# Factors Affecting Cloud ERP Adoption Decisions in Organizations

Cason Konzer

casonk@umich.edu

May 21, 2023



For this presentation will will study "Factors Affecting Cloud ERP Adoption Decisions in Organizations," by Vilde Christiansen, Moutaz Haddara and Marius Langseth [1].

For this presentation will will study "Factors Affecting Cloud ERP Adoption Decisions in Organizations," by Vilde Christiansen, Moutaz Haddara and Marius Langseth [1].

The paper was presented in CENTRIS, ProjMAN and HCist (2021) international conferences before being published in Procedia Computer Science at the beginning of 2022.

For this presentation will will study "Factors Affecting Cloud ERP Adoption Decisions in Organizations," by Vilde Christiansen, Moutaz Haddara and Marius Langseth [1].

The paper was presented in CENTRIS, ProjMAN and HCist (2021) international conferences before being published in Procedia Computer Science at the beginning of 2022.

 CENTRIS - International Conference on ENTERprise Information Systems.

For this presentation will will study "Factors Affecting Cloud ERP Adoption Decisions in Organizations," by Vilde Christiansen, Moutaz Haddara and Marius Langseth [1].

The paper was presented in CENTRIS, ProjMAN and HCist (2021) international conferences before being published in Procedia Computer Science at the beginning of 2022.

- CENTRIS International Conference on ENTERprise Information Systems.
- ProjMAN International Conference on Project MANagement.

For this presentation will will study "Factors Affecting Cloud ERP Adoption Decisions in Organizations," by Vilde Christiansen, Moutaz Haddara and Marius Langseth [1].

The paper was presented in CENTRIS, ProjMAN and HCist (2021) international conferences before being published in Procedia Computer Science at the beginning of 2022.

- CENTRIS International Conference on ENTERprise Information Systems.
- ProjMAN International Conference on Project MANagement.
- HCist International Conference on Health and Social Care Information Systems and Technologies.

The paper as presented is a literature review, or meta-study, which aims to bridge findings across multiple studies and form a general consensus.

The paper as presented is a literature review, or meta-study, which aims to bridge findings across multiple studies and form a general consensus.

Focus is given on SMEs (small and medium-size enterprises), along side LEs (large enterprises), identifying similarities and differences between them.

The paper as presented is a literature review, or meta-study, which aims to bridge findings across multiple studies and form a general consensus.

Focus is given on SMEs (small and medium-size enterprises), along side LEs (large enterprises), identifying similarities and differences between them.

Industry trends are showing a move from on-premise to cloud ERP (enterprise resource planning) systems, with a 2020 report by Panorama Consulting Group finding a 62.7% adoption rate.

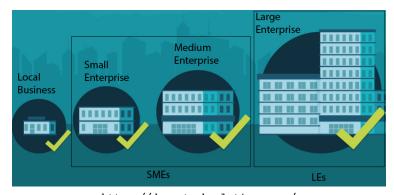
The paper as presented is a literature review, or meta-study, which aims to bridge findings across multiple studies and form a general consensus.

Focus is given on SMEs (small and medium-size enterprises), along side LEs (large enterprises), identifying similarities and differences between them.

Industry trends are showing a move from on-premise to cloud ERP (enterprise resource planning) systems, with a 2020 report by Panorama Consulting Group finding a 62.7% adoption rate.

More over, the implementations are most often seen as SaaS (software as a service) solutions, about 90%, minimizing the time to go-live.

#### **Business Sizes**



https://desmotechsolutions.com/desmo-tech-solutions-small-medium-business/

## **Cloud Offerings**



https://www.eginnovations.com/blog/ saas-vs-paas-vs-iaas-examples-differences-how-to-choose/

#### Research Question

The primary research question addressed is:

\* "What are the main factors affecting the decision to adopt cloud ERP at the organizational level in the extant literature?"

### Research Question

The primary research question addressed is:

\* "What are the main factors affecting the decision to adopt cloud ERP at the organizational level in the extant literature?"

Generally speaking the authors wonder why organizations are making the move to the cloud, identifying the pros and cons of such a decision.

As this paper is a literature review, the methodology borrows a well document method from [2].

As this paper is a literature review, the methodology borrows a well document method from [2].

The steps can be summarized as follows:

1. Formulation of the Research Question.

As this paper is a literature review, the methodology borrows a well document method from [2].

- 1. Formulation of the Research Question.
- 2. Localization of the Articles.

As this paper is a literature review, the methodology borrows a well document method from [2].

- 1. Formulation of the Research Question.
- 2. Localization of the Articles.
- 3. Selection and Evaluation of the Studies.

As this paper is a literature review, the methodology borrows a well document method from [2].

- 1. Formulation of the Research Question.
- 2. Localization of the Articles.
- 3. Selection and Evaluation of the Studies.
- 4. Analysis and Synthesis.

As this paper is a literature review, the methodology borrows a well document method from [2].

- 1. Formulation of the Research Question.
- 2. Localization of the Articles.
- 3. Selection and Evaluation of the Studies.
- 4. Analysis and Synthesis.
- 5. Development of Report with Findings.

Articles were found through a pairing of search keywords utilizing Oria's database.

Articles were found through a pairing of search keywords utilizing Oria's database.

The search is summarized by an *and* condition across the following clauses.

Cloud or Cloud-Based or Software as a Service.

Articles were found through a pairing of search keywords utilizing Oria's database.

The search is summarized by an *and* condition across the following clauses.

- Cloud or Cloud-Based or Software as a Service.
- ERP or Enterprise Resource Planning.

Articles were found through a pairing of search keywords utilizing Oria's database.

The search is summarized by an *and* condition across the following clauses.

- Cloud or Cloud-Based or Software as a Service.
- ERP or Enterprise Resource Planning.
- ♦ DOI or TBP.

Articles were found through a pairing of search keywords utilizing Oria's database.

The search is summarized by an *and* condition across the following clauses.

- Cloud or Cloud-Based or Software as a Service.
- ERP or Enterprise Resource Planning.
- ♦ DOI or TBP.

#### Note:

DOI - Diffusion of Innovation.

TBP - undefined.

Utilizing the search framework, a total of 40 articles were located.

Utilizing the search framework, a total of 40 articles were located.

The selection process imposed the following requirements:

Inclusion of Cloud ERP Adoption Decisions.

Utilizing the search framework, a total of 40 articles were located.

The selection process imposed the following requirements:

- Inclusion of Cloud ERP Adoption Decisions.
- Exclusion of Strictly Integration Phase Based Literature.

Utilizing the search framework, a total of 40 articles were located.

The selection process imposed the following requirements:

- Inclusion of Cloud ERP Adoption Decisions.
- Exclusion of Strictly Integration Phase Based Literature.
- ⋄ Disclosure of Organization Size(s).

Utilizing the search framework, a total of 40 articles were located.

The selection process imposed the following requirements:

- Inclusion of Cloud ERP Adoption Decisions.
- Exclusion of Strictly Integration Phase Based Literature.
- Disclosure of Organization Size(s).

In total 9 of the 40 articles were included, spanning 5 unique hosting databases.

## Summary of Articles

Table 2: Overview of the articles

Article	Year	Context	Theoretical lens
[11]	2020	Small organizations in Taiwan	Two-factor theory and TOE framework
[12]	2015	Consultant company in India	Previous literature
[13]	2018	MNCs in India	Analytical hierarchy process
[14]	2019	SMEs and LEs in Saudi Arabia	DOI theory and TOE framework
[15]	2015	SMEs and LEs in Norway	TPB
[16]	2018	SMEs in developing economies	DOI theory and TOE framework
[17]	2020	SMEs and LEs in Korea	DOI theory, TOE framework and MIR
[18]	2016	Higher educational institutions in India	DOI theory, task-technology fit (TTF), extended TAM model, the resource-based view (RBV)
[19]	2015	SMEs in Malaysia	TPB and Ettie's technology adoption process

[1, pg. 257]

## **Analysis**

As shown in 'Summary of Articles' (Table 2: Overview of the articles) the authors managed to review literature across 6 years, including various contexts and theoretical perspectives.

## **Analysis**

As shown in 'Summary of Articles' (Table 2: Overview of the articles) the authors managed to review literature across 6 years, including various contexts and theoretical perspectives.

Similar to the findings in [3], the context of the organizations played a key role in the factors of concern.

## **Analysis**

As shown in 'Summary of Articles' (Table 2: Overview of the articles) the authors managed to review literature across 6 years, including various contexts and theoretical perspectives.

Similar to the findings in [3], the context of the organizations played a key role in the factors of concern.

As a result we will provide a meta-summary of the most influential factors in cloud-ERP adoption across various contextual settings, as presented in the paper's discussion.

## Meta-Summary of Cloud-ERP Adoption Factors

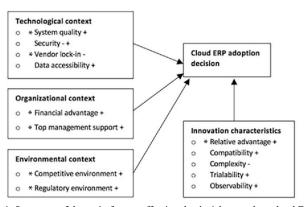


Fig. 1. Summary of the main factors affecting the decision to adopt cloud ERP [1, pg. 261]

Across the paper system quality, vendor lock-in, financial advantage, top management support, competitive environment, regulatory environment, and relative advantage were the most relevant factors in cloud-ERP adoption for SMEs and LEs.

Across the paper system quality, vendor lock-in, financial advantage, top management support, competitive environment, regulatory environment, and relative advantage were the most relevant factors in cloud-ERP adoption for SMEs and LEs.

Of these, system quality and financial advantage showed the largest differences between SMEs and LEs.

Across the paper system quality, vendor lock-in, financial advantage, top management support, competitive environment, regulatory environment, and relative advantage were the most relevant factors in cloud-ERP adoption for SMEs and LEs.

Of these, system quality and financial advantage showed the largest differences between SMEs and LEs.

A common lack of differentiation between small, medium and large enterprises was noticed throughout the literature.

Across the paper system quality, vendor lock-in, financial advantage, top management support, competitive environment, regulatory environment, and relative advantage were the most relevant factors in cloud-ERP adoption for SMEs and LEs.

Of these, system quality and financial advantage showed the largest differences between SMEs and LEs.

A common lack of differentiation between small, medium and large enterprises was noticed throughout the literature.

As a result future research suggests finer grain study with respect to the distinguishing factor of business size.

The authors of this paper were both clear and concise.

The authors of this paper were both clear and concise.

Their methodology adopted an established procedure and their factor categorization utilized frequented theoretical frameworks.

The authors of this paper were both clear and concise.

Their methodology adopted an established procedure and their factor categorization utilized frequented theoretical frameworks.

In analysis fine grained details were provided highlighting differences seen based on the economic situation, locality, and business size and viewed in the summarized papers.

The authors of this paper were both clear and concise.

Their methodology adopted an established procedure and their factor categorization utilized frequented theoretical frameworks.

In analysis fine grained details were provided highlighting differences seen based on the economic situation, locality, and business size and viewed in the summarized papers.

The meta-summary provided a clear overview of the cloud-ERP adoption landscape and conclusion provided suggestions for future research.

#### References

- [1] V. Christiansen, M. Haddara, and M. Langseth, "Factors Affecting Cloud ERP Adoption Decisions in Organizations," Procedia Computer Science, vol. 196, pp. 255–262, 2022. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S1877050921022353
- [2] Denyer, David and David Tranfield, "Producing a Systematic Review", The Sage Handbook of Organizational Research Methods, 2009.
- [3] J. V. Gavidia, I. A. Junglas, and C.-H. Chou, "An integrated model of erp success: the critical role of task-context alignment," Enterprise Information Systems, vol. 17, no. 1, p. 1931460, 2023.