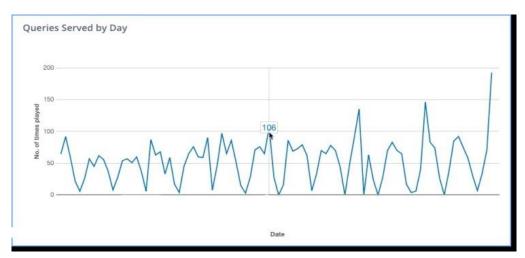


Figure-1: User engagement of Self-help widget

The Self Help also provides a means to record the searches filled in the search engine, capturing the successful and unsuccessful searches. Successful searches occur when a user enters a keyword in the search engine provided within the self help and retrieves some flow or data related to it. Unsuccessful search is when the user enters a keyword or phrase in the search engine and has no results retrieved. This is crucial to understand Rate of successful search analysis was 93.6974% as depicted in Figure 2 which concludes that the number of unsuccessful searches were very low. This indicates that the content created was of good quality and catered to the needs of the end user.



Figure-2: Successful and unsuccessful search analysis

The user engagement with respect to pop-ups is always tricky knowing that pop-ups are generally disruptive to end user experience. Hence, only announcements and minor unimportant information can be projected to the user using pop-ups. The user engagement as depicted in Figure 3 with the pop-up has been significantly lesser than the other tools with an engagement of 74.522% indicating that pop-ups are generally disruptive to user experience.



Figure-3: User engagement with the pop-up

Flow completion occurs when the user initiates or triggers a flow via the Self Help and follows through with the steps and plays the flow until the last step. A flow played till the end is considered as a completed flow. Any exits in the middle due to flow failure, or wrong user navigation or flow closure due to user opening a wrong flow is still considered as an incomplete flow. The flow completion rate for a particular flow is 24.39% but before drawing conclusions at this low flow completion rate, analysis has to be done on the reasons for closure. The reasons behind flow closure give a better understanding of this low completion rate. In Figure 4, it is clearly observable that the reason for flow closure is mainly due to the user navigating into another page. For a flow to reach completion, it is a mandatory requirement that the user stay on the path dictated by the flow. However, taking a look at the flow exits due to flow failure, which would be an error in configuration on the engineer's part, is very low. It was noted that the flow closure due to failure was 1.3157%.

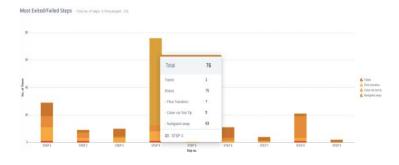


Figure-4: User engagement with the flows and flow exit analysis

The end user feedback is collected at the end of a flow or after the completion of a flow. This broadly records the user experience with the help of a few buttons and a text space where a personalized feedback can also be given. Figure 5 gives the understanding that the majority of the users found the flows to be useful, easy to use and clear in providing instructions.

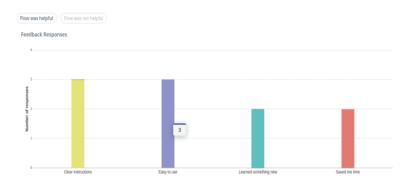


Figure-5: End user feedback response

## **C**ONCLUSION

Content creation, testing, debugging and integration of third party applications with Whatfix was successfully done. Flows which are Interactive walkthroughs played a key role. The Self help, tasklist, popups and other widgets were configured accordingly. The user analysis was achieved with the help of Whatfix Analytics. Rate of successful search analysis was 93.6974% which concludes that the number of unsuccessful searches were very low. This indicates that the content created was of good quality and catered to the needs of the end user. Coming to the popups, the user engagement with the pop-up was significantly lesser than the other tools with an engagement of 74.522% indicating that pop-ups are generally disruptive to user experience. It was also noted that the flow closure due to failure was 1.3157%. This indicates that the flows have been configured well and have no SC and page tag issues. The flow breakage due to system failure is minute. Overall, the majority of the users found the flows to be useful, easy to use and clear in providing instructions. The user experience for the content created can be seen as a success due to the positive feedback received by the end users. Furthermore, the negligible flow failure rate is an indication of correctly configured systems with low error rate. Thus, the entire onboarding or training process is made more effective and efficient using a digital adoption platform for the end users.

# REFERENCES

- 1. Rice, R. E., & Katz, J. E. (2003). Comparing internet and mobile phone usage: digital divides of usage, adoption, and dropouts. *Telecommunications policy*, 27(8-9), 597-623.
- 2. Bailie, B., & Chinn, M. (2018, April). Effectively harnessing data to navigate the new normal: Overcoming the barriers of digital adoption. In *Offshore Technology Conference*. OnePetro.
- 3. Van Zeebroeck, N., Kretschmer, T., & Bughin, J. (2021). Digital "is" Strategy: The Role of Digital Technology Adoption in Strategy Renewal. *IEEE Transactions on Engineering Management*.
- 4. Cascaes Cardoso, M. (2017, May). The onboarding effect: Leveraging user engagement and retention in crowdsourcing platforms. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 263-267).
- 5. Asadullah, A., Faik, I., & Kankanhalli, A. (2018, June). Digital Platforms: A Review and Future Directions. In *PACIS* (p. 248).
- 6. Caldwell, C., & Peters, R. (2018). New employee onboarding–psychological contracts and ethical perspectives. *Journal of Management Development*.
- 7. Bauer, T. N., & Erdogan, B. (2012). Organizational socialization outcomes: Now and into the future.
- 8. Bin-Nashwan, S. A., & Hassan, H. (2017). Impact of customer relationship management (CRM) on customer satisfaction and loyalty: A systematic review. *Journal of Advanced Research in Business and Management Studies*, 6(1), 86-107.
- 9. De Reuver, M., Sørensen, C., & Basole, R. C. (2018). The digital platform: a research agenda. *Journal of Information Technology*, 33(2), 124-135.