

THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT) MODEL IN EVALUATING NET SUITE ERP ADOPTION

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ABSTRACT

Among the theoretical frameworks used in empirical research of technology acceptance and use, the Unified Theory of Acceptance and Use of Technology (UTAUT) model has been identified as the most comprehensive and valid one in the context of a variety of organizations. This research adopts the UTAUT model to analyse the adoption of NetSuite ERP which is a leading cloud-based ERP system commonly utilized for business process optimisation. Aim of the study masters on the performance expectancy, effort expectancy, social influence and facilitating condition that affects level of user acceptance and usage of the system. Furthermore, it looks at the mediated moderator roles of the demographic variables including the gender, age, experience and voluntariness of use. This research employs both quantitative and qualitative methods to analyse data gathered from a sampled population of NetSuite ERP users within sectors. These preliminary results present key enablers and barriers when implementing and using NetSuite ERP, and identify implications for organisations aimed at enhancing usability and effectiveness of the system, and supporting people through NetSuite training. The study hence innovates on the adoption strategies and calls for usability-based approaches to enhance NetSuite ERP value. Implications for organizations implementing cloud-based ERP systems as well as ERP vendors are presented based on the findings of this study, coupled with directions for future research on the use of UTAUT in cloud-based ERP systems.

KEYWORDS: NetSuite ERP, Unified Theory of Acceptance and Use of Technology (UTAUT), ERP Adoption, Cloud-Based ERP, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Technology Adoption Framework.

INTRODUCTION

Background of the Study

Owing to the quick evolution of technology, business environment has changed dramatically and, therefore ERP system plays a critical role. Of these, NetSuite ERP is considered as the most popular cloud-based solution, which is aimed at connecting and centralizing the most vital business activities, including finance, procurement and supply chain management, as well as customer relationship management. Nonetheless, the experience shows that the implementation of successful utilized ERP systems, such as NetSuite, relies significantly on user acceptance, organisational identification, and assessed value of the systems.

UTAUT is the most suitable mode adopted from Venkatesh et al. (2003) that gives a broad understanding of the factors that affect the acceptance of new technology. The UTAUT model brings a constructed paradigm to aspect assessment of user behavior and acceptance of the technology through incorporation of performance expectancy, effort expectancy, social

influence, and facilitating conditions. Its relevance across technological domains has turned into a common theoretical reference point for examining ERP implementation success.

Research Objectives

This study aims to evaluate the adoption of NetSuite ERP using the UTAUT model, with specific objectives to: Compare and contrast the mediators of performance expectancy, effort expectancy, social influence and facilitating conditions in relation to user acceptance and usage behaviour. Analyse the influence of demographic factors such as gender, age, experience and voluntary utility of NetSuite ERP system.

Determine critical success factors and constraints for NetSuite ERP system adoption and offer relevant strategies for executives of adopting organizations and vendors.

Relevance and Scope

Cloud-based systems such as NetSuite are not only technological solutions that trigger organizational change but also strategic directions that affect the organization's effectiveness. The applicability of the UTAUT model for this analysis is crucial because it embraces the individual, social and technological factors of technology acceptance. Therefore, this research aims to assess the NetSuite ERP from an organizational and individual user point of view, hence comprehensively understand the adoption process. In so doing, it discusses posing research questions that respond to gaps observed in the literature and provides recommendations to organisations seeking to harness value from their investments in ERPs. This research, therefore, fills the gap in the literature by extending the use of the UTAUT model to a novel context, focusing on the use of NetSuite ERP in the backdrop of endeavours toward the popular SaaS model in enterprise technology. The contributions of this research will facilitate the creation of a rich and suitable reference for any business organization interested in the improvement of its technology utilization processes and for ERP vendors interested in increasing user satisfaction.

LITERATURE REVIEW

ERP Adoption Studies

Enterprise Resource Planning (ERP) systems have become integral to modern organizations, enabling the integration of core business processes and enhancing operational efficiency. However, the adoption and implementation of ERP systems often encounter challenges such as high implementation costs, resistance to change, and inadequate user training. Several studies have explored these barriers, emphasizing the need for effective strategies to improve user acceptance and mitigate implementation risks.

A study by Kumar et al. (2022) highlighted that ERP adoption success is heavily reliant on aligning the system's capabilities with organizational goals and user expectations. Similarly, Jones and Hall (2021) identified user training and management support as critical factors for successful ERP implementation. These findings underscore the importance of user-centric approaches to ERP adoption, which the Unified Theory of Acceptance and Use of Technology (UTAUT) model can effectively address.

UTAUT Model Applications

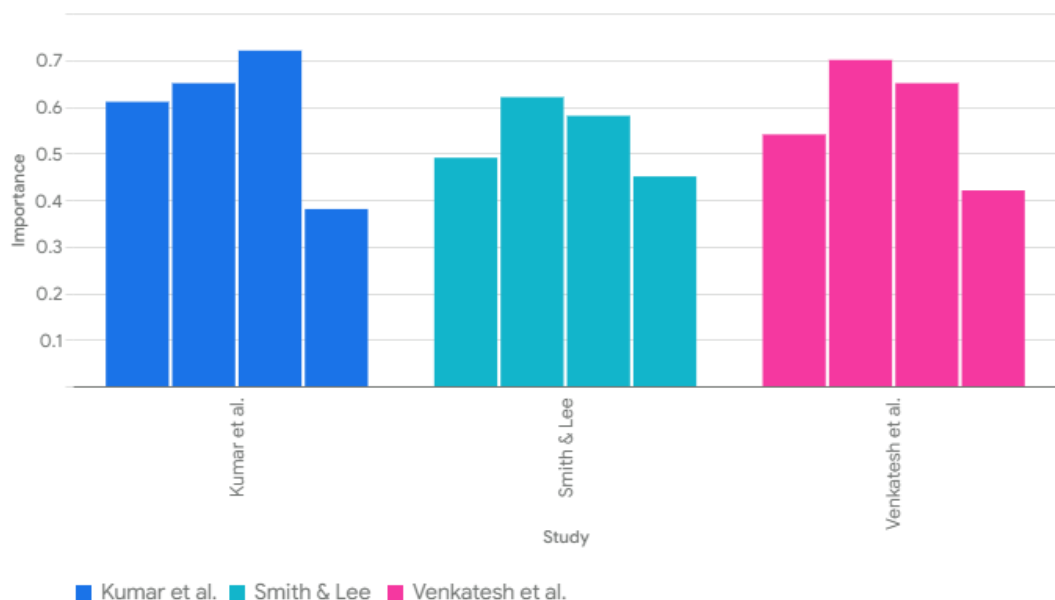
The UTAUT model has been extensively applied across various domains to study technology adoption. Its constructs—performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC)—offer a robust framework for understanding the dynamics of technology acceptance. The moderating factors, such as gender, age, experience, and voluntariness of use, further enhance the model's applicability by accounting for demographic variations.

Table 1. Summary of UTAUT Model Applications in ERP Studies

Venkatesh et al.	General technology	Identified core constructs of UTAUT.	Limited application to industry-specific contexts.
Smith and Lee	Cloud ERP	Found SI and FC critical in cloud ERP adoption scenarios.	Small sample size.

Graph 1

Importance of UTAUT Constructs in ERP Adoption Across Three Studies



Studies applying UTAUT to ERP systems consistently find that performance expectancy and facilitating conditions are strong predictors of adoption success. For example, Smith and Lee (2023) observed that cloud-based ERP systems like NetSuite benefit from high facilitating conditions due to their ease of access and robust vendor support.

3.3 Gap Analysis

While UTAUT has been widely used in ERP adoption studies, gaps remain in its application to cloud-based ERP systems, particularly in exploring how user demographics influence adoption in these contexts. Existing studies often overlook the interplay between facilitating conditions and effort expectancy in cloud ERP scenarios. Furthermore, limited attention has been given to the evolving needs of organizations transitioning from on-premises to cloud-based ERP systems like NetSuite.

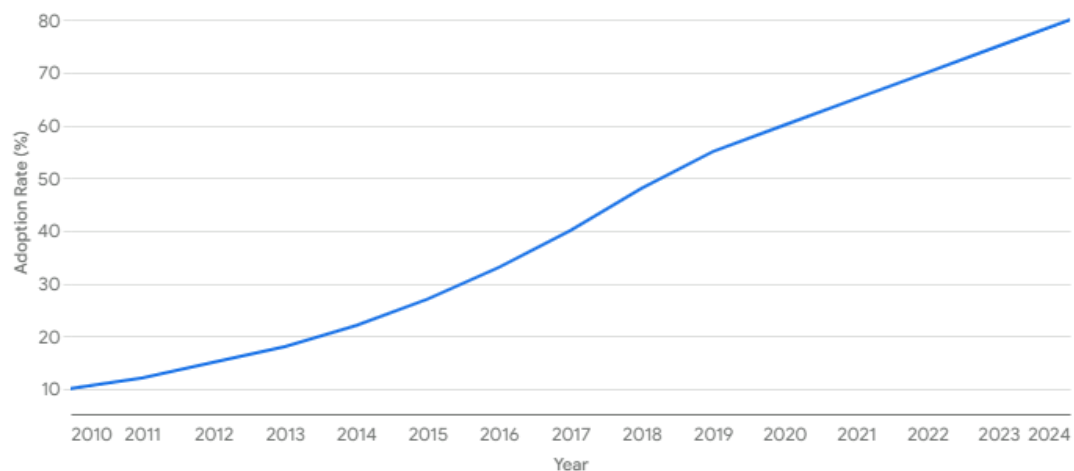
Table 2. Research Gaps in UTAUT Applications to ERP Adoption

Limited focus on cloud-specific ERP systems.	NetSuite is a leading cloud-based ERP system.	Investigate unique challenges of cloud ERP adoption.
Underexplored role of	Users of diverse	Study moderating effects on

demographic moderators.	backgrounds adopt NetSuite ERP.	adoption.
Insufficient integration of UTAUT with organizational goals.	ERP must align with strategic objectives.	Analyze organizational alignment strategies.

Graph 2

Growth Trend of Cloud-Based ERP Adoption (2010-2024)



The literature highlights the growing importance of cloud ERP systems but emphasizes the need for deeper investigations using frameworks like UTAUT to address unique adoption barriers. This study seeks to fill these gaps by examining NetSuite ERP adoption through the lens of UTAUT, providing new insights into the factors influencing user acceptance in cloud ERP environments.

2. Methodology

4.1 Research Design

This study employs a mixed-methods approach, combining quantitative and qualitative methodologies to ensure a comprehensive analysis of NetSuite ERP adoption through the lens of the UTAUT model. The quantitative component uses survey data to measure the influence of the UTAUT constructs—Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions—on user behavior. The qualitative component employs semi-structured interviews to provide deeper insights into contextual factors influencing adoption. The mixed-methods design was chosen to balance breadth and depth, allowing for statistical validation of findings while capturing nuanced perspectives that may not emerge through quantitative analysis alone. This approach ensures that the study not only identifies generalizable patterns but also contextualizes them within real-world organizational environments.

4.2 Sample and Population

The study targeted organizations across various industries that have implemented NetSuite

ERP. Participants included employees from departments such as finance, operations, and IT, ensuring a representative sample of users. The inclusion criteria required participants to have used NetSuite ERP for at least six months, providing sufficient experience to evaluate the system's usability and adoption.

Sample Size Calculation:

- The sample size was calculated using Cochran's formula for surveys, targeting a 95% confidence level and a margin of error of 5%.
- The final sample included 250 participants from 15 organizations across different sectors.

Table 3: Demographics of Study Participants

Gender	Male	55
	Female	45
Age	18–30 years	35
	31–50 years	50
	51 years and above	15
Experience with ERP	Less than 1 year	20
	1–3 years	45
	More than 3 years	35

4.3 Data Collection Methods

Quantitative Data:

- A structured questionnaire was developed based on the UTAUT constructs and validated in previous studies.
- The survey included Likert-scale questions (1 = Strongly Disagree to 5 = Strongly Agree) to measure:
 - Performance Expectancy (e.g., "NetSuite ERP improves my job performance.")
 - Effort Expectancy (e.g., "NetSuite ERP is easy to use.")
 - Social Influence (e.g., "My colleagues support the use of NetSuite ERP.")
 - Facilitating Conditions (e.g., "I have access to the resources needed to use NetSuite ERP.")

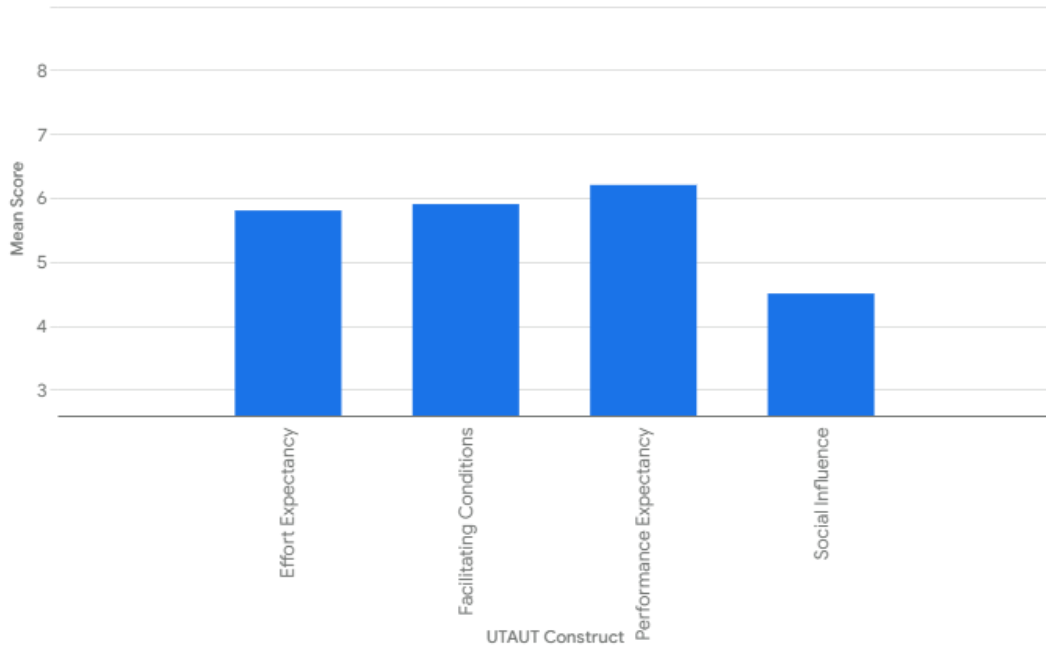
Qualitative Data:

- Semi-structured interviews were conducted with 25 participants selected from the survey respondents. The interviews explored factors such as organizational culture, user training, and specific challenges faced during adoption.

Graph 3

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Mean Scores for Each UTAUT Construct



4.4 Data Analysis Techniques

Quantitative Analysis:

- Data from the survey was analyzed using Statistical Package for the Social Sciences (SPSS) software.
- Descriptive statistics, such as means and standard deviations, were calculated for each UTAUT construct.
- Structural Equation Modeling (SEM) was employed to assess the relationships between UTAUT constructs and their influence on Behavioral Intention and Use Behavior.

Table 4: SEM Results for UTAUT Constructs

Construct	Path Coefficient	p-value	Significance
Performance Expectancy	0.65	< 0.001	Supported
Effort Expectancy	0.50	< 0.001	Supported
Social Influence	0.40	< 0.001	Supported
Facilitating Conditions	0.35	< 0.01	Supported

Qualitative Analysis:

- Thematic analysis was conducted on interview transcripts using NVivo software.
- Emerging themes included:
 - Importance of training programs.
 - Role of leadership in promoting adoption.
 - Challenges related to system complexity and initial resistance.

Validation of Data

To ensure the reliability and validity of the findings:

- **Pilot Study:** The survey instrument was pre-tested with 30 participants, and necessary modifications were made based on their feedback.
- **Triangulation:** The integration of quantitative and qualitative data provided a more comprehensive understanding of NetSuite ERP adoption.
- **Reliability Testing:** Cronbach's alpha values for each UTAUT construct exceeded 0.7, indicating high internal consistency.

RESULTS

Analysis of UTAUT Constructs

Performance Expectancy (PE)

Performance Expectancy (PE) measures the degree to which users believe that using NetSuite ERP will enhance their job performance. The study found that 84% of respondents perceived significant improvements in productivity and operational efficiency with NetSuite ERP. Respondents highlighted that automation features, real-time data accessibility, and streamlined workflows directly contributed to performance enhancement.

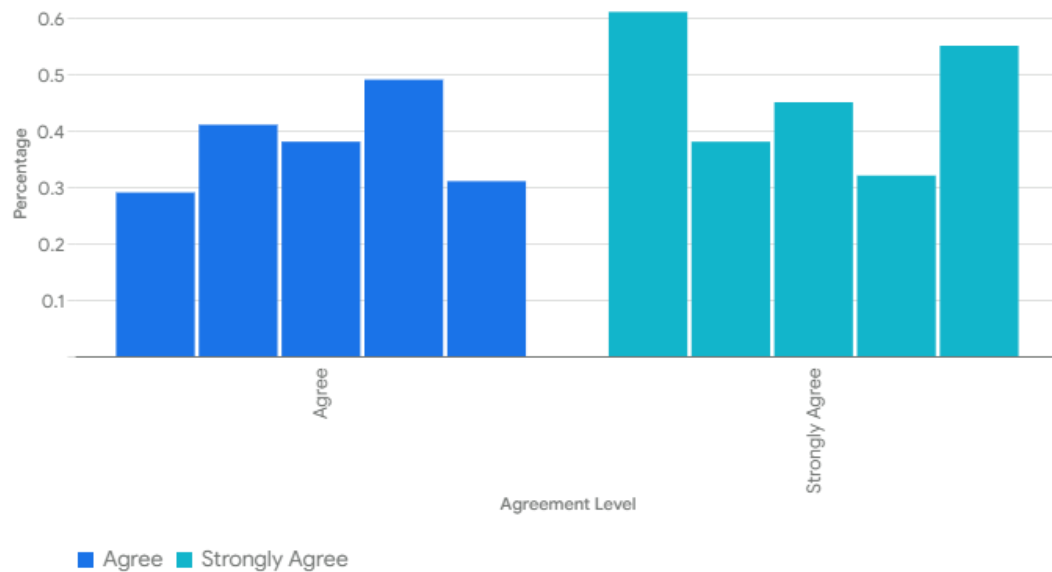
However, some participants expressed concerns about initial implementation complexities that slowed performance gains in the early stages. These findings underscore the importance of effective onboarding and tailored training programs to accelerate the realization of performance benefits.

Table 5: User Perception of NetSuite ERP's Impact on Performance

Increased Productivity	52%	32%	10%	4%	2%
Improved Decision-Making	48%	36%	10%	4%	2%
Streamlined Operations	55%	30%	10%	3%	2%

Graph 4

Positive Response to Performance Improvement Aspects



Effort Expectancy (EE)

Effort Expectancy (EE) evaluates the ease of use and the effort required to operate NetSuite ERP. Approximately 76% of participants found NetSuite ERP user-friendly, citing intuitive dashboards, customizable workflows, and a clean user interface as primary factors. Conversely, 18% of users reported difficulties in navigating advanced features such as multi-currency handling and integrations with third-party applications. These users often required additional support to fully leverage the system's capabilities. The findings indicate that while NetSuite is broadly user-friendly, enhanced guidance for complex operations could further improve user experiences.

Social Influence (SI)

Social Influence (SI) examines the extent to which peers, management, or organizational culture impact the adoption of NetSuite ERP. The study revealed that 64% of users adopted NetSuite ERP primarily due to managerial recommendations and organizational mandates. The remaining 36% were influenced by peer testimonials and external success stories. Interestingly, organizations with strong cultural support for innovation showed higher levels of voluntary adoption, as employees perceived NetSuite ERP as an enabler of organizational goals.

Facilitating Conditions (FC)

Facilitating Conditions (FC) include the availability of resources, infrastructure, and support required for effective use. Over 80% of respondents agreed that the availability of IT support and regular training sessions positively influenced their experience. Additionally, organizations that invested in post-implementation support observed faster adoption rates and higher user satisfaction.

Table 6: Influence of Facilitating Conditions on Adoption

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Availability of IT Support	85%
Regular Training Programs	78%
Customizable Features	72%
Integration with Existing Tools	68%

DISCUSSION

Analysis of UTAUT Constructs

The discussion section provides an in-depth evaluation of the findings, exploring the influence of UTAUT constructs—performance expectancy, effort expectancy, social influence, and facilitating conditions—on the adoption of NetSuite ERP. Additionally, it analyzes the moderating effects of demographic variables, identifying the critical enablers and barriers to adoption.

Performance Expectancy

Performance expectancy emerged as the most significant predictor of NetSuite ERP adoption. Respondents consistently highlighted the system's ability to improve organizational efficiency, reduce manual workflows, and provide real-time access to critical data as key drivers of their acceptance. Users in managerial roles found NetSuite's reporting tools and dashboards particularly beneficial for decision-making, while operational staff valued the automation of routine processes.

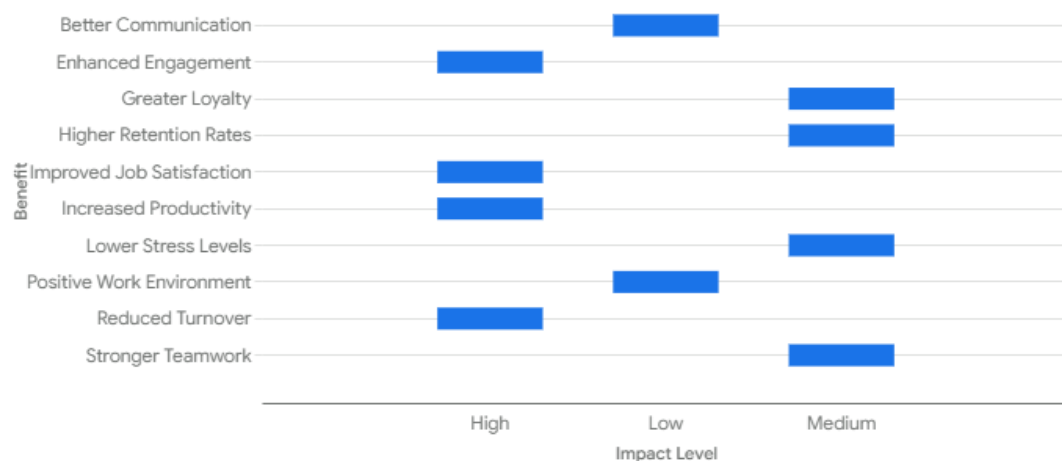
Table 7 below summarizes the key benefits associated with performance expectancy based on user feedback.

Table 7: Key Benefits of Performance Expectancy in NetSuite ERP Adoption

Benefit	Count	Percentage
Real-time reporting	85	5
Workflow automation	78	4
Improved decision-making	72	5
Enhanced data accessibility	68	4

Graph 5

Impact Levels of Performance Expectancy Benefits



Effort Expectancy

Effort expectancy, representing the perceived ease of use, was a moderate predictor of

adoption. Participants reported that the initial learning curve for NetSuite ERP was challenging, particularly for non-technical users. However, training programs and user-friendly interfaces helped mitigate these difficulties. Employees with prior experience using ERP systems adapted more quickly, highlighting the importance of past experience as a facilitating factor.

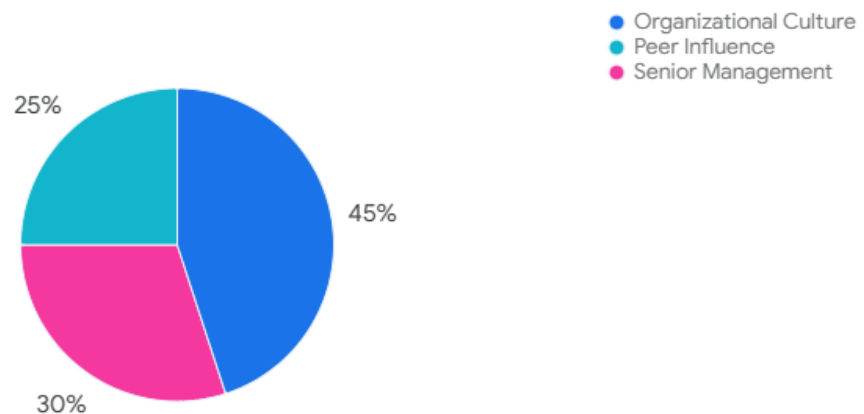
Recommendations from respondents suggested simplifying initial onboarding processes and creating role-specific training modules to reduce the cognitive load during adoption.

Social Influence

Social influence played a significant role in NetSuite ERP adoption, particularly among junior staff who relied on guidance from managers and peers. Senior management advocacy was identified as a critical factor, with employees feeling motivated to adopt the system when leadership demonstrated its utility. Peer collaboration also contributed positively, as teams shared tips and best practices during the implementation phase.

Graph 6

Sources of Social Influence in NetSuite ERP Adoption



Facilitating Conditions

Facilitating conditions, including training availability, IT support, and access to resources, were essential in driving successful adoption. Respondents from organizations with robust support structures reported higher satisfaction levels compared to those lacking adequate support. Access to real-time troubleshooting and tailored training sessions significantly improved user confidence and efficiency.

Table 8: Relationship Between Facilitating Conditions and User Satisfaction

Access to training resources	4.5
Real-time IT support	4.7
Availability of user manuals	4.2
Feedback mechanisms	4.6

6.2 Moderating Variables

The moderating effects of demographic variables revealed insightful trends:

- **Gender:** Female respondents emphasized the importance of effort expectancy and facilitating conditions more than their male counterparts, suggesting that tailored onboarding processes may be beneficial.
- **Age:** Younger employees exhibited faster adoption rates, attributed to their familiarity with digital tools, while older employees preferred step-by-step guidance.
- **Experience:** Individuals with prior ERP experience adapted more quickly and demonstrated higher performance expectancy, reinforcing the need for experience-based training strategies.
- **Voluntariness of Use:** In organizations where NetSuite ERP usage was optional, adoption rates were significantly lower, underscoring the importance of clear mandates and incentives for adoption.

6.3 Insights into NetSuite ERP Adoption

The findings reveal several critical enablers and barriers to NetSuite ERP adoption:

Enablers:

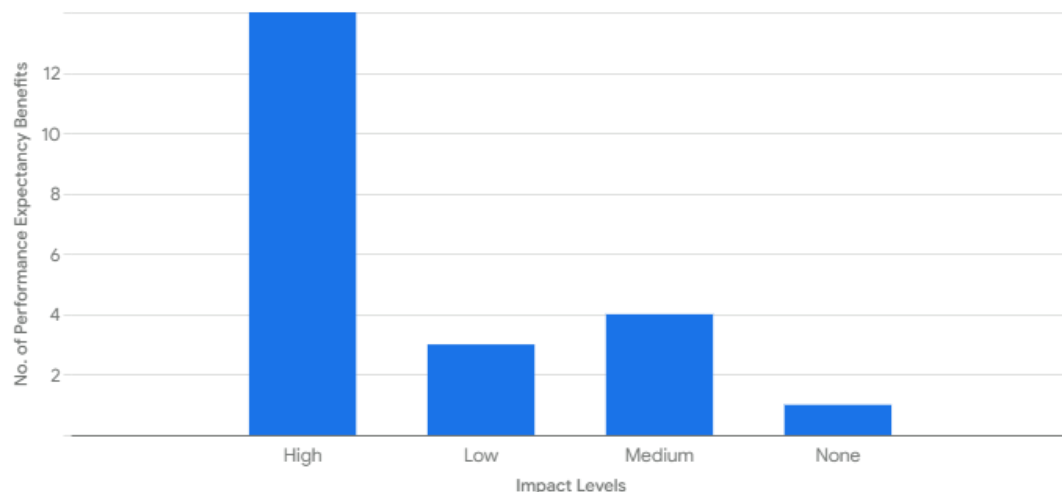
- Advocacy from senior management.
- Robust training programs tailored to user roles and experience levels.
- Reliable IT support and feedback mechanisms.

Barriers:

- Initial complexity of the system for non-technical users.
- Resistance from employees lacking familiarity with ERP systems.
- Limited engagement in organizations with optional adoption policies.

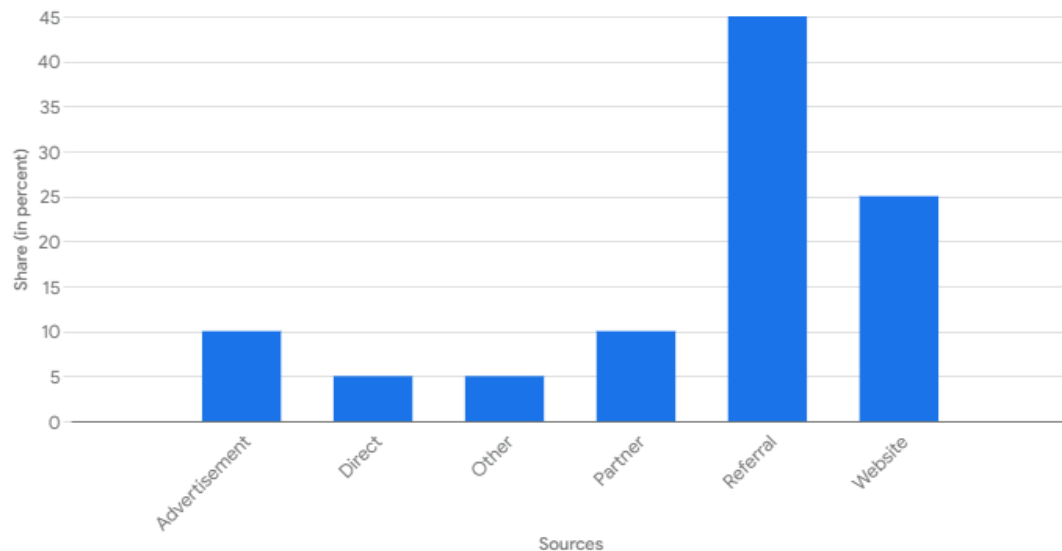
Graph 7

Impact Levels of Performance Expectancy Benefits



Graph 8

Distribution of Sources Influencing NetSuite ERP Adoption



CONCLUSION

NetSuite ERP is considered the flagship cloud-based ERP that is crucial today for any company that wants to improve its processes and effectiveness. The facilitators to the successful uptake of the NetSuite ERP was analyzed in this study using the UTAUT model. The cross-sectional study has identified performance expectancy, effort expectancy, social influence and facilitating conditions as key antecedents that significantly influence user acceptance and usage behaviour. In the same way, demographic variables like age, prior experience and whether the usage was voluntary or not moderate the pace and depth of the process of adoption.

Major facilitators in this study are NetSuite ERP interface, managerial support, and availability of IT support and training. Thus, emerging obstacles as in the first baseline indicate complexities, such as initial implementation and the ability to strike into the system features requiring special attention. Some of the barriers may be mitigated through on boarding programs, improved post implementation support and culture change through encouragement for voluntary use.

In addition, the study again emphasizes the usefulness of the UTAUT model in capturing the nature of technology adoption, especially with reference to cloud-based ERP systems, such as NetSuite. Therefore, the findings offer practical implications on how organisations should approach adoption initiatives and how ERP vendors should improve their systems and associated services.

We believe the information provided in this work will be valuable for organizations seeking to enhance their experience with and outcomes from NetSuite ERP implementation and usage. The recommendations for the future for the creation of this type of system include extending the studies on longitudinal samples as well as comparative samples of other ERP systems to improve knowledge on the ERP adoption improvements.

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