

Performance Expectancy in AR/VR Technology Adoption in Tourism Industry: A Systematic Literature Review

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Abstract:

Despite their significant potential, AR/VR adoption rates vary considerably across different contexts, with developing countries like Indonesia showing a 29% adoption gap compared to developed nations. This study systematically analyzes the role of performance expectancy in AR/VR technology adoption within the tourism sector through a comprehensive literature review spanning 2015–2024. A systematic literature review following PRISMA protocols was conducted across Scopus, Web of Science, and Google Scholar databases, with inclusion criteria encompassing English- and Indonesian-language articles published between 2015 and 2024 that focused on performance expectancy and AR/VR adoption in tourism contexts. From 532 initially identified articles, 42 met all inclusion criteria and underwent systematic analysis using thematic content analysis and meta-synthesis approaches. The synthesis reveals that performance expectancy emerges as the strongest predictor of AR/VR adoption, contributing 46%–70% of variance in adoption decisions, operationalized through four primary dimensions: utilitarian value, relative advantage, job-fit, and outcome expectations. AR/VR adoption is measured through usage intensity, system integration, implementation scope, and utilization level, with organizational technology readiness and risk perception serving as critical moderators. Significant contextual differences exist between developed and developing countries in AR/VR adoption patterns, with substantial research gaps identified in the Indonesian context—particularly the scarcity of empirical studies on AR/VR adoption in travel agencies. Future research should explore Indonesia-specific contexts, moderator roles (including organizational size and technology type), and mixed-method approaches to understand the complexity of AR/VR adoption in tourism.

Keywords: *Augmented Reality; Virtual Reality; Performance Expectancy; Technology Adoption; Digital Tourism; UTAUT.*

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INTRODUCTION

The global tourism industry has undergone unprecedented transformation in recent years, driven by rapid technological advancements and accelerated by the COVID-19 pandemic's disruptive impact on traditional tourism practices. According to the World Tourism Organization (UNWTO, 2024), approximately 83% of global tourism stakeholders have committed to adopting digital technologies as fundamental components of their recovery and competitive enhancement strategies. This widespread commitment reflects a paradigmatic shift toward technology-enabled tourism experiences that prioritize safety, efficiency, and enhanced visitor engagement. Among the myriad of emerging technologies, augmented reality (AR) and virtual reality (VR) have emerged as particularly transformative immersive technologies, offering unprecedented opportunities for reimagining how destinations are promoted, selected, and experienced by contemporary travelers (Loureiro et al., 2020).

The theoretical foundation for understanding technology adoption in tourism contexts has been significantly advanced through the application of established technology acceptance models, particularly the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2003). Within this framework, performance expectancy has

consistently emerged as the most robust predictor of technology adoption intentions and behaviors. Performance expectancy, conceptualized as the degree to which individuals believe that using a particular technology will help them attain gains in job performance, has been validated across numerous empirical studies as contributing up to 70% of the variance in technology adoption decisions (Dwivedi et al., 2019). This construct becomes particularly relevant in the context of AR/VR technologies, where the complexity and novelty of these immersive systems require substantial cognitive and financial investments from adopting organizations (Ali et al., 2025).

Despite the considerable theoretical attention given to performance expectancy in general technology adoption contexts, its specific application to AR/VR technologies within the tourism industry remains inadequately understood. The existing literature reveals significant fragmentation in how performance expectancy is conceptualized, operationalized, and measured in relation to AR/VR adoption in tourism settings. This fragmentation is compounded by notable geographical biases in research focus, with Loureiro et al. (2020) identifying that only 7.4% of 284 AR/VR tourism studies examined developing country contexts. Such limited geographic diversity in research attention becomes particularly problematic when considering that developing nations often face unique technological, economic, and infrastructural challenges that may fundamentally alter the dynamics of performance expectancy in technology adoption processes.

The contextual significance of this research gap becomes evident when examining current AR/VR adoption patterns across different geographical regions. Zhang (2023) documented substantial disparities in adoption rates, with developing countries like Indonesia demonstrating AR/VR implementation levels that lag approximately 29% behind those observed in developed nations. These disparities suggest that performance expectancy may operate differently across varying economic, technological, and cultural contexts, potentially mediated by factors such as organizational technology readiness, risk perception, and resource availability. Understanding these contextual variations becomes crucial for developing effective strategies to accelerate AR/VR adoption in tourism industries across diverse global settings.

Furthermore, the COVID-19 pandemic has fundamentally altered the tourism landscape, creating new imperatives for contactless, immersive, and digitally mediated travel experiences. Bretos et al. (2024) documented that AR/VR technologies have become increasingly valuable tools for providing safe, engaging tourism experiences while maintaining social distancing requirements. This pandemic-induced transformation has elevated the strategic importance of understanding performance expectancy in AR/VR adoption, as tourism organizations worldwide seek to rebuild their operations around more resilient, technology-enabled service delivery models.

The complexity of AR/VR technologies themselves adds another layer of analytical challenge to understanding performance expectancy in adoption processes. Unlike conventional information systems, AR/VR technologies require sophisticated hardware, specialized software, and considerable user training to achieve optimal implementation. Arena et al. (2022) emphasized that successful AR/VR deployment involves seamless integration

between digital content and physical environments, creating technical and operational complexities that may significantly influence how potential adopters evaluate expected performance benefits. These technological characteristics suggest that traditional conceptualizations of performance expectancy may require substantial modification to adequately capture the unique considerations involved in AR/VR adoption decisions.

The tourism industry's diverse organizational landscape further complicates the analysis of performance expectancy in AR/VR adoption. Tourism encompasses a wide range of organizational types, from large multinational hotel chains and tour operators to small-scale local travel agencies and independent destination attractions. Each organizational category faces distinct operational challenges, resource constraints, and customer interaction patterns that may influence how performance expectancy manifests in technology adoption decisions. Mariani et al. (2021) highlighted these organizational variations as critical factors in technology adoption success, yet systematic understanding of how performance expectancy operates across different tourism organization types remains limited.

Given these multifaceted challenges and research gaps, this study addresses the critical need for comprehensive synthesis and analysis of performance expectancy's role in AR/VR technology adoption within tourism contexts. Through systematic literature review methodology, this research aims to consolidate existing knowledge, identify key patterns and relationships, and map future research directions that can advance both theoretical understanding and practical implementation of AR/VR technologies in tourism. The study's particular emphasis on identifying research gaps in developing country contexts, especially Indonesia, reflects the urgent need to ensure that technological advancement in tourism benefits all regions rather than exacerbating existing digital divides.

This research contributes to the literature by providing the first comprehensive systematic review of performance expectancy in tourism AR/VR adoption, developing a unified conceptual framework that integrates dispersed research findings, and identifying critical moderating factors that influence the performance expectancy-adoption relationship. From a practical perspective, the study offers valuable insights for tourism industry practitioners, technology developers, and policymakers seeking to understand and enhance AR/VR adoption processes. The research's focus on developing country contexts, particularly Indonesia, provides essential groundwork for addressing technological equity issues in global tourism development.

RESEARCH METHOD

This research employed systematic literature review methodology following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure methodological rigor, transparency, and reproducibility in the review process (Page et al., 2021). The systematic approach was selected to provide comprehensive synthesis of existing research while minimizing bias and enabling critical evaluation of performance expectancy's role in tourism AR/VR adoption across diverse contexts and methodologies.

The research design addresses four fundamental questions that guide the systematic review process. First, how are performance expectancy dimensions and indicators

conceptualized and operationalized in AR/VR adoption research within tourism contexts. Second, what methodological approaches are employed to measure and evaluate AR/VR technology adoption in tourism organizations and among tourism consumers. Third, which moderating variables influence the relationship between performance expectancy and AR/VR adoption outcomes in tourism settings. Fourth, what research gaps and future research opportunities exist, particularly regarding developing country contexts such as Indonesia.

The literature search strategy employed multiple database queries across Scopus, Web of Science, and Google Scholar to capture the broadest possible range of relevant academic publications. Search terms were organized into four conceptual categories combined using Boolean operators to maximize retrieval while maintaining relevance. Technology-related terms included "augmented reality," "virtual reality," "AR/VR," "immersive technology," and "mixed reality." Adoption-focused terms encompassed "adoption," "acceptance," "implementation," "usage," and "utilization." Tourism context terms covered "tourism," "travel," "hospitality," "destination," "travel agency," and "tour operator." Performance expectancy terms included "performance expectancy," "perceived usefulness," "relative advantage," "job-fit," and "outcome expectations." This comprehensive search strategy was designed to capture articles that might use varied terminology while addressing similar theoretical and empirical questions.

Inclusion criteria were established to ensure retrieved articles directly addressed the research questions while maintaining methodological quality standards. Articles must have been published between January 2015 and April 2024 to capture the most recent decade of research while ensuring sufficient temporal scope for trend analysis. Language restrictions limited inclusion to English and Indonesian publications to align with the researcher's linguistic capabilities and the study's particular interest in Indonesian contexts. Articles must have been published in peer-reviewed journals indexed in major academic databases to ensure quality and accessibility. Substantively, articles must have explicitly addressed performance expectancy or related constructs in relation to AR/VR adoption within tourism contexts, providing either empirical evidence or substantial theoretical analysis.

Exclusion criteria were applied systematically to remove publications that did not meet the research objectives or quality standards. Grey literature, conference proceedings, book chapters, and non-peer-reviewed publications were excluded to maintain methodological consistency and quality assurance. Duplicate publications and preprint versions of subsequently published articles were removed to prevent double-counting of findings. Articles that mentioned AR/VR or performance expectancy only tangentially, without substantive analysis of their relationship, were excluded. Publications focusing exclusively on technical development of AR/VR systems without consideration of adoption factors were also eliminated.

The article selection process followed PRISMA guidelines through four distinct phases. Initial identification involved executing search strategies across all databases and combining results while removing obvious duplicates. The screening phase involved reviewing titles and abstracts of all identified articles against inclusion and exclusion criteria, with questionable cases retained for full-text review. Eligibility assessment required comprehensive review of

full-text articles to determine final inclusion status based on detailed criteria application. The final inclusion phase involved extracting relevant data from selected articles and organizing them for systematic analysis.

Data extraction employed structured templates designed to capture key information relevant to the research questions. Bibliographic information included author details, publication year, journal name, and citation information. Methodological characteristics encompassed research design, data collection methods, sample characteristics, and analytical approaches. Theoretical content focused on how performance expectancy was conceptualized, operationalized, and measured, along with findings regarding its relationship to AR/VR adoption. Contextual information included geographic location, organizational types studied, and specific AR/VR technologies examined. Moderating factors and their effects on performance expectancy relationships were systematically documented when reported.

Quality assessment procedures adapted the Mixed Methods Appraisal Tool (MMAT) developed by Hong et al. (2018) to evaluate methodological rigor across quantitative, qualitative, and mixed-methods studies. Assessment criteria included clarity and appropriateness of research questions, adequacy of methodological design for addressing research objectives, quality and appropriateness of data collection procedures, rigor of data analysis methods, and coherence between findings and conclusions. Each article received scores across multiple dimensions, enabling identification of methodological strengths and limitations that might influence interpretation of findings.

Analysis and synthesis procedures combined thematic analysis approaches with systematic categorization to address each research question comprehensively. Performance expectancy dimensions and indicators were analyzed through systematic coding of how different studies conceptualized and measured these constructs, enabling identification of common themes and variations across contexts. AR/VR adoption measurement approaches were categorized and compared to understand methodological diversity and consensus in the field. Moderating variable effects were systematically extracted and analyzed to identify patterns and contextual variations in performance expectancy relationships. Research gaps were identified through systematic comparison of study characteristics, geographic distribution, and methodological approaches, with particular attention to underrepresented contexts and populations.

The systematic approach employed in this research enables comprehensive synthesis while maintaining methodological transparency and reproducibility. By following established guidelines and employing systematic procedures throughout the review process, this study provides reliable foundation for understanding performance expectancy's role in tourism AR/VR adoption while identifying important directions for future research development.

RESULT AND DISCUSSION

The systematic literature search initially identified 532 potentially relevant articles across the three databases, demonstrating substantial research interest in AR/VR technologies within tourism contexts. Following systematic application of inclusion and exclusion criteria through the PRISMA process, 42 articles met all requirements for inclusion in the final analysis. The

temporal distribution of these articles reveals significant growth in research attention over the study period, with only 6 articles (14.3%) published during 2015-2017, 12 articles (28.6%) during 2018-2020, and 24 articles (57.1%) during 2021-2024. This increasing trend reflects both growing academic interest in immersive technologies and the accelerated digital transformation of tourism following the COVID-19 pandemic.

Methodological approaches across the included studies demonstrated considerable diversity, though quantitative methods predominated with 28 articles (66.7%) employing survey-based or experimental designs. Qualitative approaches were used in 8 articles (19.0%), typically involving case studies or interview-based investigations of AR/VR implementation experiences. Mixed-methods approaches appeared in 6 articles (14.3%), generally combining quantitative measurement of adoption factors with qualitative exploration of implementation contexts and experiences. Analytical techniques varied substantially, with structural equation modeling and partial least squares approaches most commonly employed in quantitative studies, reflecting the field's emphasis on testing complex theoretical models with multiple interrelated variables.

Geographic distribution of the research revealed significant concentration in developed countries, with 25 articles (59.5%) conducted in European, North American, Australian, Japanese, or South Korean contexts. Developing country research comprised 15 articles (35.7%), primarily focused on China, India, Southeast Asian nations, Brazil, and selected African countries. Cross-national comparative studies accounted for only 2 articles (4.8%), representing a significant gap in understanding geographic variations in AR/VR adoption patterns. Within the developing country research, Indonesian contexts were addressed in merely 2 studies, highlighting substantial underrepresentation of this important tourism market.

Analysis of organizational focus within the tourism industry revealed predominant attention to end-user perspectives, with 26 articles (61.9%) examining tourist or visitor adoption of AR/VR technologies. Service provider perspectives, including hotels, destinations, travel agencies, and tour operators, were addressed in 12 articles (28.6%). Four articles (9.5%) adopted dual perspectives examining both consumer and organizational adoption processes. This distribution suggests significant underemphasis on understanding organizational adoption processes, particularly among tourism intermediaries such as travel agencies that play crucial roles in technology diffusion throughout the industry.

Performance expectancy emerged as a multidimensional construct operationalized through four primary dimensions across the analyzed studies. Utilitarian value, representing practical and functional benefits of AR/VR technologies, appeared in 36 articles (85.7%) as the most frequently examined dimension. This dimension typically encompassed perceptions of productivity enhancement, operational efficiency improvements, and task performance facilitation. Relative advantage, emphasizing comparative benefits of AR/VR over existing technologies, was addressed in 29 articles (69.0%), focusing on speed improvements, quality enhancements, and competitive positioning benefits. Job-fit considerations, examining alignment between AR/VR capabilities and work requirements, appeared in 24 articles (57.1%), particularly relevant for organizational adoption contexts. Outcome expectations,

anticipating results from AR/VR implementation, were discussed in 31 articles (73.8%), often emphasizing customer satisfaction improvements and business performance outcomes.

Empirical findings regarding performance expectancy's predictive power demonstrated remarkable consistency across diverse contexts and methodologies. Paulo et al. (2018) found perceived usefulness explaining 46% of variance in mobile AR adoption intentions among tourism consumers, while multiple organizational studies reported performance expectancy contributions ranging from 52% to 70% of adoption decision variance. Tom Dieck et al. (2018) specifically identified relative advantage in process efficiency as contributing 38% of variance in AR adoption at tourism attractions. Faqih (2022) demonstrated that job-fit perceptions significantly influenced perceived usefulness ($\beta=0.43$, $p<0.001$) in mobile AR gaming contexts. Alam et al. (2024) found outcome expectations regarding service quality improvements mediating the relationship between perceived usefulness and adoption intentions with effect sizes of 0.42.

The operationalization and measurement of AR/VR adoption revealed four primary indicator categories across the reviewed studies. Usage intensity, measuring frequency and depth of technology utilization, appeared in 35 articles (83.3%) as the most common adoption indicator. Trunfio et al. (2022) demonstrated strong correlations ($r=0.63$, $p<0.001$) between usage intensity and visitor-perceived immersive experience quality. System integration, assessing the extent of AR/VR incorporation with existing organizational systems, was examined in 27 articles (64.3%). Lodhi et al. (2024) identified system integration as crucial for implementation success ($\beta=0.42$, $p<0.001$), particularly in hospitality contexts requiring coordination across multiple operational areas. Implementation scope, measuring the breadth of organizational areas utilizing AR/VR technologies, appeared in 23 articles (54.8%). Buhalis et al. (2019) found that organizations implementing technologies across multiple functional areas achieved significantly greater performance improvements, including 42% operational efficiency gains and 56% customer satisfaction increases. Utilization level, assessing optimization of AR/VR feature usage, was addressed in 30 articles (71.4%), with Shukla et al. (2024) demonstrating significant relationships ($\beta=0.46$, $p<0.001$) between utilization effectiveness and perceived value creation.

Moderating variables influencing performance expectancy relationships with AR/VR adoption were identified across multiple studies, revealing important contextual factors affecting adoption processes. Organizational technology readiness emerged as the most frequently examined moderator, appearing in 18 articles (42.9%). Baroroh and Agarwal (2022) found technology readiness significantly moderating performance expectancy effects in Indonesian tourism contexts, where only 23% of travel agencies demonstrated adequate readiness for AR/VR implementation.

Risk perception served as another critical moderator in 14 articles (33.3%), with Cham et al. (2024) demonstrating negative moderation effects where higher risk perceptions diminished positive relationships between performance expectations and adoption intentions. Competitive pressure was identified as a moderator in 11 articles (26.2%), with Chang et al. (2022) showing that competitive environments strengthened performance expectancy effects on technology adoption decisions. Organizational characteristics, including size, resources, and

prior technology experience, moderated performance expectancy relationships in 10 articles (23.8%), with Hewavitharana et al. (2021) documenting significant moderation effects ($\Delta R^2=0.09$, $p<0.01$) across different organizational contexts.

Contextual differences between developed and developing countries revealed important variations in both performance expectancy dimensions and moderating factor influences. Developed country studies typically emphasized utilitarian value and relative advantage dimensions, reflecting mature technological infrastructures and established digital capabilities. Developing country research placed greater emphasis on outcome expectations and job-fit considerations, possibly reflecting greater uncertainty about technology benefits and stronger needs for contextual alignment. Moderating variable patterns also differed, with technology readiness and risk perception showing stronger effects in developing countries, while competitive pressure and organizational characteristics demonstrated greater influence in developed country contexts.

The analysis revealed substantial research gaps that limit comprehensive understanding of performance expectancy in tourism AR/VR adoption. Geographic concentration in developed countries leaves significant knowledge gaps regarding developing country contexts, particularly given their different technological, economic, and cultural environments. The scarcity of Indonesian research represents a particular limitation given Indonesia's importance as a tourism destination and its unique position among developing countries with substantial tourism potential.

Organizational perspective limitations, with predominant focus on end-user adoption rather than service provider implementation, restrict understanding of business-to-business adoption processes that drive industry-wide technology diffusion. Methodological limitations include predominant reliance on cross-sectional designs that cannot capture adoption process dynamics over time, limited use of mixed-methods approaches that could provide richer contextual understanding, and insufficient attention to comparative research designs that could illuminate contextual variation sources.

The systematic analysis of performance expectancy in tourism AR/VR adoption reveals a remarkably consistent pattern of strong predictive relationships across diverse contexts, methodologies, and technological applications. The finding that performance expectancy contributes 46-70% of variance in adoption decisions represents one of the most robust effects documented in technology adoption research, surpassing typical explained variance levels found in general information systems adoption studies. This exceptional predictive power suggests that performance-related considerations assume particular importance when organizations and individuals evaluate complex, resource-intensive technologies such as AR/VR systems that require substantial investments in hardware, software, training, and organizational change processes.

The multidimensional nature of performance expectancy in AR/VR contexts reflects the complexity of these technologies and their diverse potential applications within tourism settings. The prominence of utilitarian value considerations across 85.7% of studies indicates that practical, operational benefits remain primary concerns for potential adopters, consistent with traditional technology adoption theory. However, the substantial attention to outcome

expectations (73.8% of studies) and relative advantage (69.0% of studies) suggests that AR/VR adoption decisions extend beyond immediate operational considerations to encompass strategic positioning and competitive advantage objectives. This multidimensional evaluation process may explain the exceptionally strong performance expectancy effects observed in AR/VR contexts, as potential adopters must perceive benefits across multiple organizational and strategic dimensions before committing to implementation.

The geographic variations in performance expectancy dimensions reveal important insights into how contextual factors influence technology evaluation processes. The emphasis on utilitarian value and relative advantage in developed countries likely reflects established technological infrastructures and competitive environments where operational efficiency and competitive positioning drive adoption decisions. Conversely, the focus on outcome expectations and job-fit considerations in developing countries suggests that adoption decisions in these contexts involve greater uncertainty about technology benefits and stronger needs for evidence that technologies will produce anticipated results and align with existing organizational capabilities. These patterns indicate that performance expectancy theory may require contextual adaptation to maintain explanatory power across diverse economic and technological environments.

The identification of four primary indicators for measuring AR/VR adoption represents an important advancement in understanding how complex technology implementation processes can be conceptualized and evaluated. Traditional adoption measures based on simple usage or implementation decisions fail to capture the graduated, multifaceted nature of AR/VR integration into tourism operations. The framework encompassing usage intensity, system integration, implementation scope, and utilization level provides more nuanced understanding of adoption as a process rather than a discrete event. This processual perspective aligns with recent developments in technology adoption theory that emphasize the dynamic, evolving nature of technology integration within organizational contexts.

The critical role of moderating variables in shaping performance expectancy relationships highlights the importance of contextual factors in technology adoption processes. The particularly strong effects of organizational technology readiness and risk perception in developing countries illuminate specific challenges faced by tourism organizations in these contexts. Baroroh and Agarwal's (2022) finding that only 23% of Indonesian travel agencies demonstrated adequate technology readiness suggests that high performance expectations may not translate into adoption behaviors when fundamental technological capabilities are lacking. This finding has important implications for technology diffusion strategies, suggesting that infrastructure development and capability building may be prerequisite to effective performance expectancy-based promotion of AR/VR technologies.

The predominant focus on end-user rather than organizational adoption perspectives represents a significant limitation in current understanding of AR/VR diffusion in tourism. While consumer adoption research provides valuable insights into demand-side factors, the tourism industry's structure as a complex network of intermediaries, service providers, and destination organizations means that organizational adoption processes often determine technology availability and implementation success. Travel agencies, tour operators, hotels,

and destination management organizations serve as crucial intermediaries that shape tourist access to AR/VR experiences, yet their adoption processes remain inadequately understood. This organizational adoption gap is particularly problematic given the substantial investments and organizational changes required for successful AR/VR implementation.

The methodological predominance of cross-sectional research designs limits understanding of how performance expectancy and adoption relationships evolve over time. AR/VR technologies continue to develop rapidly, with improving capabilities, declining costs, and expanding application possibilities that may alter performance expectations and adoption decisions. Furthermore, adoption processes themselves are inherently temporal, involving initial evaluation, pilot implementation, full deployment, and optimization phases that may be characterized by different performance expectancy considerations. Longitudinal research approaches could provide valuable insights into these dynamic processes and identify critical transition points where interventions might enhance adoption success.

The scarcity of research in Indonesian contexts represents more than a simple geographic gap; it reflects limited understanding of how AR/VR adoption processes operate in important emerging tourism markets that face unique combinations of technological, economic, and cultural factors. Indonesia's position as a major tourism destination with significant growth potential, combined with its developing country status and distinctive cultural characteristics, makes it an important context for understanding how performance expectancy operates in complex, resource-constrained environments. The limited research attention to this context restricts both theoretical understanding and practical guidance for technology implementation in similar emerging markets.

The COVID-19 pandemic's impact on tourism has created new imperatives for contactless, immersive, and digitally-mediated experiences that may fundamentally alter performance expectancy evaluations for AR/VR technologies. While some studies documented increased interest in these technologies for health and safety reasons, systematic understanding of how pandemic-induced changes affect performance expectations and adoption processes remains limited. This represents an important area for future research, particularly given the likelihood that some pandemic-induced changes in tourism practices and consumer expectations may persist beyond the immediate health crisis.

The integration challenges identified across multiple studies highlight the complexity of AR/VR implementation in tourism contexts. Unlike standalone software applications, AR/VR systems often require integration with existing reservation systems, customer databases, content management platforms, and operational workflows. These integration requirements create multiple points of potential failure and may substantially influence performance expectancy evaluations. Organizations must anticipate not only direct technology benefits but also integration costs, compatibility issues, and change management challenges that could affect overall performance outcomes.

CONCLUSION

This systematic literature review of 42 empirical studies from 2015–2024 confirms performance expectancy as a robust predictor of AR/VR technology adoption in tourism,

explaining 46–70% of variance—surpassing general technology adoption benchmarks—and manifesting as a multidimensional construct encompassing utilitarian values, relative superiority, work suitability, and outcome expectations, with contextual variations between developed and developing countries. AR/VR adoption proves complex, best captured through metrics like usage intensity, system integration, and implementation scope rather than binary measures, and is moderated by factors such as organizational technology readiness and risk perception. Key gaps include scarce organizational-level studies in developing countries like Indonesia, overreliance on end-user perspectives, and methodological biases toward quantitative, cross-sectional designs, underscoring the need for contextualized technology adoption theories and tailored strategies for diverse tourism markets. For future research, longitudinal qualitative studies in Indonesian tourism organizations could explore how cultural and infrastructural factors mediate performance expectancy, bridging the provider-end-user divide.

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