COEXISTENCE OR REPLACEMENT? HOW ATTACHMENT TO PRINT AND PERCEIVED USEFULNESS SHAPE AUDIOBOOK ADOPTION

Jasmine Vania Fadeli\textsuperscript{a}, Genieyung Faraninda Sakanti Topan\textsuperscript{b}, Christian Haposan Pangaribuan\textsuperscript{c}, Danial Thaib\textsuperscript{d}, Emanuel Himawan Saptaputra\textsuperscript{e}, Santo Tjhin\textsuperscript{f}

ARTICLE INFO

Objective: The objective of this study is to investigate the factors influencing readers’ choice between audiobooks and physical books. The research focuses on how perceived ease of use and attachment to printed books affect the intention to adopt audiobook services.

Theoretical Framework: The Technology Acceptance Model (TAM) is a prominent theory in the field of information systems that explains how users adopt new technologies.

Method: For this research, the methodology comprises quantitative method, PLS-SEM analysis, and structural model evaluation. Data collection was carried out through online questionnaires.

Results and Discussion: The study supports the role of Perceived Ease of Use (PEOU) in increasing Perceived Usefulness (PU) for audiobooks. Attachment to physical books seems to be a complex factor not solely influenced by ease of use or perceived benefits of audiobooks.

Research Implications: The study highlights the importance of user-friendly audiobook platforms. Providers should design intuitive interfaces and emphasize ease of use to attract new customers, communicate the practical benefits of audiobooks, such as convenience and utility, consider offering resources or programs that improve technology literacy and comfort, and develop strategies to address attachment by emphasizing how audiobooks can complement, rather than replace, the traditional reading experience.

Originality/Value: This study contributes to the literature by highlighting attachment to traditional reading formats as a factor influencing audiobook adoption. Previous TAM studies primarily focused on perceived ease of use and perceived usefulness. This study suggests that emotional attachment to physical books can be a resistance mechanism hindering audiobook adoption.

Doi: https://doi.org/10.26668/businessreview/2024.v9i7.4762

Keywords: Audiobooks; Structural Equation Modeling (SEM); Technology Acceptance Model; Attachment; Adoption.

\textsuperscript{a} Bachelor in Management. Sampoerna University. Jakarta, Indonesia. E-mail: jasmine.fadeli@my.sampoernauniversity.ac.id
\textsuperscript{b} Bachelor in Management. Sampoerna University. Jakarta, Indonesia. E-mail: genieyung.topan@my.sampoernauniversity.ac.id
\textsuperscript{c} Doctor in Marketing Management. Universitas Bunda Mulia. Jakarta, Indonesia. E-mail: cpangaribuan@bundamulia.ac.id Orcid: https://orcid.org/0000-0001-7095-8829
\textsuperscript{d} Doctor in Environmental Management. Universitas Bunda Mulia. Jakarta, Indonesia. E-mail: danithaib@gmail.com
\textsuperscript{e} Master in Data Science. Bina Nusantara University. Jakarta, Indonesia. E-mail: emanuel@binus.edu
\textsuperscript{f} Master in Product Design. Sampoerna University. Jakarta, Indonesia. E-mail: santo.tjhin@sampoernauniversity.ac.id
COEXISTÊNCIA OU SUBSTITUIÇÃO? COMO O APEGO AO IMPRESSO E A PERCEPÇÃO DE UTILIDADE MOLDAM A ADOÇÃO DO AUDIOLIVRO

RESUMO
Objetivo: O objetivo deste estudo é investigar os fatores que influenciam a escolha dos leitores entre audiolivros e livros físicos. A pesquisa se concentra em como a facilidade de uso percebida e o apego aos livros impresos afetam a intenção de adotar serviços de audiolivros.
Estrutura Teórica: O Modelo de Aceitação de Tecnologia (TAM) é uma teoria proeminente no campo dos sistemas de informação que explica como os usuários adotam novas tecnologias. Método: Para esta pesquisa, a metodologia inclui o método quantitativo, a análise PLS-SEM e a avaliação do modelo estrutural. A coleta de dados foi realizada por meio de questionários on-line.
Resultados e Discussão: O estudo apóia o papel da facilidade de uso percebida (PEOU) no aumento da utilidade percebida (PU) para audiolivros. O apego aos livros físicos parece ser um fator complexo, não influenciado apenas pela facilidade de uso ou pelos benefícios percebidos dos audiolivros.
Implicações para a Pesquisa: O estudo destaca a importância de plataformas de audiolivros fáceis de usar. Os provedores devem projetar interfaces intuitivas e enfatizar a facilidade de uso para atrair novos clientes, comunicar os benefícios práticos dos audiolivros, como conveniência e utilidade, considerar a oferta de recursos ou programas que melhorem a alfabetização tecnológica e o conforto, e desenvolver estratégias para lidar com o apego, enfatizando como os audiolivros podem complementar, em vez de substituir, a experiência de leitura tradicional.
Originalidade/Valor: Este estudo contribui para a literatura ao destacar o apego aos formatos tradicionais de leitura como um fator que influencia a adoção do audiolivro. Estudos anteriores sobre TAM enfocaram principalmente a facilidade de uso percebida e a utilidade percebida. Este estudo sugere que o apego emocional aos livros físicos pode ser um mecanismo de resistência que impede a adoção do audiolivro.
Palavras-chave: Audiolivros, Modelagem de Equações Estruturais (SEM), Modelo de Aceitação de Tecnologia, Apego, Adoção.

¿COEXISTENCIA O SUSTITUCION? EL APEGO A LA LETRA IMPRESA Y LA UTILIDAD PERCEBIDA DETERMINAN LA ADOPCION DEL AUDIOLIBRO

RESUMEN
Objetivo: El objetivo de este estudio es investigar los factores que influyen en la elección de los lectores entre audiolibros y libros físicos. La investigación se centra en cómo la facilidad de uso percibida y el apego a los libros impresos afectan a la intención de adoptar los servicios de audiolibros.
Marco Teórico: El Modelo de Aceptación de la Tecnología (TAM) es una teoría destacada en el campo de los sistemas de información que explica cómo los usuarios adoptan las nuevas tecnologías. Método: Para esta investigación, la metodología comprende el método cuantitativo, el análisis PLS-SEM y la evaluación del modelo estructural. La recogida de datos se llevó a cabo mediante cuestionarios en línea.
Resultados y Discusión: El estudio apoya el papel de la Facilidad de Uso Percibida (PEOU) en el aumento de la Utilidad Percibida (PU) para los audiolibros. El apego a los libros físicos parece ser un factor complejo en el que no influyen únicamente la facilidad de uso o los beneficios percibidos de los audiolibros.
Implicaciones de la Investigación: El estudio destaca la importancia de las plataformas de audiolibros fáciles de usar. Los proveedores deben diseñar interfaces intuitivas y hacer hincapié en la facilidad de uso para atraer a nuevos clientes, comunicar los beneficios práticos de los audiolibros, como la comodidad y la utilidad, considerar la posibilidad de ofrecer recursos o programas que mejoren la alfabetización tecnológica y la comodidad, y desarrollar estrategias para abordar el apego haciendo hincapié en cómo los audiolibros pueden complementar, en lugar de sustituir, la experiencia de lectura tradicional.
Originalidad/Valor: Este estudio contribuye a la literatura destacando el apego a los formatos tradicionales de lectura como un factor que influye en la adopción de audiolibros. Los estudios TAM anteriores se centraban principalmente en la facilidad de uso y la utilidad percibidas. Este estudio sugiere que el apego emocional a los libros físicos puede ser un mecanismo de resistencia que obstaculice la adopción de audiolibros.
Palabras clave: Audiolibros, Modelado de Ecuaciones Estructurales (SEM), Modelo de Aceptación de la Tecnología, Apego, Adopción.
1 INTRODUCTION

Traditionally, the physical book has been the primary medium for literature consumption, fostering a unique reader-text interaction that demands imaginative engagement with the narrative (Have & Pedersen, 2020). Readers actively construct the story’s setting, character’s voices, and personalities by deciphering the written word. For centuries, this process has been the cornerstone of the publishing industry, with physical book serving as the undisputed vehicle for storytelling and knowledge dissemination.

The advent of audiobooks presented an alternative electronic format for literary engagement, distinct from traditional reading practices (Have & Pedersen, 2020; Elislah & Irwansyah, 2022). However, the digital age has fundamentally reshaped the literary landscape (Srivastava et al., 2021). Audiobooks are no longer considered a supplementary format, contingent upon the success of print sales (Elislah & Irwansyah, 2022). Instead, they have become an integral component of the contemporary book market, routinely released alongside print and e-book versions. This concurrent release strategy empowers readers with greater flexibility in format selection from the very outset (Have & Pedersen, 2020).

A prominent challenge faced by avid readers is the inherent limitation of physical books: the requirement for manual manipulation (Dewan, 2019). This physical constraint often necessitates multitasking during reading, a practice detrimental to sustained attention and focus on complex tasks, particularly those demanding deep concentration, such as literary engagement (Liu & Gu, 2020). The burgeoning audiobook market presents a compelling solution, enabling individuals to engage with literature while navigating the demands of daily life. Notably, a recent study in the United States revealed a 9% increase in audiobook usage between 2020 and 2023 (Watson, 2023), highlighting the growing popularity of this format.

The digital audiobook market has witnessed a surge in consumer interest, fueled in part by the proliferation of smartphones and smart home technology (Sari et al., 2023). While audiobooks enjoyed a degree of popularity among readers in the 1980s, the COVID-19 pandemic has demonstrably accelerated their adoption (Best et al., 2020). This format’s primarily digital nature exemplifies the publishing industry’s adaptability to the challenges presented by COVID-19 and its capacity to respond to evolving cultural trends (Snelling, 2021). Lockdowns and social distancing measures implemented during the pandemic often led to bookstore closures, prompting a shift toward audiobooks as a means to maintain reading habits.
The format to which a reader develops an attachment, whether physical books or audiobooks, significantly influences reading preferences and engagement (Cuñas & Augusto, 2022; Have & Pedersen, 2020). Individuals with a strong attachment to printed books often value the tactile experience and sensory elements associated with traditional reading practices (Spence, 2020). However, this attachment does not necessarily preclude the occasional use of audiobooks in specific contexts.

Conversely, individuals who develop an attachment to audiobooks often demonstrate consistent engagement, potentially fostered by emotional connections that enhance the user experience and incentivize continued usage (Have & Pedersen, 2020). This trend is further evidenced by the observed shift in consumer preferences toward audiobooks (Firmansyah et al., 2022). Despite the rise in audiobook popularity, physical books continue to hold significant importance across various publishing sectors. Nonetheless, publishers must adapt by ensuring content accessibility across diverse digital formats, acknowledging the increasingly varied circumstances in which reading and content consumption occur.

While some studies associate audiobooks with benefits in usefulness and ease of use (Fitriati et al., 2023), highlighting their simplicity, efficiency, enjoyment, and relaxing nature (Rusmanayanti, 2021), others report only moderate user satisfaction (54%) with their effectiveness (Warsihna et al., 2022). This inconsistency, coupled with concerningly low reading rates in Indonesia (Pitri & Sofia, 2022), motivates further investigation into factors influencing audiobook adoption over physical books. This study aims to explore how perceived usefulness and practicality of audiobooks, alongside user attachment to printed books, shape the intention to adopt audiobooks.

2 THEORETICAL FRAMEWORK

2.1 TECHNOLOGY ACCEPTANCE MODEL

There is a more nuanced model for technology adoption called the Technology Acceptance Model (TAM) with Emotional Attachment. Building on the classic TAM (Davis et al., 1989), Read et al. (2011) recognized emotions’ role in user decisions, previously overlooked. Their research showed emotional attachment, to, for example, paper books, could hinder the adoption of e-readers for leisure reading. Similarly, emotional attachment likely impacts audiobook use. Hence, the incorporation of this factor into our model to get a more complete picture.
From the perspective of the TAM, widespread adoption of audiobooks hinges on both perceived usefulness and ease of use. Users who see audiobooks as a valuable way to consume information while multitasking or during commutes will likely find them more useful. Conversely, those who struggle with using apps or navigating interfaces might be discouraged. The design of audiobook platforms can significantly influence user perception. Intuitive interfaces, clear playback controls, and seamless integration with other devices can all contribute to a positive TAM assessment, ultimately leading to increased audiobook adoption.

2.2 HYPOTHESIS DEVELOPMENT

Technology that is difficult to use cannot be deemed useful since it is thought to be a time waster (Javaid et al., 2022). Technology that is seen as easy to use is more likely to be perceived as useful and efficient, which in turn increases online activity success (Christian & Agung, 2020; Christian et al., 2023). It is asserted that, under the circumstances, the technology – which is user-friendly – will be adopted more widely than other technologies (Davis et al., 1989). Thus, we propose the following hypothesis:

H1: Perceived ease of use of audiobook technology has a positive effect on perceived usefulness of audiobooks.

Consumers find easier-to-use products appealing for they perceive fewer risks and effort involved in adoption (Wilson & Prayitno, 2023). It is predicted that perceived usefulness and perceived ease of use have a negative relationship with attachment to printed books (Engström & Müller, 2019). Perceived usefulness and perceived ease of use had a negative impact on resistance to innovation (Yoo, 2021). Although the emotional attachment to physical books has been observed to impede the adoption of electronic books, its detrimental impact on the intention to use book streaming services is minimal (Kristensen & Lüders, 2021). Therefore, we propose the following hypotheses:

H2: Perceived ease of use of audiobook streaming services has a negative effect on attachment to printed books.

H3: Perceived usefulness of audiobook streaming services has a negative effect on attachment to printed books.

When technology is perceived as meeting their needs and being beneficial, people are more likely to use it (Christian et al., 2023; Fratama et al., 2023). The convenience factor that audiobook users obtain is unparalleled, particularly during daily activities, e.g., commutes and
household chores (Snelling, 2021). The perceived usefulness provides a wide option that accommodates a range of interests and preferences (Suryatenggara & Dahlan, 2022; Soemitro et al., 2023). Therefore, we propose the following hypothesis:

H4: Perceived usefulness of audiobook streaming services has a positive effect on intention to adopt audiobooks.

Individuals tend to prefer what they are familiar with (Macaluso et al., 2022). If printed books provide strong attachment from years of reading and positive experiences, then trying audiobooks may be biased. Holding a physical book may provide authenticity and intellectual engagement (Spence, 2020). Therefore, we propose the following hypothesis:

H5: Attachment to printed books has a negative effect on intention to adopt audiobooks.

3 METHODOLOGY

This study adopted a quantitative research methodology using the TAM as a theoretical framework to comprehensively evaluate the effects of emerging technologies, namely audiobooks, on the selection of literacy medium. Participants in the study included people who use audiobooks regularly and those who do not use them at all but are interested in using them. The justification for incorporating both user and non-user groups was to obtain a thorough grasp of the elements impacting the acceptance or rejection of audiobooks.

Figure 1
Research framework model

This study’s survey reflects 15 items. Four constructs are used: perceived ease of use, perceived usefulness, attachment to printed books, and intention to adopt (see Figure 1). Using pre-validated instruments from past research (Engström & Müller, 2019), all constructs are measured using multiple-item perceptual scales that are reworded to meet the context of audiobook adoption intention. The 5-point Likert scale offers better indices of reliability,
validity, and discriminating power; all of the items were measured on the scales, which ranged from strongly disagree (1) to strongly agree (5) (Joshi et al., 2015).

Bahasa Indonesia was utilized to adapt the survey items for the primary survey location was in Indonesia. Targeting a diverse participant pool, the study included individuals actively engaging with audiobooks and those who had not yet adopted this medium. The survey link was distributed through personal networks to guarantee a wide range of viewpoints. The measurement and structural model was assessed using PLS-SEM, which is particularly useful for smaller sample sizes in model validation when compared to other structural equation modelling techniques (Dash & Paul, 2021).

### Table 1

*Profile of the respondents*

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>&lt;18</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>18-29</td>
<td>65</td>
<td>45.8</td>
</tr>
<tr>
<td></td>
<td>30-49</td>
<td>58</td>
<td>40.8</td>
</tr>
<tr>
<td></td>
<td>50-64</td>
<td>17</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td>&gt;64</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>111</td>
<td>78.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>31</td>
<td>21.8</td>
</tr>
<tr>
<td></td>
<td>Junior High School</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Senior High School</td>
<td>7</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>50</td>
<td>35.2</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>51</td>
<td>35.9</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>6</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>27</td>
<td>19.1</td>
</tr>
</tbody>
</table>

### 4 RESULTS AND DISCUSSION

#### 4.1 RESULTS

Out of the 142 questionnaire responses received, 23 were deemed irrelevant to the study, hence, the exclusion. For this research, the relevant respondents are those who use and are interested in using audiobook services, hence the removal of some of the respondents that are deemed irrelevant. As a result, 119 replies remained and the total amount of data used was reduced to 100 by further eliminating data with missing values. Thus, resulting in the sample size used to be aligned with Wolf et al.’s (2013) rule of thumb that requires 100 respondents for SEM.
It is evident from the respondents’ demographics that a sizable portion of them are women (see Table 1). Moreover, it seems that most of the respondents had a college degree. Women and those with higher education levels preferred reading more than men and those with lower education levels (Milal et al., 2021).

**Table 2**

*Reliability and validity of the variables*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Loadings</th>
<th>Alpha</th>
<th>rho_A</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEOU</td>
<td>PEOU1</td>
<td>0.713</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU2</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU5</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU2</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU5</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU2</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU5</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PU</td>
<td>PEOU2</td>
<td>0.790</td>
<td>0.783</td>
<td>0.796</td>
<td>0.859</td>
<td>0.605</td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU5</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU2</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU5</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU2</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU5</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU2</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU5</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU2</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU5</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATT</td>
<td>ATT9</td>
<td>0.573</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT10</td>
<td>0.719</td>
<td>0.885</td>
<td>0.722</td>
<td>0.407</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT11</td>
<td>0.605</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT12</td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INT13</td>
<td>0.871</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT</td>
<td>INT14</td>
<td>0.915</td>
<td>0.869</td>
<td>0.896</td>
<td>0.935</td>
<td>0.828</td>
</tr>
<tr>
<td></td>
<td>INT15</td>
<td>0.942</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The standard outer loadings should, as a general rule of thumb, be at least 0.708; in many cases, 0.70 is thought to be sufficiently close to be acceptable (Christian et al., 2024). The variable ATT is the only one with outside loadings less than 0.70, as can be seen in Table 2. However, in the same article, Hair et al. (2017) mention that an outer loading below 0.70 should be carefully examined as the item removal might have effects on the composite reliability and the content reliability of the construct as well as the content validity. In this case, the deletion of ATT 9-11 will cause the attachment variable to be invalid and unreliable. For this reason, ATT 9-11 will still be in use despite the outer loadings being <0.70. Additionally, ATT is still valid because its composite reliability is >0.60.

The reliability of the measurement model was assessed using two methods commonly employed in SEM-PLS: composite reliability (CR) and Cronbach’s Alpha (α). While Cronbach’s Alpha establishes the lower bound for a construct’s reliability, CR provides an estimate of its actual internal consistency (Hair et al., 2017). Following Kline’s (2013) recommendations, α values of 0.8 and 0.7 were considered indicative of very good and adequate reliability, respectively. As presented in Table 2, the α values for perceived usefulness (PU) and intention to use (INT)
exceeded the threshold for very good reliability, while perceived ease of use (PEOU) and attachment to traditional books (ATT) demonstrated adequate reliability.

To test the validity of the construct, this research uses the minimum recommended Average Variance Extracted (AVE) of 0.5 (Jeyhan & Pangaribuan, 2023). However, it is also said that if AVE is <0.5 the convergent validity is still eligible as long as the composite reliability is >0.6. As can be seen in Table 2, the AVE value for PEOU, PU, and INT are all above the minimum score of 0.5 which pass the validity test, and ATT has the AVE value of 0.407, which are below the minimum score of 0.5. However, as mentioned before, ATT is still valid as the composite reliability score of ATT is 0.722.

To evaluate the collinearity of the variables, the Variance Inflation Factor (VIF) is often used (Hair et al., 2017), and the ideal VIF values should be < 3. The data observed to be in accordance with the ideal VIF value. This means that the possibility of multicollinearity in the model is absent.

Table 3
Coefficient of Determination

<table>
<thead>
<tr>
<th>Construct</th>
<th>$R^2$</th>
<th>$R^2$ Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment to Printed Books</td>
<td>0.452</td>
<td>0.441</td>
</tr>
<tr>
<td>Intention to Adopt Audiobooks</td>
<td>0.506</td>
<td>0.496</td>
</tr>
<tr>
<td>Perceived Usefulness of Audiobook Technology</td>
<td>0.397</td>
<td>0.391</td>
</tr>
</tbody>
</table>

To measure the goodness of fit of a model, $R^2$, or the coefficient of determination are used. It is an important statistical measure in the testing of hypotheses. The value of $R^2$ ranges from 0 to 1. A model with a high number of $R^2$ is preferred and considered to be the best (Sapra, 2014). As can be seen in Table 3, 45.2% of ATT, 50.6% of INT, and 39.7% of PU can be explained by the variable of PEOU. However, Sapra (2014) also claims that to solve the problem of multicollinearity, it is better to use VIF instead of $R^2$.

The procedure of determining the route coefficients’ significance level and testing hypotheses is known as bootstrap resampling, or bootstrapping (Streukens & Leroi-Werelds, 2016). In this study, the path coefficient will be significant if the t-statistics is larger than 1.96, it is convenient to take this point as a limit in judging whether a deviation ought to be considered significant or not. According to Hair et al. (2017), the p-value is the probability of rejecting a true null hypothesis. In this study, we have chosen the significance level of 5%. This measure implies that our hypothesis’ p-value must be smaller than 0.05 to be considered significant in the research (Prawira & Pangaribuan, 2023). The results of PLS bootstrapping are shown in
Table 4: three (H1, H3, H4) of the hypotheses were supported since their paths were significant with the t-statistics value larger than 1.96 and a p-level of <0.05. H2 was rejected as its t-statistics and the p-value is exactly 1.96 and 0.05. While H5 was rejected because its t-statistics and p-value are both less than required.

Table 4

Hypothesis test

<table>
<thead>
<tr>
<th>Path</th>
<th>Coefficients</th>
<th>t-Statistics</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: PEOU→PU</td>
<td>0.630</td>
<td>9.106</td>
<td>0.000</td>
</tr>
<tr>
<td>H2: PEOU→ATT</td>
<td>0.272</td>
<td>1.968</td>
<td>0.050</td>
</tr>
<tr>
<td>H3: PU→ATT</td>
<td>0.467</td>
<td>3.773</td>
<td>0.000</td>
</tr>
<tr>
<td>H4: PU→INT</td>
<td>0.585</td>
<td>4.492</td>
<td>0.000</td>
</tr>
<tr>
<td>H5: ATT→INT</td>
<td>0.177</td>
<td>1.205</td>
<td>0.229</td>
</tr>
</tbody>
</table>

4.2 DISCUSSION

Our findings support a significant positive relationship between perceived ease of use (PEOU) and perceived usefulness (PU) of audiobooks (H1; t-statistic = 9.106). This aligns with Kristensen and Lüders (2021) who reported that user-friendly audiobook apps enhance the perceived utility of the app and foster positive user attitudes. Conversely, PEOU does not exert a significant influence on attachment to traditional books (ATT) (H2). This aligns with Engström and Müller (2019) who theorized that low perceived complexity of audiobooks may not always translate to reduced resistance from users accustomed to printed books.

With the resulting t-statistics and p-value, H3 is considered significant. Congruent with studies by Srivastava et al. (2021), perceived usefulness of audiobook services had a significant negative influence on attachment to paper books perceived usefulness of audiobook services had a significant negative influence on attachment to paper books (H3). Our results are consistent with Kristensen and Lüders’s (2021) that, although a sizable portion of readers will probably embrace streaming services, the complete substitution of digital formats—including streaming services—for printed books seems improbable.

Our results demonstrate a significant positive effect of perceived usefulness (PU) on the intention to continue using audiobook services (H4). This finding aligns with Engström and Müller’s (2019) proposition that users perceive innovative technologies, such as audiobooks, as offering long-term benefits, thereby enhancing their willingness to sustain engagement with the service.
Our findings reveal no significant influence of attachment to traditional books (ATT) on the intention to utilize audiobook services (H5). This result contradicts Engström and Müller’s (2019) assertion that emotional attachment to physical books might impede audiobook adoption. Interestingly, our findings resonate with Snelling’s (2021) prediction of a sustained rise in digital audiobook popularity, potentially occurring alongside an enduring fondness for printed books. This alignment suggests that our data might signal user adaptability, indicating the possibility of users integrating audiobooks into their routines while maintaining a preference for physical books.

5 CONCLUSION

A central finding of this study is the strong positive correlation between perceived ease of use (PEOU) and perceived usefulness (PU) of audiobook services. This aligns with established research, emphasizing the importance of user-friendly audiobook platforms in augmenting their perceived value and cultivating positive user sentiment (e.g., Kristensen & Lüders, 2021). However, our hypothesis regarding the influence of PEOU on attachment to traditional books (ATT) was not supported. This suggests that a reduced perception of complexity in audiobook usage might not directly translate to diminished resistance from users accustomed to printed formats, potentially revealing a novel mechanism of resistance.

Our investigation expands the TAM framework by demonstrating the broader influence of attachment to traditional reading formats, which may impede both the initial adoption and continued use of audiobook services. This highlights the value of incorporating insights from diverse theoretical perspectives within TAM to achieve a more nuanced understanding of technology adoption in a constantly evolving environment (e.g., Engström & Müller, 2019). It is noteworthy that the path coefficient for the impact of PEOU on ATT resides on the cusp of significance. While designated as insignificant in this study with the current sample size, future research employing larger datasets may warrant further examination of this relationship.

5.1 THEORETICAL IMPLICATIONS

The study’s theoretical implications impact how TAMs develop, especially concerning audiobook uptake. Our theoretical understanding is enriched by confirming the TAM’s applicability and explanatory power in the context of audiobook services. The discovered
details, such as the insignificant impact of ease of use on attachment to printed books, contradict prevalent preconceptions and underscore the need for a more nuanced perspective on technology adoption. Furthermore, the theoretical framework is expanded by the discovered innovation resistance mechanism through attachment to conventional reading formats, highlighting the broader influence of emotional connections on resistance to technical changes outside of the audiobook domain.

5.2 MANAGERIAL IMPLICATIONS

The findings of this study carry managerial implications for audiobook service providers and industry stakeholders. The positive influence of perceived ease of use and perceived usefulness on the intention to use audiobook services underscores the importance of user-friendly platforms and emphasizes the service’s practical benefits. Audiobook industry leaders can leverage these insights to design intuitive interfaces and communication strategies that highlight the convenience and utility of their audiobook offerings. Moreover, identifying the role of printed book attachment on confidence in utilizing audiobook services implies that specific measures aimed at improving technology literacy may favor adoption. Additionally, realizing that customers’ emotional attachment to traditional reading media serves as a mechanism for innovation resistance necessitates the development of customized tactics to address attachment to printed books.

5.3 LIMITATIONS AND FUTURE STUDIES

There are two noteworthy limitations pertain to the current investigation. First, the sample size might not adequately represent the full spectrum of audiobook users and non-users. This underscores the importance of employing more comprehensive participant recruitment strategies in future studies to encompass a more diverse range of demographic groups (e.g., Banerjee et al., 2019). Second, the reliance on self-reported data introduces the potential for response bias, as participants might provide answers perceived as socially desirable, potentially compromising the validity of the findings (Podsakoff et al., 2003). These constraints necessitate prudence when interpreting the results and highlight the need for further research to address them and bolster the generalizability of the conclusions. Future research endeavors could involve expanding the sample size to include a broader representation of audiobook users.
Additionally, adopting a longitudinal approach could illuminate how perceptions and attitudes evolve over time (McCarry et al., 2017). Furthermore, incorporating qualitative methodologies and exploring the phenomenon across diverse cultural contexts could offer a richer understanding of the factors influencing audiobook adoption. These proposed avenues for exploration aim to mitigate the limitations of the present study and pave the way for a more comprehensive examination of the audiobook service market.

REFERENCES


Mattioli, D., & Toonkel, J. (2023). *Amazon layoffs to hit over 18,000 workers, the most in recent tech wave.* Wall Street Journal. https://www.wsj.com/articles/amazon-to-lay-off-over-17-000-workers-more-than-first-planned-11672874304


Niang (2023). *The Influence of Ethical Leadership on Employees’ Behavior in the Public Sector, Case of Mali* [Thesis, Final International University].


Thang, N. N., & Trang, P. T. (2024). Employer branding, organization’s image and reputation, and intention to apply: The moderating role of the availability of organizational information on social media. *Frontiers in Sociology, 9*, 1256733.


