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Exploring Determinants of Electronic Medical Record (EMR) Acceptance Using the Technology Acceptance Model (TAM)

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Abstract

Background: Digital transformation in the healthcare sector has accelerated the implementation of Electronic Medical Records (EMR). However, the level of EMR acceptance among healthcare professionals remains variable, indicating that technological readiness alone is insufficient to ensure successful adoption.

Objective: To analyze the determinants of EMR adoption based on a synthesis of empirical evidence using the Technology Acceptance Model (TAM) framework

Methods: A systematic literature review was conducted in accordance with the PRISMA guidelines. A total of 20 empirical studies published between 2020 and 2025 were selected through systematic identification, screening, eligibility assessment, and quality assessment. The reviewed studies examined key TAM variables, including perceived usefulness (PU) and perceived ease of use (PEOU), as well as external factors such as management support, training, information technology infrastructure readiness, social influence, and digital literacy.

Results: The synthesis reveals that PU and PEOU are the most consistent and significant determinants of both the intention to use and actual use of EMR systems. PEOU (Perceived Examination of Use/System Usefulness) often serves as an initial determinant of PU (Perceived Use/User Usefulness), thereby indirectly reinforcing behavioral intent. Organizational factors generally do not directly influence intention but play an important role in shaping users' perceptions of the system's usefulness and ease of use. Social factors and digital literacy were found to be increasingly relevant in collaborative and technology-based healthcare environments.

Conclusion: The successful EMR implementation depends not only on technical readiness but also on organizational strategies and user capacity-building interventions. During the digital adoption transition phase, prioritizing system usability and ongoing training is essential to increase acceptance. Further research is recommended to integrate TAM (Technology Acceptance Model) with other behavioral theories, such as UTAUT (Uniform Teaching and Understanding/Information Technology), to better understand the dynamics of EMR acceptance in the context of mandatory policies, particularly in Indonesia following the implementation of PMK No. 24 of 2022.

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INTRODUCTION

Digital transformation in the health sector has become a strategic agenda in efforts to improve service quality, operational efficiency, and clinical data continuity. In Indonesia, the implementation of Electronic Medical Records (EMR) is no longer optional but a national obligation regulated by the Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 concerning Medical Records. This regulation requires all healthcare facilities to maintain medical records in electronic form that are integrated with the national health information system[1] . The policy emphasizes that EMR plays an important role in supporting continuity of care, patient safety, data interoperability, and clinical decision-making based on accurate and real-time information.

However, the success of EMR implementation is not only determined by infrastructure and policy readiness, but is also greatly influenced by user acceptance, especially among healthcare workers as the main users of the system[2]. Various studies show that resistance to change, perceptions of increased workload, concerns about disruption to clinical workflows, limited digital literacy, and low perceived benefits of the system are factors that often hinder the adoption of EMR[3–6]. This situation has created a gap between the availability of technology and its optimal use in practice, meaning the goal of digitization has not been fully achieved.

The Technology Acceptance Model (TAM) has become one of the most widely used theoretical frameworks for explaining and predicting technology acceptance behavior[7]. TAM emphasizes two main constructs, namely perceived usefulness and perceived ease of use, which directly influence users' attitudes, intentions, and actual behavior in using a system. The advantages of TAM lie in the simplicity of the model, its consistent empirical validity across sectors, and its ability to identify psychological factors relevant to health information system implementation[8]. Therefore, TAM is considered relevant and applicable to analyzing the determinants of EMR acceptance, especially in clinical work environments with high operational pressure and documentation accuracy requirements.

Although there have been many studies and literature reviews discussing the adoption of EMR or TAM-based health information systems, most studies are still general in nature, focusing on the context of developed countries or combining various technology adoption models without examining in depth the mechanisms of the relationship between TAM constructs in the context of health services. In addition, there are still limited reviews that specifically relate EMR acceptance to the context of the latest policies, organizational readiness, and the characteristics of health workers in developing countries, including Indonesia. Therefore, this review aims to fill this gap by synthesizing the latest empirical findings on the determinants of EMR acceptance within the TAM framework, while identifying consistent patterns in relationships among variables, contextual factors that moderate acceptance, and practical implications for formulating more effective and sustainable EMR implementation strategies.

METHODS

This study used a Systematic Literature Review (SLR) design to summarize and analyze existing literature on technology acceptance. The

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research protocol was developed in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency and quality of the search. The literature search strategy involved electronic searches of reputable academic databases to cover both national and international publications. The databases used included Google Scholar, PubMed, ScienceDirect, and ProQuest, as well as additional references from registers such as Portal Garuda and relevant institutional databases. To refine the search results, a combination of keywords with Boolean operators (AND/OR) was used, namely: ("Technology Acceptance Model" OR "TAM") AND ("Electronic Medical Record" OR "RME" OR "Electronic Medical Records") AND ('Hospital' OR "Clinic").

The article selection process was conducted using strict eligibility criteria to ensure the relevance and quality of the synthesized literature. The articles included were original research journals available in full text. In addition, the selected articles had to be published within the last five to ten years to ensure the currency of the scientific evidence. The research also focuses on studies that examine the application of the Technology Acceptance Model (TAM) to the implementation of Electronic Medical Records (EMR) in healthcare services, particularly in hospitals or clinics.

The study selection process began with the identification stage, in which 147 articles were identified in the database and 12 in other registers, resulting in a total of 159 articles. During the screening stage, the titles and abstracts were examined, resulting in 81 articles deemed irrelevant and 10 removed for duplication. From the screening results, 20 reports remained; their full texts were then searched for, and all were successfully obtained without any missing. After the eligibility stage, all articles that met the inclusion criteria (n= 20) were then assessed for methodological quality using general systematic review criteria, including clarity of research design, adequacy of sample size, validity and reliability of instruments, suitability of data analysis techniques for the research objectives, and transparency of reporting results.

The assessment results show that 15 articles were categorized as high-quality studies, 5 as moderate-quality, and none as low-quality. Studies included in the high-quality category generally used quantitative designs with Structural Equation Modeling (SEM) or Partial Least Squares–SEM (PLS-SEM) approaches, and some combined these with advanced techniques such as Necessary Condition Analysis, Importance Performance Map Analysis (IPMA), or machine learning. In addition, several studies applied expanded theoretical models, such as integrating TAM with UTAUT, ISSM, the Health Belief Model, or ITAM, thereby enabling a more comprehensive explanation of technology adoption intentions. Systematic literature reviews with broad coverage and mixed methods research based on participatory design were also included in the high-quality category because they provided depth of analysis and strong contextual validity.

In contrast, the five studies categorized as of moderate quality generally used correlational or simple regression methods without comprehensive structural model testing, or had relatively small sample sizes and very specific research contexts, such as student environments

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or specific institutions. Nevertheless, these studies remain relevant for supporting the consistency of findings on the role of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) in influencing technology usage intentions, but their generalizability is more limited than that of high-quality studies.

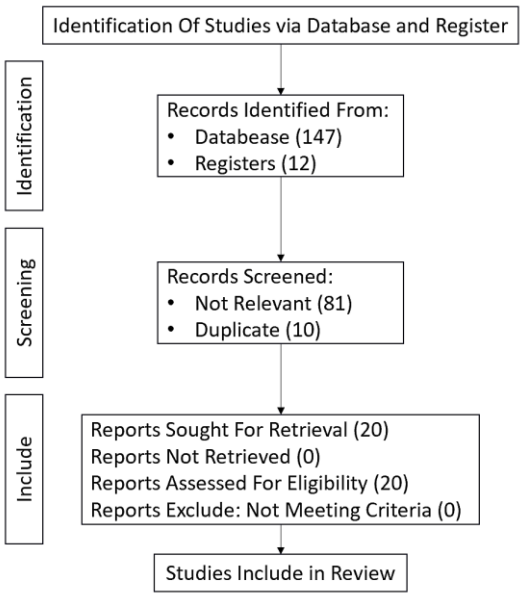

Figure 1. PRISMA Flow Diagram of Study Selection

The following studies are categorized as high quality because they have a robust research design, use appropriate and up-to-date data analysis techniques, and report results clearly and transparently:

1. de Andrés-Sánchez et al. (2024)[9], using PLS-SEM and Necessary Condition Analysis with a model that has high explanatory power (large R^2 value).
2. Himawan (2025)[10] applied PLS-SEM with a complete TAM construct and comprehensively discussed implementation issues in an organizational context.
3. Ghozali et al. (2025)[11] used PLS-SEM with a clearly defined UTAUT framework and strong model predictive power.
4. Jang (2023)[12] integrates e-health literacy variables into the TAM model using PLS-SEM with a solid theoretical foundation.
5. Ouajdouni et al. (2024) [13] combines TAM and the Information Systems Success Model (ISSM) and conducts systematic mediation testing.
6. Bennet et al. (2023)[14] applied a mixed methods approach with machine learning integration, enabling data triangulation and increased validity of findings.
7. Das Gupta (2024)[15] integrated TAM, UTAUT, and the Health Belief Model with complex but statistically verified construct testing.
8. Coreas-Flores (2024)[16] used regression analysis with moderator variables and adequate inferential analysis.
9. Walle et al. (2023)[17] applied AMOS-based SEM with attitude mediation testing and a robust research design.
10. Tan et al. (2024)[18], using PLS-SEM accompanied by Importance–Performance Map Analysis (IPMA) to provide clear practical implications.
11. AlQudah et al. (2021)[19], is a large-scale systematic literature review (99 studies), follows the PRISMA procedure completely.
12. Alquran et al. (2024)[20], combine a quantitative approach with machine learning and feature selection, accompanied by predictive model validation.
13. Kang et al. (2021)[21] used the Institution-based TAM (ITAM) framework with SEM to analyze the role of institutional factors structurally.
14. Mukhopadhyay et al. (2020)[22] utilized national HINTS data with weighted regression to improve representativeness and inferential power.

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15. Pfeuffer et al. (2022)[23] applied mixed methods based on participatory design with in-depth contextual analysis.

In general, studies in this category have well-developed methods, adequate sample sizes or rich qualitative data, and analysis techniques that are consistent with the research objectives.

A total of five studies were categorized as moderate quality because, although they used appropriate methods, there were limitations in sample size, depth of analysis, or the level of generalization of the research results:

1. Tang et al. (2023)[24], used SEM with good analysis quality, but focused on the effectiveness of multimedia use in the education sector, not on the adoption of clinical systems, so its relevance to the RME context is indirect.
2. Pal and Vanijja (2020)[25] used a correlational design without testing the structural model for technology usage intentions.
3. Goh and Wen (2020)[26] conducted an exploratory qualitative study with a relatively limited number of participants and a specific context among university students.
4. Wicaksono and Maharani (2020)[26] used simple regression analysis, so the relationship between TAM constructs was not tested structurally.
5. Hidayat et al. (2021)[27] applied adequate path analysis, but the sample size and specific institutional context limited the generalization of the findings.

However, all studies in the moderate-quality category still provide relevant empirical evidence supporting the consistent influence of Perceived Usefulness (PU) and Perceived Ease of Use on the intention to use technology.

RESULTS

Table 1. Synthesis of Studies on Electronic Medical Record (EMR) Acceptance Based on the Technology Acceptance Model (TAM).

No	Author (Year)	Method	TAM Variables Tested	Main Results
1	de Andrés-Sánchez et al. (2024)	Quantitative, survey; PLS-SEM + Necessary Condition Analysis	PU, PEOU, Social Influence, Perceived Enjoyment → Behavioral Intention	All variables have a significant positive effect on usage intention. PU is the strongest necessary condition for intention, followed by PEOU and enjoyment. Social influence is not necessary. The model explains 70% of the variation in usage intention
2	Himawan (2025)	Quantitative, survey; PLS-SEM (SmartPLS 4)	PU, PEOU, Attitude, Behavioral Intention	PU and PEOU significantly influence attitudes and intentions to use RME. RME improves work efficiency, but user resistance and system integration issues remain barriers to implementation
3	Ghozali et al. (2025)	Quantitative, cross-sectional; PLS-SEM	(Not pure TAM) Performance Expectancy, Effort Expectancy, Social	All constructs significantly influence the intention to use RME. Effort expectancy (similar to PEOU) is the strongest predictor. $R^2 = 0.655$ indicates that the model has sufficient explanatory power.

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			Influence, Facilitating Conditions → Behavioral Intention	
4	Jang (2023)	Quantitative, survey; PLS-SEM	PU, PEOU, Attitude, Social Influence, E-health Literacy → Behavioral Intention	E-health literacy increases PU and PEOU. Attitude and social influence have a significant effect on intention. This shows the importance of social factors in the context of post-COVID digital health services.
5	Ouajdouni et al. (2024)	Quantitative, survey; TAM + ISSM integration; PLS-SEM	PEOU, Information Quality, Service Quality, Trust, Privacy → Satisfaction	Information quality improves PEOU and patient satisfaction. Privacy protection improves satisfaction and trust. PEOU acts as a mediator between system quality and user satisfaction
6	Bennet et al. (2023)	Quantitative mixed method; TAM + Random Forest	PU, PEOU + startup ecosystem variables	The integration of TAM with machine learning improves the accuracy of startup success predictions. PU and PEOU remain relevant as initial factors in technology adoption, but are insufficient without business environment factors.
7	Das Gupta (2024)	Quantitative, PLS-SEM; TAM + UTAUT + Health Belief Model	PU, PEOU, Health Belief, Reference Group, Willingness to Change	PU, willingness to change, and the influence of reference groups have a significant effect on the intention to adopt digital health. Data security factors do not significantly affect PU.
8	Coreas-Flores (2024)	Quantitative correlational + regression	PU, PEOU → Intention; moderator: experience & institutional support	PU and PEOU significantly influence the intention to use AI. Technological experience strengthens the PU–Intention relationship. Institutional support influences PEOU and PU.
9	Walle et al. (2023)	Quantitative, cross-sectional; SEM (AMOS)	PU, PEOU, Attitude, Digital Literacy → Intention	PEOU is the strongest predictor of the intention to use EPHR. Digital literacy and attitude are also significant. Attitude mediates the relationship between PEOU and intention. Emphasizes the importance of training and technical support.
10	Tan et al. (2024)	Quantitative, survey (n=230); PLS-SEM + IPMA; integration of TAM + Social Influence Theory	PU, PEOU, Informational Influence, Reward, Patient Records → Behavioral Intention	Significant factors: informational influence, reward, PU, and PEOU. IPMA shows PEOU as the most important factor for doctors, while the highest performance is in patient record access. This confirms the importance of system ease and information support.
11	AlQudah et al. (2021)	Systematic Literature Review (PRISMA); 6 databases; 99 studies	PU, PEOU, Attitude, Social Influence, Facilitating Conditions (varied between studies)	RME, telemedicine, and mHealth were the most researched topics. PU and PEOU were consistent as the main predictors of health technology acceptance. Dominant countries: Taiwan and the US. This shows the strong generalization of TAM in the health sector.
12	Tang et al. (2023)	Quantitative, survey (n=400); SEM	PU, PEOU → Effectiveness of Use	PU and PEOU significantly influence the effectiveness of teachers' use of multimedia. This

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				shows that TAM remains relevant in the non-health sector as a cross-domain comparison.
13	Alquran et al. (2024)	Quantitative + machine learning; feature selection (Weka)	PU, Usability (PEOU), Trust, Comfort, Technophobia → Behavioral Intention	Trust, comfort, usefulness, and technophobia significantly influence the intention to adopt HIT. Random Forest and Bayes Net are the most accurate in predicting acceptance. This shows that extending TAM with psychological factors improves predictive power.
14	Kang et al. (2021)	Quantitative, survey (n=300); SEM; ITAM (Institution-based TAM)	PU, PEOU as mediators between institutions → Intention to Use	External institutional factors have a stronger influence on PU, PEOU, and intention than internal factors. PU and PEOU mediate the influence of institutions on IT adoption. Emphasizes the role of policy and organizational environment
15	Mukhopadhyay et al. (2020)	National secondary data analysis (HINTS 5); weighted regression; UTAUT-based	PU, Provider Encouragement, Vulnerability → Continued Use	PU and encouragement from health workers were significant for continued use of OMR. Perceptions of security vulnerability were not significant. This demonstrates the important role of service institutions in patient adoption.
16	Pal & Vanijja (2020)	Quantitative; large-scale survey of students; SUS and TAM instruments; correlational statistical analysis	Perceived Ease of Use (PEOU), Perceived Usefulness (PU)	PEOU has the strongest correlation with SUS scores, indicating consistency between the HCI and IS approaches in usability evaluation. Access platform (mobile vs. web) does not significantly affect perceived usability.
17	Goh & Wen (2020)	Exploratory qualitative; semi-structured interviews with 32 students; TAM-based thematic analysis	PU, PEOU, Attitude toward Use	Seven aspects of PU, four aspects of PEOU, and five aspects of attitude were found to influence the use of discussion forums. Ease of posting and reflection on the material were the dominant motivational factors.
18	Wicaksono & Maharani (2020)	Quantitative; questionnaire survey; regression analysis with SPSS	PU, PEOU, Behavioral Intention (BI)	PU and PEOU have a significant effect on BI ($R^2 = 0.713$; $p < 0.05$). Partially, the effect of PEOU on BI exceeds that of PU.
19	Hidayat et al. (2021)	Quantitative ex post facto; madrasah operator survey; path analysis	PU, PEOU, Attitude, Intention to Use, Actual Use	Management support significantly influences PU and actual use; training influences PEOU. PU does not significantly influence attitude, but does significantly influence intention to use; attitude and intention predict actual use.
20	Pfeuffer et al. (2022)	Mixed methods: participatory design, workshop, usability questionnaire, and qualitative analysis of barriers and drivers	Implicit TAM constructs: PEOU, PU, Acceptance/Use	System acceptance is influenced by ease of use, trust, and suitability to local needs. Main barriers: resource limitations, interoperability, computer literacy, and privacy issues

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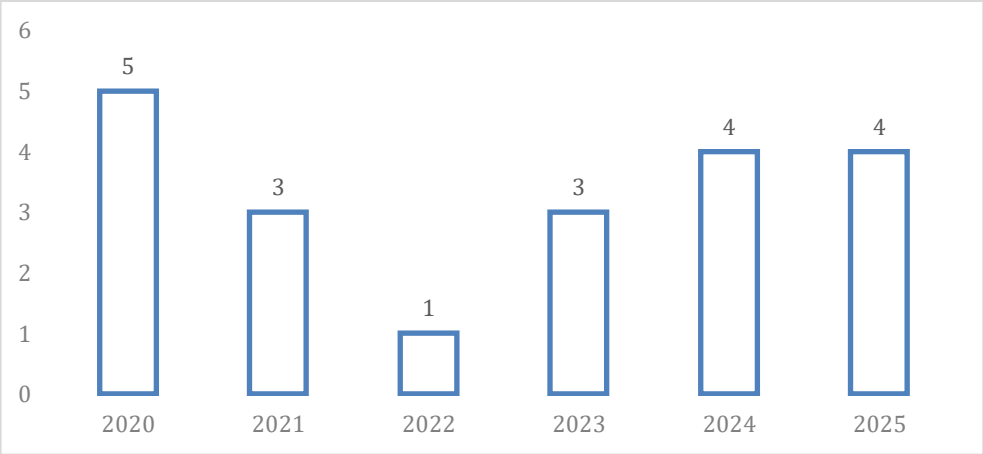
Based on an analysis of 20 selected articles, the following is a summary of the results covering study characteristics, geographic distribution, and types of health facilities:

1. Distribution Publication Year



2. Geographic Distribution Data

Continent	Number of Studies	Researcher References
Asia	11	Himawan, Ghozali, Jang, Das Gupta, Tan, Tang, Kang, Pal & Vanijja, Goh & Wen, Wicaksono, Hidayat
Eropa	1	de Andrés-Sánchez et al.
Amerika	3	Bennet et al., Coreas-Flores, Mukhopadhyay et al.
Afrika	2	Ouajdouni et al., Walle et al.
Timur Tengah	1	Alquran et al.
Global (Multinational)	2	AlQudah et al., Pfeuffer et al.
Total	**20**	

3. Health Service Facility Type Data

Facility Category	Number	%	Description
Hospital	11	55%	Focus on doctors, nurses, and clinical staff
Education/Academic	6	30%	Students and lecturers (AI tools, discussion forums)
Other/General Health Facilities	3	15%	Clinics, community health centers, madrasas, and startups
Total	20	100%	

DISCUSSION

Perceived Usefulness (PU) is the most consistent determinant influencing the intention to use RME in almost all studies reviewed. de Andrés-Sánchez et al.[9] show that PU not only has a significant effect but is also the strongest necessary condition for forming the intention to use the system, meaning that without adequate perceived usefulness, technology adoption is almost impossible. This finding is consistent with the results of studies by Himawan10, Jang12, Tan et al.18, and Walle et al.17, which found that increased work efficiency, improved documentation quality, and easier ac-

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cess to clinical information were the main reasons healthcare workers accepted RME. However, the relationship between PU and user attitudes is not always significant. Hidayat et al.[27] found that PU does not directly influence attitudes but still significantly influences usage intentions. This shows that in the context of healthcare institutions, system usage can be driven by functional considerations or organizational obligations, even if users' affective attitudes toward the system are not entirely positive. In addition, Mukhopadhyay et al.[22] show that PU also plays an important role in the sustainability of system use, not only in the initial adoption stage. In models that integrate TAM with other theories, such as the Health Belief Model or psychological factors, PU still emerges as a significant variable (15, 20), confirming that perceived usefulness remains the main foundation for technology acceptance, even when influenced by other external factors.

Perceived Ease of Use (PEOU) has been proven to be a very strong predictor of RME usage intention. In several studies, PEOU even has a greater influence than PU. Ghozali et al.[11] showed that effort expectancy, which is the equivalent of the PEOU concept in the UTAUT model, is the strongest predictor of RME usage intention. Similar results were also found by Walle et al.[17] and Wicaksono and Maharani (28), who showed that ease of use has a dominant contribution in shaping system adoption intention. In addition to being a direct predictor, PEOU also acts as a mediating variable. Ouajdouni et al.[13] found that system quality and information quality increase user satisfaction through increased PEOU. Kang et al.[21] also showed that institutional factors indirectly influence usage intention through PU and PEOU as mediators. These findings indicate that organizational interventions tend to work by increasing perceptions of system ease and usefulness, rather than by directly influencing user intent. In the context of usability evaluation, Pal and Vanijja[25] found a strong correlation between PEOU and System Usability Scale (SUS) scores, confirming that perceptions of ease of use are strongly influenced by interface and system workflow quality. Therefore, aspects of system design and suitability for clinical work processes are crucial factors in increasing the acceptance of RME.

External variables have been shown to play an important role in shaping RME acceptance, particularly in healthcare organizations. Hidayat et al.[27] showed that management support had a direct effect on actual system usage, while training had a significant effect on PEOU. This suggests that training improves perceived ease of use, which in turn encourages intention to use the system. Kang et al.[21], through an institution-based TAM approach, emphasized that institutional factors, such as organizational policies, technical support, and infrastructure readiness, have a greater influence on PU and PEOU than individual factors. Pfeuffer et al.[23] also highlight that resource constraints, low system interoperability, and limited digital literacy are major barriers to implementing health information systems, especially in facilities with low technological capacity. In addition to structural factors, social influences also play a role in the adoption of RME. Jang[12] and Tan et al.18 found that social and informational influences significantly affect usage intentions, especially in collaborative work environments such as hospitals. This shows that social norms and teamwork practices also influence technology usage behavior.

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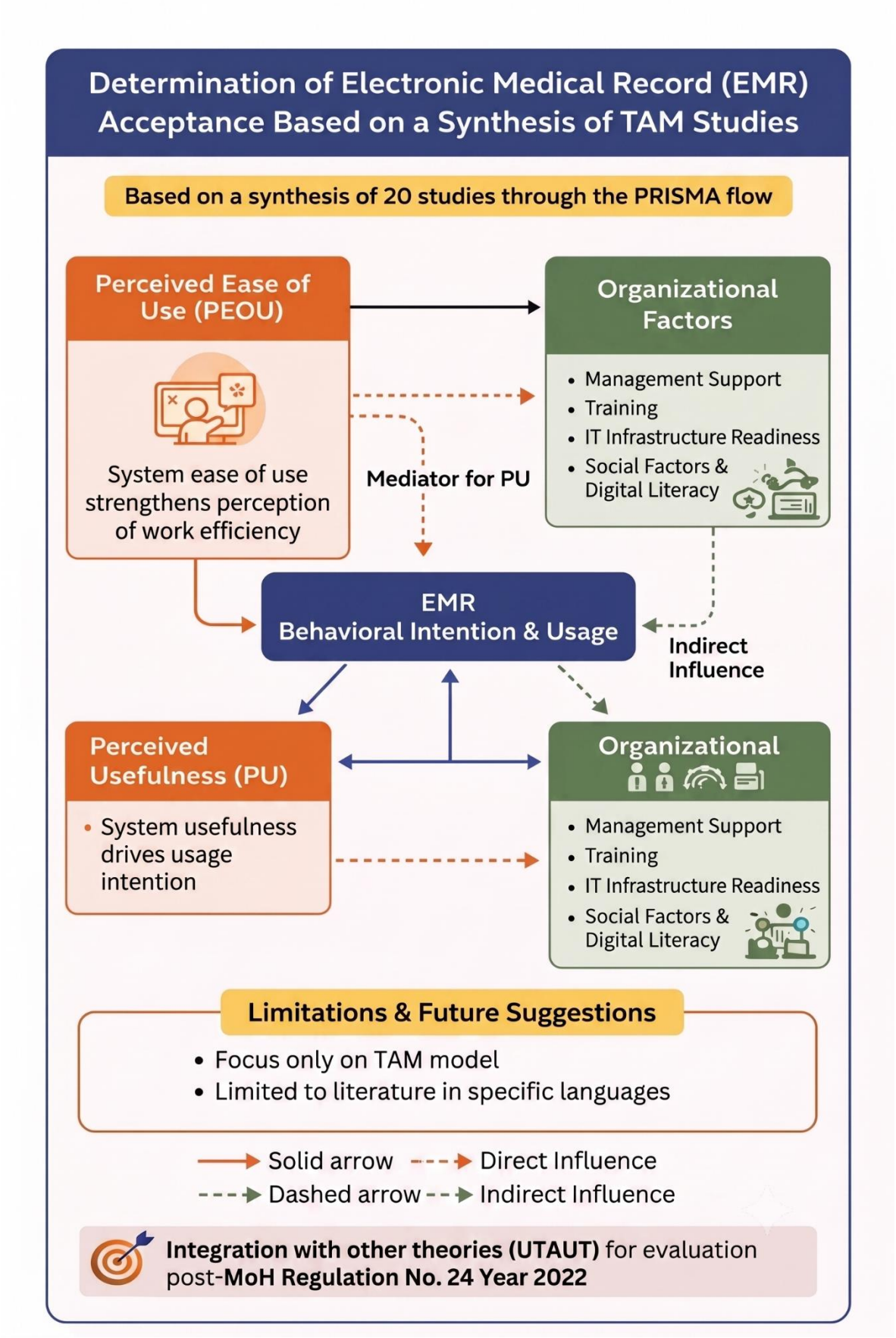

Figure 2. Determination of Electronic Medical Record (EMR) Acceptance based on TAM Study Synthesis

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A synthesis of the literature shows that the determinants of technology acceptance are highly dependent on the geographical context and the level of maturity of the digital ecosystem of the relevant institutions. Most of the international studies reviewed (such as those in Spain, the United States, and South Korea) were conducted in developed countries or in contexts with mature digital systems. In such environments, technological infrastructure and basic digital literacy among healthcare workers are considered prerequisites that have already been met, making the Perceived Usefulness (PU) variable the most consistent dominant factor. This is because users have already overcome technical and operational barriers and are more focused on how the system can optimize clinical service quality and work efficiency.

On the contrary, Indonesia is currently still in a massive digital transition phase following the enactment of PMK No. 24 of 2022. In this transition, external factors such as digital literacy and management support are far more crucial than studies in developed countries. In developing countries, digital literacy serves as a gatekeeper, moderating the relationship between perceived ease of use (PEOU) and intention to use; without basic skills and strong institutional support, users tend to experience technophobia, which can trigger resistance to early adoption.

The findings from these 20 pieces of literature address policy gaps in Indonesia specifically through several key points:

1. Transition from Voluntary to Mandatory: Although PMK 24/2022 mandates the use of RME, research shows that legal compliance alone does not guarantee psychological acceptance. PU continues to have a strong influence on intention due to the organizational obligation aspect, but effective use will only be achieved if PEOU is also fulfilled.
2. Infrastructure Gap: In institutions with newly implemented systems or those that experience frequent technical disruptions (characteristics of the transition phase), PEOU and technical factors become major obstacles that overshadow the benefits of the system (PU). This explains why, in some Indonesian hospitals, the ease-of-use factor is more significant than its functional benefits.
3. The Role of Continuous Training: Given the diverse literacy profiles, interventions in the form of training oriented towards operational practices (not just theory) have proven to be significant in improving the competence and confidence of users in operating RME.

Overall, the effectiveness of RME implementation in Indonesia depends heavily on user profiles and institutional readiness. Once the system is stable, management can shift its focus to strengthening PU; however, during this transition period, the main priority should remain on strengthening PEOU through the provision of reliable infrastructure and intensive mentoring programs. However, this review has limitations because it only focuses on the TAM model and is limited to literature in certain languages, so future research is recommended to conduct empirical studies that integrate other behavioral theories (such as UTAUT, Lawrence Green, IS Success Model, or others) to evaluate the dynamics of RME acceptance in Indonesia, especially after the implementation of the mandatory PMK No. 24 of 2022 policy.

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CONCLUSION

Based on a synthesis of all literature, the strongest and most consistent determinants influencing EMR acceptance are Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). PEOU plays an important role in the early stages of adoption because it affects user comfort and the ability to operate the system. At the same time, PU is a major factor in continued use because it is directly related to work efficiency and the quality of health services. External variables, particularly organizational support and training, serve as reinforcing factors influencing the two main TAM variables. Hospital management is advised to prioritize developing an EMR aligned with clinical workflows to improve perceived ease of use. In addition, training programs oriented towards operational practices need to be conducted on an ongoing basis to improve users' competence and confidence. Responsive technical support and consistent institutional policies are also necessary to create an environment conducive to technology adoption. Finally, the involvement of key healthcare personnel as agents of change can strengthen positive social influence to promote optimal EMR use.

Research Limitations Although it provides a comprehensive overview, this review has several limitations. First, the analysis focuses exclusively on the Technology Acceptance Model (TAM) framework, so factors outside the model, such as cybersecurity aspects or physical infrastructure constraints, may not be mapped in depth. Second, this review is limited to articles published in specific languages (English and Indonesian), which may potentially overlook perspectives from other global literature. In addition, variability in quality assessment methods in primary studies may affect the generalization of the overall results.

Recommendations for Future Research: It is recommended that future studies conduct more in-depth empirical research on integrating TAM with other behavioral theories, such as UTAUT (Unified Theory of Acceptance and Use of Technology), Lawrence Green's Theory, or the IS Success Model. Given the regulatory changes in Indonesia following PMK No. 24 of 2022 on Medical Records, future research should evaluate how this mandatory policy affects user acceptance dynamics compared with voluntary use. In addition, it is recommended to conduct a longitudinal study to examine whether perceived usefulness (PU) remains stable as users gain more experience over time.

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