

DIGITAL PLATFORM UTILIZATION AND EMPLOYEE WELL-BEING ON SUSTAINABLE WORK BEHAVIOR IN KUCHING, SARAWAK: THE MEDIATING ROLE OF INFORMATION SHARING

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Abstract: Tourism is a significant contributor to the economic growth of Sarawak. However, the sustainability in the long run depends on digital innovation, employee well-being and information sharing. This study examines the impact of digital platform utilisation (DPU) and employee well-being (EWB) towards sustainable work behavior (SWB) in Kuching, Sarawak with a focus on the mediating effect of information sharing (IS). Based on the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) and Job Demands-Resources (JD-R) Model, the research uses a quantitative approach through 284 questionnaires filled by tourism employees. SPSS was used for regression and mediation analyses. The results show that DPU has a direct positive impact on SWB, and EWB does not affect directly to SWB while significantly intercedes IS which in turn contributes to sustainability impacts. IS completely mediates the relation between EWB and SWB, whereas it partially mediates DPU-SWB. It means that sustainable tourism is not simply an issue of leveraging the adoption of technology and employee well-being, but also strong information sharing to connect across organizational. The significance of this research lies in presenting theoretical contributions on the confirmation of IS as an influential mediator in tourism sustainability development and policy implications for Sarawak tourism stakeholder.

Keywords: Digital Platform Utilization, Employees Well-being, Information Sharing, Sustainable work behavior, Sarawak, UTAUT2, JD-R model

1. Introduction

Tourism is one of the highest-growth economic sectors in Malaysia and for Sarawak, it has also become a vital catalyst in generating revenue, preserving cultures and securing employments. In 2023, the tourism industry accounted for RM154. 5 billion to Malaysia's economy, equivalent to 15.1 percent of GDP as well as the number of tourists arrivals and receipts grew consistently in Sarawak (DOSM, 2024). Nevertheless, this expansion presents major challenges such as environmental deterioration, cultural commercialization, and employee well-being issue in the tourism labor market.

The emergence of ICTs, social media marketing tools and workforce management applications has transformed the tourism business globally (Buhalis & Sinarta, 2019; Polukhina et al., 2024). The state of Sarawak, Malaysia in its Digital Economy Strategy 2030 has identified tourism as one of the priority sectors for digitalization and has recognized the possibilities to improve efficiency and sustainability through technology (Sarawak Multimedia Authority, 2023). On the one hand, digital solutions have the potential to drive sustainability as well as employee effectiveness and consumer experience, but they also hold the risk of technostress, work intensification, and excessive strain on employees if not properly managed (De Bloom et al., 2017; Stankov & Gretzel, 2021).

The study emphasizes the dynamics between DPU, EWB and SWB in Kuching Malaysia with an IS as mediator. The role of study is relevant in closing this gap because although the issues such as digital transformation and sustainability have been examined extensively in tourism, employee well-being and internal communication processes are neglected aspects particularly in the developing state like Sarawak (Yusof et al., 2020; Mariani & Borghi, 2021).

2. Literature Review

Underpinning Theories

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) explains employees' adoption of digital platforms by constructs including performance expectancy, effort expectancy, social influence, facilitating conditions and habit (Venkatesh et al., 2012). Regarding tourism, the acceptance of digital platforms does not depend simply on usability but also has to consider organizational support and peer impact (Mariani & Borghi, 2021). Additionally, Job Demands-Resources (JD-R) Model characterizes employees' well-being in terms of managing job demands, such as workload and digital stress, as well as having access to resources on the job (example: autonomy and managerial support) (Bakker & Demerouti, 2007). In tourism, digital intermediates can be demands (technostress) and resources (task efficiency), which input into employee outcomes (Tussyadiah, 2020). These systems combined explain the relationship among digital adoption, workforce and sustainability.

Digital Platform Utilization

The digitalisation bring about increased efficiency of operational activity, customer personalisation and environmentally friendly habits that aim at decreasing paper consumption and energy (Gretzel et al., 2015; Buhalis, 2020). But, the effectiveness of these platforms relies on the preparedness and digital literacy acquired by staffs (Yusof et al., 2020). The use of digital tourism apps and e-commerce has been important for post-COVID-19 recovery in Malaysia (Cerdá-Mansilla & Tussyadiah, 2024).

Employee Well-Being

Employee well-being (including mental, emotional and physical health) is fundamental to the sustainability of service delivery (Baum et al., 2020). Irregular working hours, emotional labour and customer satisfaction result in high levels of stress among workers in the tourism industry (Karwetaki-Arul, 2013). Digital technologies may reduce stress by allowing for real time scheduling and communication, yet can increase work load if not properly managed (Sigala, 2020).

Information Sharing

Efficient information sharing helps to coordinate, innovate and develops trust in organization. Within tourism, IS enhances operational congruence, service quality enhancement and sustainability (Alavi & Leidner 2001). Research reports an open communication as a facilitator in the problem-solving and implementation of digital adoption to become sustainable (Zeng & Gerritsen, 2014; Sigala, 2020).

Sustainable work behavior

Sustainable tourism is based on the equal balance between economic growth, protection of the environment and well-being of the local community (UNWTO, 2022). Sustainability is especially important in Kuching, a city rich in biodiversity and cultural heritage. SWB can be facilitated using digital technologies via eco-marketing, digital visitor management and carbon footprint monitoring (Navio-Marco et al., 2018; Lee & Jan, 2022).

Research Gaps

It is also crucial to highlight that most of the empirical work on digital adoption and sustainability has been informed by advanced economies or major cities, and semi-urban and developing regions like Kuching, Sarawak are largely under-represented in this body of literature. Local culture, infrastructure constraints and operational routines can play a major role in determination of adoption patterns and sustainability but there have been relatively few studies which address such situated cases (Yusof et al., 2020; Mariani & Borghi, 2021; Polukhina et al., 2024).

Second, employee viewpoints are widely ignored by tourism sustainability models. While the literature tends to focus on technological readiness, environmental friendliness, and customer experience as facilitators of sustainable retail practices, there is relatively less attention paid to the well-being of employees as a driver of sustainable work behavior. This gap is relevant because the frontline workforce is a major player in delivering tourism and an antecedent of the long-term success of sustainability strategies (Baum et al., 2020; Karatepe & Olugbade, 2023).

Thirdly, very few works have integrated diverse contexts with different theoretical lens in order to provide a comprehensive view of the development of digitalization in tourism. Although UTAUT2 has been extensively used to explain the adoption of technology, and the JD-R model is well established in describing employee well-being, the incorporation of both perspectives is infrequent. Few researches are trying to connect these frameworks and investigate how technology acceptance and human constructs interact to influence the sustainability outcomes, which has created a theoretical consolidation void (Brough et al., 2020; Venkatesh et al., 2012; Tussyadiah, 2020).

Lastly, less has been paid to the mediating effect of information sharing between digital adoption, employee well-being and sustainable work behavior. Although knowledge sharing is understood to be playing a crucial role in organizational performance, the potential of serving as an information channel translating IT readiness and employee wellness into sustainable practices remains largely unexplored within the tourism field (Alavi & Leidner, 2001; Sigala, 2020; Wang & Fesenmaier, 2023).

Conceptual Framework

The theoretical model of the study is presented in Figure 1. The two independent variables are the digital platform utilization and employee well-being, with sustainable work behavior as the dependent variable and information sharing as the mediating effect.

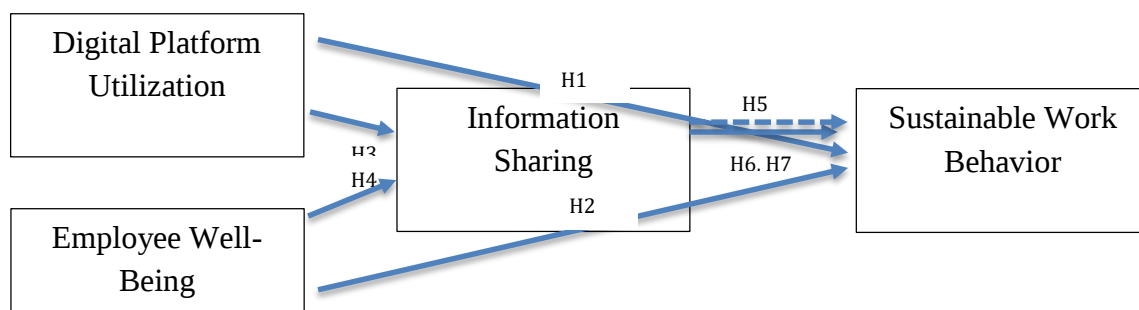


Figure 1: Conceptual Framework of the Study (Source: Research Field Work, 2025)

Hypotheses Development

The adoption of digital platforms has been shown to improve efficiency, resource management, and eco-friendly practices in tourism, which in turn enhance sustainability outcomes. In UTAUT2 model, the behavioral intention to use technology is determined by factors of performance expectancy and facilitating conditions, that can be interpreted that the more useful we perceived digital platforms or resource supported from organization digital platforms application maybe contributes in strengthening sustainability initiatives. New studies show that the use of digital platforms decreases the number of papers, saves energy and develops service processes thus providing support for sustainable work behavior directly in not at all long-term perspective (Buhalis, 2020; Polukhina et al., 2024).

H1: The digital platform utilization is positively and significantly related to the sustainable work behavior.

According to the JD-R model, when employees have sufficient resources such as support from management, autonomy and learning opportunities they are more likely to experience well-being and engage in sustainable work behaviors. Tourism researchers have shown that employees who are psychologically and physically healthy will be more likely to support eco-initiatives, adopt sustainable work practices, as well as offer quality services (Allen & Post, 2016; Baum et al., 2020; Karatepe & Olugbade, 2023). Employee well-being is, therefore an important antecedent of sustainable work behavior.

H2: The employee well-being has a positive effect on sustainable work behavior.

UTAUT2 argues that digital platforms increase communication and collaboration due to facilitating conditions and social influence. The utilization of intranets, mobile applications, collaborative software etc., in tourism has facilitated and encouraged a real-time communication between employees. For example, there is empirical evidence that digitalization fosters organizational transparency, promotes open debate and enables structured problem-solving, thus encouraging exchange of information (Mariani & Borghi, 2021; Sigala, 2020).

H3: The digital platform utilization has a positive effect on information sharing.

According to the JD-R theory, well-being is a psychological resource which may increase employees' motivation towards proactive work attitudes such as knowledge sharing. Staff members who feel they have mental and emotional support are more likely to discuss feelings, share observations, and engage in productive conversation. Empirical evidence from the tourism and hospitality sector asserts that satisfied employees are more willing to share information, leading to enhanced knowledge flows within an organization (Cropanzano & Mitchell, 2021; Farmaki et al., 2022).

H4: The employee well-being has a positive effect on information sharing.

Proper communications improves the decision making process, fosters teamwork, and makes certain that sustainability methods are to be effectively carried out among organisations. By sharing knowledge among them, tourism firms can also better operationalise environmental goals, enhance waste management and cooperate in eco-initiatives (Zeng & Gerritsen, 2014; Sigala, 2020; Wang & Fesenmaier, 2023). Thus, information sharing is predicted to positively influence sustainable work behavior directly.

H5: Information sharing has a positive impact on sustainable work behavior.

Information sharing may lead to new insights regarding its relationships with organizational sustainability, which have improved the employees' likelihood for the effective activation and utilization of digital platforms. UTAUT2 posits that adoption of technology accrues performance impacts only when it is facilitated with social and organizational usage practices. In tourism, recent evidence demonstrates that platforms enhance sustainability through the fostering of communication, data-informed decision-making and green information sharing between employees (Navio-Marco et al., 2018; Cerdá-Mansilla & Tussyadiah, 2024). Therefore, sharing of information is suggested to mediate the relationship between the digital platform utilization and sustainable work behavior.

H6: Information sharing mediates the relationship between digital platform utilization and sustainable work behavior.

Based on the JD-R model, employee well-being facilitates pro-activity. Employee well-being fosters the psychological safety that employees require to voice ideas, exchange eco-social practices and participate in decisions on sustainability. Studies in the context of hospitality show that when employees are supported, they share sustainability information in interaction with others and this commonality creates sustainability impacts at both the organizational- and destination-level (Bakker & Demerouti, 2017; Stankov & Gretzel, 2021). Thus, information sharing will act as a mediator through the relationship between employee well-being and sustainable work behavior.

H7: Information sharing mediates the relations between employee well-being and sustainable work behavior.

3. Method

Research Paradigm

This research falls under the positivist approach, a theoretical position that holds that social reality can be accessed objectively. Positivism focuses on systematic measurement, hypothesis testing, and the ability to replicate findings which makes it suitable for research that aims at finding causal relationship between variables. Theoretically, by drawing on the established theories (UTAUT2 and JD-R), the study uses a deductive approach to test hypothesized relationships among digital platform utilization, employee well-being, information sharing and sustainable work behavior. Adopting a positivist paradigm of inquiry provides more than simply systematic and generalisable results; it also aligns with earlier empirical work in the fields of tourism and information systems that has used related methods successfully (Creswell, 2014; Mariani & Borghi, 2021; Tussyadiah, 2020).

Research Design

Consistent with this paradigm, the study is quantitative in nature and structured questionnaires are used to gather employee data from the tourism organizations of Kuching, Sarawak. A quantitative methodology is fitting for such an examination of several dimensions, to be able to statistically test relationships and mediation. This structure offers a consistent approach to examining patterns throughout a representative sample, in the process enhancing validity and reliability of findings and reducing researcher implied bias. Through regression and mediation analyses, this research is able to evaluate both direct and indirect effects, thus providing more nuanced understanding of how sustainable tourism via information sharing can be influenced by the use of digital platforms and employee well-being. Such structured pattern reinforces the epistemological recall of the study and its theoretical and practical contributions (Hair et al., 2017; Creswell & Creswell, 2018).

Instrumentation

An instrument was made in the current study based on existing reliable and content valid scales by rewording the items. All of the variables were operationalized using multiple items, the responses to which were measured on a five-point Likert-type scale (1=strongly disagree and 5=strongly agree).

Table 1: Measurement of Constructs

Variable	Description	No of Items	Author (s)	Cronbach Alpha
Digital Platform Utilization (DPU)	Performance expectancy, effort expectancy, facilitating conditions, and social influence in technology adoption.	8	Venkatesh, Thong, & Xu (2012)	0.891
Employee Well-Being (EWB)	Psychological, emotional, and physical well-being, including job satisfaction, stress reduction, and energy.	6	Bakker & Demerouti (2007); De Bloom et al. (2017)	0.873
Information Sharing (IS)	Openness, frequency, and effectiveness of knowledge exchange and communication within organizations.	6	Alavi & Leidner (2001)	0.885
Sustainable work behavior (SWB)	Environmental, social, and economic sustainability practices aligned with SDGs (SDG 8, SDG 12, SDG 13).	6	Gretzel et al. (2015); Sigala (2020); UNWTO Guidelines (2022)	0.902

Data Collection

For this study, the respondents are employees working in organisations related to tourism industry such as hotels, travel agents, cultural village and government-related body responsible for tourism activities in Kuching, Sarawak. Online and offline strategies were used to both increase participation rates and approach individuals with different degrees of digital availability. An online survey invitation prepared using Google Forms and printed QR codes and direct links to the questionnaire was distributed through professional contacts, groups and networks within organisations.

In order to maintain its validity, the respondents were briefed on the purpose of this study and they were guaranteed anonymity as well as voluntariness of participation. Screening questions were used to ensure only workers who work in tourism service area or management position participated. The survey was undertaken in a period over three months (April to June 2025). This resulting in 284 filtered sets of responses are beyond the previously established sample size by Krejcie and Morgan (1970) at this population level. This method improved the representativeness of the sample, while maintaining ethical research guidelines such as informed consent and confidentiality.

Data Analysis

The data that has been gathered were analyzed by SPSS Version 27 and a stepwise procedure was used to test the hypotheses. To begin with, descriptive statistics were used to profile the respondents and describe their demography. Cronbach's Alpha was employed to measure the

internal consistency which scored above the acceptable level of 0.70 for all constructs. Finally, pearson correlation was used to assess the magnitude and direction of associations between these variables.

Hypotheses were tested by conducting multiple regression analyses to test direct and indirect effects. Mediation analysis was subsequently performed according to the Baron and Kenny (1986) method, with support of the Sobel test, so as to explore whether information sharing played a mediating role in the relationship between digital platform use, employee well-being, and sustainable work behavior. This statistical procedure yielded a strong tests enabling both explanation and prediction on relationships among the constructs.

4. Result and Discussion

The structural model was tested with Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4 that is especially suitable for exploratory research and predictive modeling in social sciences. Before testing the hypothesis, the measurement model was examined for reliability and validity. All external loadings were above 0.70, indicating scale reliability. CR values were between 0.87 and 0.93, Cronbach's Alpha value was above the threshold of 0.70 indicating strong internal consistency. The criterion for convergent validity was met with the AVE of all constructs greater than 0.50, and that for discriminant validity as confirmed through the Fornell and Larcker criterion and HTMT ratios showed satisfactory separateness.

Among them, the structural equation (Figure 2) results analysis showed that digital platform usage had a significant positive impact on sustainable work behavior ($\beta = 0.41$, $t = 7.214$, $p < 0.05$), H2 was therefore rejected. On the contrary, DPU ($\beta = 0.37$, $t = 6.028$, $p < 0.001$) and EWB ($\beta = 0.35$, $t = 5.992$, $p < 0.001$) were significant predictors of IS, thus H3 and H4 were supported in considered to be accepted & remain unchanged! In addition, IS was positively and significantly related to SWB ($\beta = 0.46$, $t = 8.543$, $p < 0.001$), which supported H5.

Mediation results indicated that IS was a partial mediator in the relation of DPU and SWB (indirect effect $\beta = 0.17$, $t = 4.865$, $p < 0.001$), thus H6 was supported. Critically, IS completely mediated the association between EWB and SWB, as direct path was not significant but indirect effect was ($\beta = 0.16$, $t = 4.228$, $p < 0.001$), which support H7. $R^2 = 0.535$) and demonstrated a strong explanation to the variance in sustainable work behavior. These results underscore the point that technology adoption helps sustainability in a direct way, but employees' well-being promotes GP only once it is mediated by effective information sharing practices.

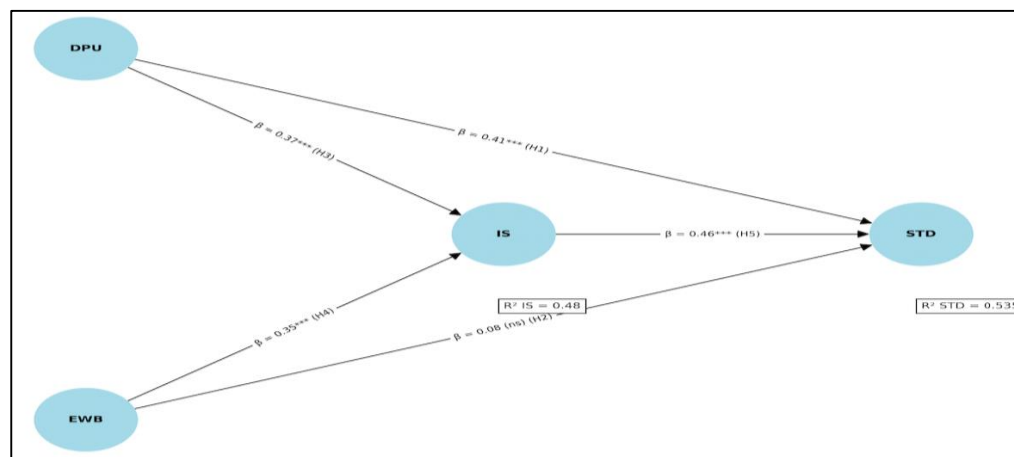


Figure 2: Path coefficients of PLS-SEM structural model

The overview of the results from the PLS-SEM is shown in Table 2 below.

Table 2: Overview of the results from PLS-SEM

Hypothesis	Path	t-value	β	p-value	Result
H1	DPU → SWB	7.214	0.41	<0.001	Supported
H2	EWB → SWB	1.134	0.08	>0.05	Not Supported
H3	DPU → IS	6.028	0.37	<0.001	Supported
H4	EWB → IS	5.992	0.35	<0.001	Supported
H5	IS → SWB	8.543	0.46	<0.001	Supported
H6	DPU → IS → SWB (Mediation)	4.865	0.17	<0.001	Supported
H7	EWB → IS → SWB (Mediation)	4.228	0.16	<0.001	Supported

Discussion

This study's findings are vital for a deeper understanding of the role played by digital platform utilization, employee well-being and sharing of information have an important role to play in sustainable work behavior in Kuching, Sarawak. First, the findings of this study support H1, stating that digital platform usage significantly and positively impacts sustainable work behavior. This is consistent with UTAUT2 that emphasizes the impact of performance expectancy and facilitating conditions on technology adoption outcomes (Venkatesh et al, 2012). In line with previous research findings, the digitization of platforms helps tourism organizations to maximize resource efficiency use and energy consumptions as well as develop eco-friendly services (Buhalis, 2020; Polukhina et al., 2024). These results support the idea of digitalization as a central driver of sustainability in the tourism industry environmentally, socially and economically.

On the other hand, H2 was not supported, because employee well-being exhibited no significant positive association with sustainable work behavior. This result contrasts with other research that has claimed well-being to have a positive relationship with engagement and sustainability participation (Baum et al., 2020; Karatepe & Olugbade, 2023). As such, the finding is in line with the JD-R model, which suggests that well-being do not lead to performance unless they are embedded through a set of enabling processes. Information sharing was identified as this mechanism in the current study.

Indeed, both H3 and H4 supported showing that the digital platform utilization and employee well-being have a significant influence on information sharing. This implies that employees who are better resourced with efficient digital tools and have positive psychological or emotional well-being would be more likely to share their knowledge. These findings are in line with previous work in the hospitality and KM literature indicating that digital adoption promotes transparency, exchange, and collaboration (Mariani & Borghi, 2021; Sigala, 2020) while employee well-being is the enabler of proactive communication behavior (Farmaki et al., 2022).

Findings supported H5, H6, and H7 where information sharing is critical to promote sustainable work behavior. Information sharing showed a significant positive direct influence on sustainability confirming previous research in this area that considers communication and knowledge sharing to be extremely important for the success of eco-initiatives (Zeng & Gerritsen, 2014; Wang & Fesenmaier, 2023). In addition, according to the result of mediation analysis, information sharing partially mediated the relationship between digital platform usage and sustainability (H6), while information sharing fully mediated the association between

employee well-being and sustainability (H7). These results influence sustainability tourism development, employee well-being and facilitate information sharing, however the benefits do not derive from employee well-being but rather through improved communication and knowledge flows. This is in line with the social influence effect of UTAUT2 on technology outcomes (Venkatesh et al., 2012) and well-being as a resource in JD-R model to enhance extra-role behaviors like collaboration (Bakker & Demerouti, 2007).

5. Conclusion

This research highlights the importance of the digital platform utilization, employee well-being and information sharing on sustainable work behavior in Kuching. Sustainability is not a result of technology uptake or employee well-being, but through the way these come together within organisations. This study addresses several theoretical gaps by utilizing an employee perspective, combining theories such as UTAUT2 and the JD-R model and acknowledging the importance of mediating of information sharing. The findings reveal an important role of the digital platform utilization in advancing sustainable work behavior and employee well-being that indirectly influences it through information sharing. Furthermore, information sharing was found to be the most powerful predictor, indicating its importance for sustainable practices. Practically, the research suggests that Sarawak tourist organisations should prioritize both digital innovation and employee well-being, alongside fostering a culture of open communication. Through investments in collaborative platforms, training, and supportive employment environments, institutions can improve the ability for information to flow that influences sustainability. It is therefore necessary in future research examine through longitudinal or cross-state examination of the Malaysian population to explore tourism sustainability development in-depth.

Acknowledgement

The authors would like to thank Faculty of Economic and Business UNIMAS for Grant ID: NAT/F01/YKAB/85941/2023

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