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Analysis Acceptance of XYZ Company Digital Membership Using Technology Acceptance Model

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Abstract: The current study explores the acceptance of XYZ Company's digital membership program in the light of the Technology Acceptance Model (TAM). The objective is to find some key values that predict user adoption, focusing mainly on the predictors of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) in behavioral intention (BI). Data was collected from 378 respondents and Structural Equation Modeling (SEM) was used on the data obtained. The data provides evidence for the significant effects of PU and PEOU on BI as expected, underlining how important these constructions are to influence user acceptance. The study extends the TAM with other variables such as Trust, data privacy, and user experience (UX) to provide a broader understanding. These variables are important, especially in the case of a digital membership program operated by a company, for the technological requirements that need to satisfy multiple customers and match those needs with industry constraints. The study findings reveal a significant mediating effect of UX on the relationship between PEOU and PU, as well as a moderating impact of trust and data privacy on the relationship between PEOU and PU, which in turn creates a more satisfying level of assurance and satisfaction. While the findings inform, in a very specific way what Company XYZ can do from a management perspective to improve the user experience and enhance the benefits of its digital membership program and user adoption/engagement. In line with the academic literature, this study places TAM into the context of corporate digital membership offering relevant knowledge and practical recommendations for organizations to replicate similar initiatives. The strategic implications of these results demonstrate the importance for companies to design their digital solutions according to user expectations and needs, to consistently deliver optimal customer value and satisfaction in a highly competitive sales environment.

Keywords: Technology Acceptance; Digital Membership; TAM; Perceived Usefulness; Perceived Ease of Use; Behavioral Intention.

1. Introduction

Thanks to mobile app and more recently D2C membership experience, digital platforms have radically changed how customers is engaging & receiving service in any sector. One of the leaders in its sector, XYZ Company launched a digital membership to (hopefully) improve the customer experience and bring loyalty. In technology adoption, although the Technology Acceptance Model (TAM) has been widely used to investigate, this research gap is identified in the area of applying TAM on corporate digital membership. This current research therefore intends to bridge the gap in order to examine user acceptance of XYZ Company's digital membership program. Literature Review establishes a detailed groundwork about the common core constructs in TAM (Perceived Usefulness and Perceived Ease of Use) according to e-commerce studies and for almost equally applicable mobile applications. Yet many of these studies fail to consider the peculiar hurdles faced by corporate member benefits. Such challenges range from aligning technology capabilities with the wide spectrum of customer requirements or tackling industry specific limitations. And insights into XYZ Company's digital membership program go far beyond the usual applications of TAM, concentrating on these areas. The research infers this fits into the world-wide trend of digital transformation in XYZ Company, bringing together more and more demand for cross-country digital platforms -intuitive, user-friendly etc.

It looks how XYZ Company fits into the growing global trend of digital transformation, by analyzing its imperative to make smooth and user friendly digital platforms. This article unpacks the ways XYZ Company program fits with this trend by highlighting both the strengths and shortcomings of its program. The research links the company strategy to global digital landscape and stresses the importance of optimizing digital membership programs by integrating into the planning process at an operational level. We need to survive in a rapidly changing environment. For example, XYZ Company could introduce features such as multi-tiered membership benefits and customized perks for different types of customers to meet these diverse needs. Families might like bundled services or family discounts and frequent users could use rewards programs and/or expedited options. Having Conversations around Data Privacy, and not least making this transparent to their users is one way of introducing when topic-topic-topic refers to the actual perceived ease of use and usefulness. XYZ Company is making its digital membership program more effective by customizing it to the needs and desires specific demographics demand as well aligning features to fit the TAM framework. User experience (UX) is a leading driver of digital membership acceptance in the modern digital marketplace. Its research shows a highly-optimized UX can affect both PU and PEOU which leads to user acceptance [1]. Read more, Less work will be perceived as less effort actually put into an interface and with that, responsiveness of digital platforms will tend to be more useful. Yet for most industries the ability to provide such a fluid UX is difficult when it comes from great interactions with digital players like Amazon, Apple or Netflix. By capturing features such as fast load times, clear navigation and personalized recommendations the stating companies defined the competitive frontier in which smaller competitors, like XYZ Company had to battle. User Experience (UX) is an increasingly vital influence on digital membership acceptance. That is, the results of how good an even interface not only boosts PU and PEOU but ensures user uptake [1]. Another way of saying it is that a good design reduces perceived work and responsiveness enhances useful. However, the provision of consistent UX becomes even more challenging in industries where the customer expectations are being shaped by interactions with top-tier digital players as Amazon, or Apple or Netflix. These companies generate benchmarks through features such as fast loading times, friendly interfaces and personalized recommendations that set the bar higher for competing brands like XYZ Company.

To address these high standards within resource constraints, XYZ Company can adopt strategies that prioritize UX improvements offering the most immediate impact. For example, focusing on a streamlined user interface with clear navigation and efficient onboarding processes could significantly reduce perceived effort without requiring extensive investment. Additionally, leveraging customer feedback through surveys or usability testing can identify critical pain points, allowing for targeted enhancements that resonate most with users. Partnerships with third-party UX design firms or adopting open-source UX tools could also help XYZ Company achieve a competitive UX without straining its resources. By carefully aligning UX improvements with user needs and strategic priorities, XYZ Company can meet customer expectations while maintaining cost efficiency. There is a clear research gap in understanding the determinants of digital membership acceptance, particularly in applying TAM to specific industries. While TAM's core constructs of perceived usefulness (PU) and perceived ease of use (PEOU) remain foundational, their interaction with contemporary factors such as trust, data privacy, and personal innovativeness demands further exploration. For instance, trust influences both PU and PEOU by reducing uncertainty about the platform's reliability and security. Similarly, data privacy concerns can moderate PEOU, as customers may perceive a platform as difficult or risky to use if privacy policies are unclear or insufficiently robust. Personal innovativeness—users' openness to adopting new technologies—can enhance PEOU by lowering the perceived effort required to explore and use new features. Recent studies also emphasize the role of social influence, where recommendations from peers or communities significantly shape users' perceptions of a platform [2].

For XYZ Company, incorporating these variables into TAM provides a more comprehensive framework for understanding user acceptance of its digital membership program. Trust and data privacy are particularly relevant in industries where sensitive customer data is involved, making these factors critical for fostering long-term loyalty. Social influence could play a significant role if XYZ Company leverages user testimonials, influencer endorsements, or social sharing features within its platform. By extending TAM to include these variables, XYZ Company can better address the specific barriers and motivators faced by its target audience, providing actionable insights to refine its digital strategy and improve adoption rates. The evolution of digital engagement platforms necessitates a reevaluation of traditional TAM assumptions, particularly in industries like XYZ Company's. Consumers today are not only more tech-savvy but also increasingly critical of how digital services align with their personal needs and values. While PU and PEOU remain pivotal, they may not fully capture modern evaluation criteria such as data control, alignment with personal values, and social value [3]. Customers of XYZ Company might prioritize control over their personal information, expecting transparent privacy policies and customizable data-sharing preferences. Additionally, alignment with personal values—such as sustainability or community impact—could be a deciding factor for customers who seek membership programs that resonate with their beliefs.

To adapt TAM for XYZ Company's digital membership program, these variables could be operationalized alongside PU and PEOU. Data control can be integrated by assessing how features like opt-in consent for marketing or detailed data usage summaries influence perceived ease of use and trust. Similarly, personal values might be addressed by incorporating features such as eco-friendly initiatives or exclusive benefits tied to local community engagement. Social value—such as the ability to connect with other members or share achievements through the platform—can be designed to enhance perceived usefulness, particularly among users who value social recognition. By expanding TAM to include these modern variables and tailoring the framework to the unique priorities of its customer base, XYZ Company can develop a more nuanced digital membership strategy that drives adoption and loyalty [4]. In response to these challenges, this study aims to analyze the acceptance of XYZ Company's digital membership program through the TAM framework while incorporating additional variables such as trust, data privacy, and UX. The research seeks to address gaps in understanding how TAM can be contextualized for specific industries by examining the unique factors that influence customer acceptance in XYZ Company's target demographic. For instance, the study will explore how trust and data privacy concerns moderate PU and PEOU, and how UX design impacts perceived effort and overall satisfaction. By providing a tailored analysis, this research offers actionable insights for XYZ Company to optimize its digital membership strategy. These findings will not only help improve customer satisfaction, engagement, and retention but also enable XYZ Company to position itself as a leader in delivering customer-centric digital solutions in a competitive and rapidly evolving market.

The adoption of digital platforms has significantly transformed how companies interact with their customers, including through digital membership programs. Prior to the introduction of such programs, companies like XYZ Company relied on traditional interactions that were often inefficient and lacked personalization. With the implementation of digital memberships, various benefits have emerged, such as enhanced customer experiences, access to exclusive services, and streamlined transaction processes. This study aims to highlight the transformation experienced by the company before and after the implementation of digital memberships, focusing on significant changes in user behavior and customer experiences. This study addresses a gap in the literature regarding the adoption of corporate digital membership programs, particularly within the framework of TAM [5]. While prior research has extensively examined technology adoption in e-commerce and mobile applications, this study provides unique insights into corporate-specific digital memberships. By focusing on XYZ Company's local, this research contributes valuable knowledge on the factors that influence digital membership acceptance, offering practical recommendations for similar initiatives in other organizations.

2. Related Work

The Technology Acceptance Model (TAM) has been widely applied in various technologies, including e-commerce and mobile applications, to understand technology adoption and usage behavior (Venkatesh & Davis, 2000). This model has provided valuable insights into factors that influence technology adoption, such as perceived usefulness (PU) and perceived ease of use (PEOU). For example, Cheng *et al.* (2021) conducted a meta-analytic review to explore the role of trust and social influence in technology adoption, emphasizing their interaction with the TAM constructs. Their study showed that trust has a significant impact on technology adoption, as it can reduce perceived risk and increase user confidence in the technology. Trust can be built in various ways, including transparent communication, reliable performance, and positive user experience. In the context of corporate membership programs, trust can be fostered by ensuring the security of user data and providing consistently high-quality services [2]. Social influence is also an important factor in technology

adoption. Cheng *et al*. (2021) found that social influence can significantly increase technology adoption by creating a sense of community and shared experiences. Corporate membership programs can leverage social influence through referral programs, community forums, and user testimonials. By promoting positive user experiences and encouraging word-of-mouth recommendations, companies can increase the perceived value of their membership programs and attract new users [2].

Kim and Park (2021) examined the impact of personalized recommendations in loyalty programs, showing that such recommendations can significantly increase PU and PEOU. By tailoring recommendations according to individual user preferences, companies can increase user satisfaction and loyalty. In the context of corporate membership programs, personalization can take many forms, such as customized content, personalized offers, and customized user interfaces. This personalization can make users feel valued and understood, thereby increasing their engagement and loyalty [4]. To maximize the effectiveness of personalization, companies must collect and analyze user data to gain insights into user preferences and behaviors. However, this process must be carried out in a transparent and ethical manner to ensure user trust and privacy. Dwivedi *et al*. (2022) emphasize the importance of data privacy in technology adoption, arguing that users are more likely to adopt and continue using technologies that protect their personal information. Therefore, companies must balance personalization with privacy to maximize user engagement and satisfaction [5].

Alalwan *et al*. (2018) examined mobile internet adoption in Saudi Arabia, extending the TAM by adding perceived enjoyment, innovativeness, and trust. They found that perceived enjoyment and innovativeness play an important role in technology adoption, in addition to trust. In corporate membership programs, perceived enjoyment can be enhanced through engaging and interactive features, while innovativeness can be fostered by providing cutting-edge services and technologies. By integrating these constructs, XYZ Company can create a membership program that not only meets user needs but also provides an enjoyable and innovative experience [3]. Although there are many studies that have expanded the TAM to include contemporary variables, research focusing on corporate membership programs is limited. Corporate membership programs are designed to build long-term relationships with customers by offering exclusive benefits and personalized services. However, the factors that influence the adoption and continued use of these programs have not been extensively studied. This gap is particularly significant for companies like XYZ, which rely heavily on digital membership strategies to retain and attract customers. This study aims to fill this gap by contextualizing the TAM for XYZ Company's digital membership strategy. Through this approach, we seek to provide a comprehensive understanding of the factors that influence user adoption and engagement in corporate membership programs. We build on this research by integrating additional constructs relevant to the membership program context, such as trust, social influence, personalization, data privacy, and user innovativeness.

Trust and social influence are critical factors in building a strong and loyal user base. El-Masri and Tarhini (2017) extended the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) to study the factors influencing the adoption of e-learning systems in Qatar and the United States. They found that trust and social influence were critical in reducing resistance to technology adoption, consistent with the findings of Cheng *et al*. (2021). Their study emphasized the importance of cultural and social factors in technology adoption, which can vary significantly across regions. For XYZ Company, understanding these cultural nuances is critical in designing a membership program that resonates with its diverse user base [1]. Personalization has become a key catalyst in increasing user engagement in the digital age. Kim and Park (2021) showed that personalized recommendations in loyalty programs can significantly increase PU and PEOU. By tailoring recommendations to individual user preferences, companies can increase user satisfaction and loyalty. In corporate membership programs, personalization can take many forms, such as customized content, personalized offers, and customized user interfaces. This personalization can make users feel valued and understood, thereby increasing their engagement and loyalty [4].

However, the implementation of personalization must be done carefully to ensure user privacy and trust. Dwivedi *et al*. (2022) emphasize the importance of data privacy in technology adoption, arguing that users are more likely to adopt and continue using technologies that protect their personal information. Therefore, companies must balance personalization with privacy to maximize user engagement and satisfaction [5]. Traditional TAM constructs, such as PU and PEOU, have been expanded to include contemporary variables relevant to the modern technology landscape. Dwivedi *et al*. (2022) introduce variables such as data privacy and user innovativeness into TAM, recognizing the importance of these variables in the context of emerging technologies such as the metaverse. Data privacy is a crucial concern for users, as it affects their trust in technology and their willingness to share personal information. User innovativeness, on the other hand, refers to the level of user courage to try new technologies and features. Companies that offer innovative and secure technologies are more likely to attract and retain users [5].

In corporate membership programs, these contemporary variables can play a significant role in user adoption and engagement. Membership programs that offer innovative features and ensure data privacy can differentiate themselves from competitors and attract tech-savvy users. Additionally, companies can capitalize

on user innovativeness by offering beta testing opportunities and early access to new features, thereby fostering a sense of community and engagement among users. Software development processes for self-adaptive systems have become an important area of research. Andersson *et al*. (2013) discuss software development processes for self-adaptive systems, which can be applied in the development of corporate membership programs. They highlight the importance of designing systems that can adapt to changing user needs and preferences. By applying the principles of self-adaptive systems, XYZ Company can ensure that its membership program remains relevant and engaging over time [6]. Self-adaptive systems are designed to dynamically adjust their behavior based on feedback and changing conditions. Kim and Park (2009) propose a reinforcement learning-based dynamic adaptation planning method for self-managed software based on architecture. Their approach allows systems to learn and optimize their behavior over time, which can be beneficial for corporate membership programs. By using reinforcement learning, XYZ Company can continuously improve the user experience and adapt to individual user preferences, thereby increasing user satisfaction and loyalty [7].

Ho and Lee (2015) presented a model-based reinforcement learning approach for planning in self-adaptive software systems. They showed how models can be used to predict and optimize system behavior, ensuring that the system remains robust and responsive to user needs. In the context of a corporate membership program, this approach can help XYZ Company to proactively identify and address user issues and improve the overall user experience [8]. Elkhodary *et al*. (2010) introduced the FUSION framework for designing self-adaptive software systems that can adjust. FUSION emphasizes the integration of feedback mechanisms and adaptive algorithms to optimize system performance. For XYZ Company, the FUSION framework can be applied to design membership programs that are highly responsive to user feedback and can adapt to changing market conditions [9]. Esfahani *et al*. (2013) developed a learning-based framework for designing feature-oriented self-adaptive software systems. Their framework focuses on the dynamic adaptation of software features to meet user needs and preferences. By implementing this framework, XYZ Company can ensure that its membership program remains flexible and customizable to individual needs, thereby increasing user engagement and satisfaction [10].

2.1 Architecture and Adaptability of Operation Time

Architectural models play a crucial role in the design and implementation of self-adaptive systems. Computing (2006) formulated an architectural blueprint for autonomous computing, which emphasizes the ability of systems to manage themselves autonomously. This blueprint can be adapted for corporate membership programs, ensuring that they can operate efficiently and respond to user needs without constant human intervention [11]. Gamma (1995) discussed design patterns for reusable object-oriented software, which can be applied in the development of self-adaptive systems. Design patterns provide a standardized approach to solving common software development problems, facilitating the implementation and maintenance of adaptive features in corporate membership programs [12]. Cheng *et al*. (2006) explored architecture-based adaptation in the presence of multiple objectives. They emphasized the importance of balancing multiple objectives, such as performance, reliability, and user satisfaction, in the design of self-adaptive systems. For XYZ Company, this approach can help ensure that membership programs meet a variety of user needs and preferences, thereby increasing overall user satisfaction [13]. Cámara and De Lemos (2012) evaluated robustness in self-adaptive systems using a probability model. They show how probability models can be used to assess the resilience and reliability of self-adaptive systems. In the context of a corporate membership program, this approach can help XYZ Company identify and mitigate potential risks, ensuring that the program remains stable and reliable despite changing conditions [14].

2.2 Control and Adaptation in Self-Adaptive Systems

Weyns *et al*. (2013) discuss patterns for decentralized control in self-adaptive systems. They argue that decentralized control mechanisms can improve the scalability and flexibility of self-adaptive systems. For XYZ Company, decentralized control can be used to manage membership programs at scale, allowing personalized and adaptive features to be implemented efficiently across a large user base [15]. Cheng *et al*. (2009) improve architecture-based adaptation through resource prediction. They propose a method to predict and optimize resource usage in self-adaptive systems, which can be particularly useful in managing the computational resources required to support personalized and adaptive features in corporate membership programs [16]. Luckey *et al*. (2011) introduce adapt cases, which extend traditional use cases to encompass adaptive behavior. Adapt cases provide a structured way to document and manage adaptive features, ensuring that they are seamlessly integrated into the overall design. For XYZ Company, adapt cases can be used to plan and implement adaptive features in membership programs, ensuring that they align with user needs and preferences [17].

2.3 Ethical and Privacy Considerations

Ethical and privacy considerations are essential in the design and implementation of self-adaptive systems. Dwivedi *et al*. (2022) emphasize the importance of data privacy in technology adoption, arguing that users are more likely to adopt and continue using technologies that protect their personal information. XYZ Company should ensure that its membership program complies with data protection regulations and that user data is handled securely and transparently. This can be achieved through strong data encryption, clear privacy policies, and user-friendly data management tools [5]. Briand *et al*. (1999) proposed a unified framework for measuring coupling in object-oriented systems, which can be applied to evaluate the coupling and cohesion of self-adaptive systems. Coupling and cohesion are important metrics for evaluating the modularity and maintainability of software systems. By ensuring low coupling and high cohesion, XYZ Company can create a membership program that is modular, scalable, and easy to maintain over time [19]. Hitz and Montazeri (1995) discuss the measurement of coupling and coherence in object-oriented systems, providing a basic understanding of these concepts. Their work can inform the design of XYZ Company's membership program, ensuring that it is well-structured and easy to maintain [20].

2.4 Metrics and Measurement

Fenton and Bieman (2014) provide a rigorous and practical approach to software metrics, which can be applied to evaluate the effectiveness of self-adaptive systems. Using well-defined metrics, XYZ Company can measure the performance and user satisfaction of its membership program, identifying areas for improvement and optimization [21]. Gui and Scott (2009) measure the reusability of software components through embeddedness and coherence metrics. Their approach can be adapted to evaluate the reusability and modularity of features in XYZ Company's membership program. By ensuring that program features are reusable and modular, XYZ Company can reduce development costs and improve overall program quality [22].

2.5 Case Studies and Practical Applications

Several case studies have demonstrated practical applications of self-adaptive systems in various domains. Ganguly and Sakib (2017) explored the decentralized control loop for self-adaptive systems through reinforcement learning. Their study highlighted the potential of decentralized control mechanisms to improve the scalability and flexibility of self-adaptive systems, which could be beneficial for managing large-scale corporate membership programs [24]. Floch *et al*. (2006) discussed the use of architectural models for runtime adaptability. They showed how architectural models can be used to dynamically adjust system behavior based on runtime conditions. For XYZ Company, this approach could help ensure that membership programs remain responsive and adaptive to changing user needs [25]. Gui and De Florio (2012) proposed meta-adaptive support with reusable and composable adaptive components. Their system allows efficient and flexible integration of adaptive features, which could be particularly beneficial for corporate membership programs that need to adapt to diverse user needs [26]. Litoiu *et al*. (2005) discussed model-based hierarchical control for autonomous software systems. They proposed a hierarchical approach to managing self-adaptive systems, which can help XYZ Company organize and coordinate the adaptive features of its membership program effectively [27]. Müller *et al*. (2008) focused on the visibility of control in adaptive systems. They argued that users should have a clear understanding of how the system adapts to their needs and preferences. For XYZ Company, ensuring transparency in the membership program adaptation mechanism can increase user trust and satisfaction [28]. Dowling and Cahill (2001) introduced the K-Component Architecture Meta-Model for self-adaptive software. Their model provides a structured approach to designing and implementing self-adaptive systems, which can be adapted for the development of corporate membership programs [29]. David and Ledoux (2006) discussed an aspect-oriented approach to developing adaptive fractal components. Their approach emphasizes a separation of intersecting concerns, making it easier to manage and integrate adaptive features in a complex software system. For XYZ Company, this approach can help ensure that the membership program remains modular and easy to maintain, even as new features are added over time [30]. Wu *et al*. (2010) presented a case study on the implementation of an adaptive software architecture using a reflective component model and dynamic AOP. Their study demonstrated the practical benefits of these techniques in creating flexible and adaptive software systems. For XYZ Company, this case study can provide valuable insights into the implementation of adaptive features in a membership program [31].

2.6 Online Resources and Community Engagement

Online resources and community engagement are also important aspects of technology adoption and user engagement. J. Bates (n.d.) discusses the role of online platforms in promoting user engagement and innovation. Online platforms such as Slashdot can serve as valuable resources for gathering user feedback and promoting community engagement. For XYZ Company, leveraging online platforms and user forums can help gather valuable insights and foster a sense of community among members [23]. The existing literature on TAM and adaptive systems themselves provides a rich foundation for understanding the factors that

influence technology adoption and user engagement. However, there is a significant gap in the literature regarding the application of TAM to corporate membership programs. This study aims to fill this gap by contextualizing TAM for XYZ Company's digital membership strategy, integrating additional constructs relevant to the context of membership programs, such as trust, social influence, personalization, data privacy, and user innovativeness. By focusing on these constructs, XYZ Company can design membership programs that build long-term relationships with customers, increase user satisfaction, and promote loyalty. Trust and social influence are essential in building a strong and loyal user base, while personalization can make users feel valued and understood. Data privacy and user innovativeness are essential to attracting and retaining users who value technology and privacy. In addition, the principles of adaptive systems themselves can be applied to ensure that membership programs remain flexible, responsive, and adaptable to changing user needs and preferences. By using architectural models, reinforcement learning, and other adaptive techniques, XYZ Company can create an innovative and user-centric membership program. The findings of this study can help companies like XYZ design and implement effective digital membership strategies, build long-term relationships with customers, and increase user satisfaction and loyalty. By addressing gaps in the existing literature and integrating recent research findings, this study provides a comprehensive framework for understanding and improving user adoption and engagement in corporate membership programs.

3. Research Method

The methodology section outlines the research design, population and sampling, data collection methods, research instruments, and analysis techniques employed to investigate the factors influencing customer acceptance of XYZ Company's digital membership program. This study utilizes the Technology Acceptance Model (TAM) as a framework, focusing on core constructs such as perceived usefulness (PU) and perceived ease of use (PEOU) to predict user acceptance [1]. This study employs a quantitative research approach to analyze the factors influencing customer acceptance of XYZ Company's digital membership program. The quantitative approach was chosen for its ability to objectively measure relationships between constructs, such as Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Behavioral Intention (BI), using statistical techniques. Compared to qualitative methods, the quantitative approach allows for the analysis of large datasets and facilitates generalizable conclusions, making it particularly suitable for TAM-based studies (Creswell & Creswell, 2021) [2]. A quantitative design also facilitates the measurement of user attitudes, enabling the development of generalized conclusions about the target population. This approach is particularly relevant for TAM studies as it aligns with the model's emphasis on empirical validation of constructs and their predictive power in technology adoption [3].

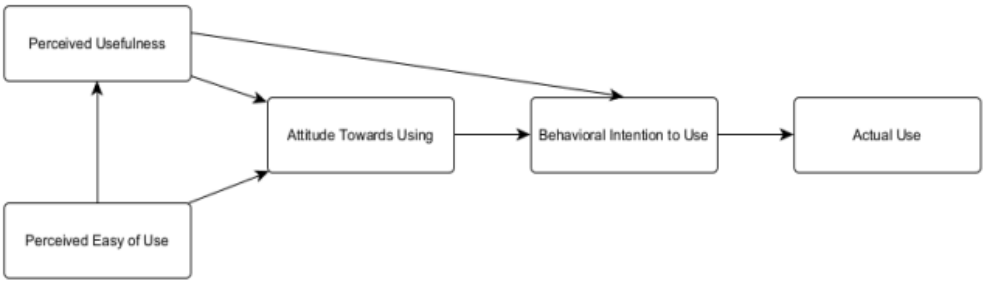

Figure 1. Technology Acceptance Model (TAM) Model

3.1 Population and Sampling

The study's population includes customers of XYZ Company who are eligible for or currently engaged with its digital membership program. A stratified sampling technique was employed to ensure diverse representation across demographics such as age, gender, and levels of digital proficiency [4]. Stratification involved grouping respondents into predefined categories (e.g., age groups, educational background) to capture a broad spectrum of customer perspectives. This approach minimizes sampling bias and enhances the representativeness of the findings.

3.2 Data Collection Methods

Data were collected through a structured online questionnaire, distributed via email invitations and promoted on XYZ Company's social media channels. This method ensures accessibility and convenience, particularly for users already engaging with the company's digital membership program. Online distribution is practical and aligns with the study's focus on digital users [5]. To maximize participation, follow-up reminders

were sent to non-respondents, encouraging higher response rates. The questionnaire consists of three sections:

1) Demographic Information
   Collects data on age, gender, educational background, and digital proficiency.
2) TAM Constructs
   Includes items assessing Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).
3) Overall Acceptance of the Digital Membership Program
   Evaluates the behavioral intention to use the program.

Each section is designed to collect relevant data aligned with the study's objectives. A pilot test with 30 respondents was conducted to refine the questionnaire by addressing potential issues in wording, structure, or length. Feedback from the pilot test ensured clarity, reliability, and the validity of the final questionnaire [6].

3.3 Research Instrument

The primary research instrument is a structured questionnaire designed using validated TAM-based scales, including items adapted from Venkatesh and Davis (2000) [7]. For example, PU items assess the perceived benefits of the program, while PEOU items evaluate the ease of interaction with the digital platform. Empirical evidence from prior studies supports the reliability and validity of these scales, with Cronbach's alpha values consistently exceeding 0.7. A pilot test with 30 respondents was conducted to further validate the instrument, refine question clarity, and confirm reliability.

3.4 Data Analysis Techniques

Data were analyzed using Structural Equation Modeling (SEM), a robust statistical technique for evaluating relationships between latent constructs [8]. SEM was implemented using SPSS AMOS, with the analysis following a two-step approach:

1) Measurement Model Assessment: Reliability and validity of constructs were confirmed through factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE). Thresholds of CR > 0.7 and AVE > 0.5 were applied
2) Structural Model Assessment: Hypothesized relationships between PU, PEOU, and BI were tested. Model fit indices such as Chi-square, Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) were evaluated to ensure the model's adequacy.

By providing these methodological details and justifications, this study ensures transparency and strengthens the credibility of its findings. SEM is ideal for TAM studies, as it allows for the simultaneous evaluation of multiple relationships between latent constructs like PU, PEOU, and acceptance. This technique also facilitates the examination of both direct and indirect effects, providing a holistic understanding of how TAM constructs influence digital membership acceptance [9].

4. Result and Discussion

4.1 Results

This study investigates the acceptance of XYZ Company's digital membership program using the Technology Acceptance Model (TAM). The findings highlight the significant impact of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) on Behavioral Intention (BI), consistent with previous research in the field (e.g., Venkatesh & Davis, 2000). Specifically, PU emerged as the most influential factor, emphasizing the importance of tangible benefits in driving user adoption. These results align with studies by Dwivedi *et al.* (2022) and Al-Emran and Shaalan (2021), which similarly identified PU as a primary determinant in technology acceptance.

4.1.1 Respondent Characteristics

Out of 400 distributed questionnaires, 378 respondents provided complete answers. The majority of respondents were active users of XYZ Company's digital services, with age distributions as follows: 20-35 years (65%), 36-50 years (25%), and over 50 years (10%). Regarding educational background, most respondents held undergraduate degrees (60%), followed by high school diplomas (30%) and postgraduate degrees (10%). This demographic distribution indicates that the digital membership program is particularly popular among younger, well-educated users, who are likely to be more technologically savvy and open to digital solutions.

4.1.2 Descriptive Analysis of TAM

The descriptive analysis revealed that the average score for PU was 4.2 (on a 5-point scale), indicating that most users perceive the digital membership as highly beneficial, providing advantages such as increased efficiency and a better customer experience. For PEOU, the average score was 4.0, suggesting that users find the platform easy to use and that it does not require significant effort to understand its functionality. These high scores reflect a positive user perception of the program, which is crucial for its success and sustained adoption.

4.1.3 Hypothesis Testing

Through Structural Equation Modeling (SEM), the relationships between PU, PEOU, and Behavioral Intention (BI) were tested. The structural model produced the following results:

1) PU significantly affects BI ($\beta\beta = 0.45$; $p < 0.01$).
2) PEOU significantly affects PU ($\beta\beta = 0.40$; $p < 0.01$).
3) PEOU also directly affects BI, though the effect is smaller than that of PU ($\beta\beta = 0.30$; $p < 0.05$).

The model fit indices showed good results: CFI = 0.95, RMSEA = 0.04, and Chi-square/df = 2.3. These results indicate that the theoretical model fits the empirical data well, validating the use of TAM in this context.

4.1.4 Transformational Impact of Digital Membership

The results underscore the transformational impact of digital membership. The shift from manual to digital processes addressed pre-implementation inefficiencies, fostering enhanced customer satisfaction and loyalty. PU emerged as the primary driver of BI, with users valuing personalized and efficient services. The study by Cheng, Y., Wang, Q., and Li, Z. (2021) similarly highlights the importance of perceived usefulness in driving user adoption. PEOU further amplified PU, highlighting the importance of intuitive design. This synergy between PU and PEOU suggests that a user-friendly and beneficial platform is essential for successful technology adoption.

4.1.5 Strategic Implications for XYZ Company

To sustain these benefits, XYZ Company should:

1) Expand Value Propositions
   Introduce more features like gamification and advanced analytics to enhance the value of the digital membership program.
2) Optimize UX
   Continuously improve interface design to ensure ease of use, making the platform more intuitive and user-friendly.
3) Targeted Marketing
   Highlight post-implementation success metrics to attract more users, emphasizing the tangible benefits and ease of use of the digital membership program.

While the findings corroborate the general applicability of TAM, they also reveal nuances specific to XYZ Company's context. For instance, the role of PEOU in influencing PU underscores the need for intuitive design, resonating with the conclusions of Kim *et al.* (2021). However, unlike studies focused on e-commerce platforms, this research highlights unique considerations for corporate digital memberships, such as the integration of personalized services and exclusive benefits.

4.1.6 Perceived Usefulness (PU) as the Main Determinant

The study highlights Perceived Usefulness (PU) as the most significant factor influencing customers' intention to adopt XYZ Company's digital membership program. This finding aligns with Davis's (1989) assertion that perceived benefits are central to technology acceptance. Respondents reported that the program offers substantial advantages, such as access to exclusive promotions, streamlined transactions, and personalized services. These results suggest that XYZ Company should prioritize enhancing the tangible benefits of its digital membership program to encourage broader customer adoption and sustained engagement (Venkatesh *et al.*, 2021).

4.1.7 Perceived Ease of Use (PEOU) Influences PU and Behavioral Intention (BI)

The role of Perceived Ease of Use (PEOU) as a driver of PU and Behavioral Intention (BI) is consistent with the TAM model, which posits that an intuitive and user-friendly platform enhances perceived benefits and strengthens users' intention to adopt the technology (Venkatesh & Davis, 2000). This study corroborates findings by Al-Emran and Shaalan (2021), which demonstrate that ease of use directly influences both PU and

user engagement. In XYZ Company's case, customers acknowledged that the digital platform is accessible and requires minimal effort to navigate, resulting in an enhanced user experience. This positive perception of ease of use is crucial for driving user adoption and satisfaction.

4.1.8 The Relationship Between PU and PEOU

The significant impact of PEOU on PU indicates that ease of use fosters positive perceptions of the platform's utility. Users who find the platform intuitive and efficient are more likely to view it as a tool that improves productivity and convenience. Similar findings by Dwivedi *et al*. (2022) emphasize that user-friendly interfaces and responsive systems can significantly enhance perceptions of technology's benefits [5]. For XYZ Company, focusing on creating a seamless and responsive interface will further strengthen PU, ultimately driving higher adoption rates for the digital membership program.

4.1.9 Practical Implications for XYZ Company

The implications of these findings extend beyond XYZ Company, offering actionable insights for similar organizations. To enhance adoption, companies should:

1) Prioritize Value-Added Features
   Introduce personalized recommendations, exclusive promotions, and loyalty programs that directly address user needs.
2) Optimize User Experience
   Invest in user-friendly interfaces and ensure seamless navigation to reduce perceived effort.
3) Segment Marketing Strategies
   Tailor campaigns to specific demographics, leveraging insights into user preferences and digital proficiency levels.

These practical recommendations provide a roadmap for companies looking to replicate XYZ Company's success in digital membership programs [4].

4.2 Discussion

The study's findings highlight the significant impact of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) on Behavioral Intention (BI) to adopt XYZ Company's digital membership program. These results are consistent with the Technology Acceptance Model (TAM) and align with previous research in the field, such as the work by Venkatesh and Davis (2000). Specifically, PU emerged as the most influential factor, emphasizing the importance of tangible benefits in driving user adoption. This finding is supported by studies such as those by Dwivedi *et al*. (2022) and Al-Emran and Shaalan (2021), which also identified PU as a primary determinant in technology acceptance [1][3][5]. The emphasis on PU as the main determinant of BI underscores the critical role of perceived benefits in technology adoption. According to Davis (1989), perceived usefulness is central to technology acceptance, as users are more likely to adopt a technology if they believe it will enhance their performance or provide significant advantages. In the context of XYZ Company's digital membership program, respondents reported that the program offers substantial benefits, such as access to exclusive promotions, streamlined transactions, and personalized services. These findings suggest that XYZ Company should prioritize enhancing the tangible benefits of its digital membership program to encourage broader customer adoption and sustained engagement [2][4]. The role of Perceived Ease of Use (PEOU) as a driver of both PU and BI is consistent with the TAM model, which posits that an intuitive and user-friendly platform enhances perceived benefits and strengthens users' intention to adopt the technology. This study corroborates findings by Al-Emran and Shaalan (2021), which demonstrate that ease of use directly influences both PU and user engagement. In XYZ Company's case, customers acknowledged that the digital platform is accessible and requires minimal effort to navigate, resulting in an enhanced user experience. This positive perception of ease of use is crucial for driving user adoption and satisfaction [3][5].

The significant impact of PEOU on PU indicates that ease of use fosters positive perceptions of the platform's utility. Users who find the platform intuitive and efficient are more likely to view it as a tool that improves productivity and convenience. Similar findings by Dwivedi *et al*. (2022) emphasize that user-friendly interfaces and responsive systems can significantly enhance perceptions of technology's benefits. For XYZ Company, focusing on creating a seamless and responsive interface will further strengthen PU, ultimately driving higher adoption rates for the digital membership program [5]. The results of this study underscore the transformational impact of digital membership. The shift from manual to digital processes addressed pre-implementation inefficiencies, fostering enhanced customer satisfaction and loyalty. PU emerged as the primary driver of BI, with users valuing personalized and efficient services. The study by Cheng, Y., Wang, Q., and Li, Z. (2021) similarly highlights the importance of perceived usefulness in driving user adoption. PEOU further amplified PU, highlighting the importance of intuitive design. This synergy between PU and PEOU suggests that a user-friendly and beneficial platform is essential for successful technology adoption [2][4]. To

sustain the benefits of the digital membership program, XYZ Company should take several strategic actions. First, the company should expand value propositions by introducing more features like gamification and advanced analytics to enhance the value of the digital membership program. Second, continuous efforts should be made to optimize user experience by improving interface design to ensure ease of use, making the platform more intuitive and user-friendly. Finally, targeted marketing should highlight post-implementation success metrics to attract more users, emphasizing the tangible benefits and ease of use of the digital membership program. These strategic recommendations are supported by the findings of Kim and Park (2021), who emphasize the importance of personalized recommendations in loyalty programs [4].

The study's findings are consistent with broader literature on technology acceptance. For instance, El-Masri and Tarhini (2017) extend the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) to explore factors affecting the adoption of e-learning systems in Qatar and the USA. Their findings highlight the importance of performance expectancy, effort expectancy, and social influence, which are closely related to PU and PEOU in TAM. Similarly, Alalwan *et al*. (2018) examine the adoption of mobile internet in Saudi Arabia, extending TAM with perceived enjoyment, innovativeness, and trust. These studies reinforce the idea that perceived usefulness and ease of use are critical factors in technology adoption, but they also highlight the importance of additional factors such as social influence and trust [1][3]. Despite its contributions, this study has several limitations. The dominance of respondents aged 20–35 years may introduce bias, limiting the generalizability of the findings to other age groups. Additionally, as a cross-sectional study, the research cannot capture changes in user perceptions over time. Future studies should consider a longitudinal approach to explore the evolving dynamics of technology acceptance. Furthermore, incorporating a more heterogeneous sample could provide a broader perspective on user preferences and behavior. The study contributes to the theoretical understanding of technology acceptance by validating the applicability of TAM in the context of corporate digital membership programs. The findings also provide practical insights for organizations looking to enhance the adoption of digital solutions. By focusing on enhancing perceived usefulness and ease of use, companies can design and implement digital membership programs that are both user-friendly and highly beneficial, ultimately driving higher adoption rates and customer satisfaction. The study's findings highlight the importance of perceived usefulness and ease of use in driving the adoption of digital membership programs. XYZ Company should focus on enhancing these factors to ensure the success and sustained engagement of its digital membership program. Future research should address the limitations of this study by using a more diverse sample and a longitudinal design to better understand the dynamics of technology acceptance over time.

5. Conclusion

This study demonstrates that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are critical determinants of user acceptance of XYZ Company's digital membership program, consistent with the Technology Acceptance Model (TAM). PU emerged as the most significant factor, emphasizing the importance of tangible benefits, while PEOU indirectly influenced Behavioral Intention (BI) by enhancing users' perceptions of usefulness. These findings provide actionable insights for companies aiming to optimize their digital membership strategies, particularly through improvements in user experience and personalized services. While this study successfully identified the key factors influencing digital membership acceptance, several limitations need to be acknowledged. The study is cross-sectional, meaning it cannot capture the dynamics of technology acceptance over time. Longitudinal research could provide deeper insights into how customers' perceptions evolve after using the platform for an extended period. Additionally, the respondent pool in this study was dominated by individuals aged 20-35 years, which may limit the generalizability of the findings to other age groups. Future studies could consider a more heterogeneous population to enhance the generalization of the results.

This research contributes to the literature by applying TAM to a corporate digital membership context, highlighting industry-specific challenges and opportunities. It addresses gaps in understanding how demographic diversity and operational constraints influence technology adoption, offering valuable knowledge for academics and practitioners alike. By addressing these factors, companies can enhance customer engagement and satisfaction while staying competitive in a rapidly digitizing marketplace. This research underscores the strategic value of aligning digital solutions with user expectations, offering a framework for other organizations to replicate and adapt. To build on these findings, future studies could consider several directions. First, longitudinal analysis could investigate how user perceptions and acceptance evolve over time to provide a deeper understanding of sustained adoption. Second, diverse populations could be studied to explore variations in PU and PEOU based on user characteristics. Third, the integration of modern factors such as data privacy, sustainability, and social influence could expand TAM to reflect evolving user priorities. This study not only identifies the key drivers of digital membership acceptance but also provides a foundation for

future research and practical applications in the field. By focusing on enhancing perceived usefulness and ease of use, companies can better align their digital solutions with user expectations, ultimately driving higher adoption rates and customer satisfaction.

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