

**BUKTI KORESPONDENSI**  
**ARTIKEL JURNAL INTERNASIONAL BEREPUTASI**

Judul Artikel : The Extended Digital Maturity Model  
Nama Jurnal : Big Data and Cognitive Computing  
Rank Jurnal : Q2 (Scopus)  
Penulis : Tining Haryanti, Nur Aini Rakhmawati, Apol Pribadi Subriadi

No	Korespondensi	Tanggal
1	Bukti konfirmasi submit artikel	11 Mei 2022
2	Review Round 1	29 November 2023
3	Review Round 2	30 November 2023
4	Round 3	7 Januari 2023
5	Manuscript Accepted	10 Januari 2023
6	Publikasi	17 Januari 2023

# Bukti Submit 16 November 2022

← → ↻ susy.mdpi.com/user/manuscripts/status/published ☆ 📄 📁 📄 T Error

Journals Topics Information Author Services Initiatives About tining.haryanti@gmail.com My Profile Logout Submit

Account

Dashboard

Manage Accounts

Change Password

Profile

Logout

Submissions

Submit

Submitted Manuscripts

Co-Authored Manuscripts

Author Services

Discount Vouchers

Invoices

LaTeX Word Count

Reviewer

Reviews

Volunteer Preferences

Manuscript Status

Incomplete submissions (1) | Under processing (0) | **Website Online (1)** | Rejected / Withdrawn / Archived (1)

Manuscript ID	Journal	Section / Special Issue	Title	Status	Submission Date	
BDCC-2068716	BDCC	SI: Human Factor in Information Systems Development and Management	The Extended Digital Maturity Model	Website online	2022-11-16 03:29:57	Deposit

# Review Round 1 29 November 2022

Account

Dashboard

Manage Accounts

Change Password

Profile

Logout

Submissions

Submit

Submitted Manuscripts

Co-Authored Manuscripts

Author Services

Discount Vouchers

Invoices

LaTeX Word Count

Reviewer

Reviews

Volunteer Preferences

Journal

BDCC (ISSN 2504-2289)

Manuscript ID

BDCC-2068716

Type

Article

Title

The Extended Digital Maturity Model

Authors

Tining Haryani \* , Nur Aini Rakhmawati , Apol Pribadi Subriadi

Special Issue

Human Factor in Information Systems Development and Management

Abstract

The Digital Transformation (DX) potentially affects productivity and efficiency while offering high risks to organizations. Necessary frameworks and tools to help organizations navigate such radical changes are needed. An extended framework of DMM is presented through a comparative analysis of various digital maturity models and qualitative approaches through expert feedback. The maturity level determination uses the Enprise test of the International standard ISO / IEC Assessment known as SPICE. This research reveals seven interrelated dimensions to support the success of DX as a form of development of existing Maturity Model. DX – Self Assessment Maturity Model (DX-SAMM) is built to guide organizations by providing a broad roadmap for improving digital maturity. This article presents a digital maturity model from a holistic point of view and meets the criteria for assessment maturity. The case study results show that DX-SAMM can identify DX maturity levels while providing roadmap recommendations for increasing maturity levels in every aspect of its dimensions. It offers practical implications for improving maturity levels and the ease of real-time monitoring and evaluating digital maturity. With the development of maturity measurement, DX-SAMM contributes to the sustainability of the organization through the organization's DX achievement escort.

The cover letter for this review report has been saved in the database. You can safely close this window.

Authors' Responses to Reviewer's Comments (Reviewer 1)

Author's Notes

Please see the attachment

Author's Notes File

Report Notes

Review Report Form

Quality of English Language

The English is very difficult to understand/incomprehensible.

Extensive editing of English language and style required.

Moderate English changes required.

English language and style are fine/minor spell check required.

I am not qualified to assess the quality of English in this paper.

Yes

Can be improved

Must be improved

Not applicable

Does the introduction provide sufficient background and include all relevant references?

(x)

Is the research design appropriate?

(x)

Are the methods adequately described?

(x)

Are the results clearly presented?

(x)

Are the conclusions supported by the results?

(x)

Comments and Suggestions for Authors

The content of your article is interesting and valuable. The article needs mostly formal changes and improvements. The approach to the research and its results are described quite well.

Add a brief description of both cases used in the research within the case study approach (add information on the organizations and the industries).

Minor formal deficiencies – redundant spaces in the whole text.

I do not think that the word "escort" works well in the sentence (line 21). Change it, rephrase the sentence.

Table 2 needs to be adjusted so that it is readable.

Increase font size in Figure 3 and 4, 5, 6.

Formulas 1, 2, 3 need proper explanations of the elements used in them – without the same letters assigned to different variables or elements (e.g., "A" is both average and attributes).

Make all the graphics elements (tables, figures) unified – use the same colour pallet and the same style to make your outputs look more professional.

Submission Date

16 November 2022

Date of this review

29 Nov 2022 18:51:15

© 1996-2025 MDPI (Basel, Switzerland) unless otherwise stated

Disclaimer

Terms and Conditions

Privacy Policy

Journal

BDCC (ISSN 2504-2289)

Manuscript ID

BDCC-2068716

Type

Article

Title

The Extended Digital Maturity Model

Authors

Tining Haryanti \*, Nur Aini Rakhmawati, Apol Pribadi Subriadi

Special Issue

Human Factor in Information Systems Development and Management

Abstract

The Digital Transformation (DX) potentially affects productivity and efficiency while offering high risks to organizations. Necessary frameworks and tools to help organizations navigate such radical changes are needed. An extended framework of DMM is presented through a comparative analysis of various digital maturity models and qualitative approaches through expert feedback. The maturity level determination uses the Emprise test of the international standard ISO / IEC Assessment known as SPICE. This research reveals seven interrelated dimensions to support the success of DX as a form of development of existing Maturity Model. DX – Self Assessment Maturity Model (DX-SAMM) is built to guide organizations by providing a broad roadmap for improving digital maturity. This article presents a digital maturity model from a holistic point of view and meets the criteria for assessment maturity. The case study results show that DX-SAMM can identify DX maturity levels while providing roadmap recommendations for increasing maturity levels in every aspect of its dimensions. It offers practical implications for improving maturity levels and the ease of real-time monitoring and evaluating digital maturity. With the development of maturity measurement, DX-SAMM contributes to the sustainability of the organization through the organization's DX achievement escort.

The cover letter for this review report has been saved in the database. You can safely close this window.

Authors' Responses to Reviewer's Comments (Reviewer 2)

Author's Notes

Please see the attachment

Author's Notes File

[Report Notes](#)

Review Report Form

Quality of English Language

☐ The English is very difficult to understand/incomprehensible.

☐ Extensive editing of English language and style required.

☐ Moderate English changes required.

☒ English language and style are fine/minor spell check required.

☐ I am not qualified to assess the quality of English in this paper.

Does the introduction provide sufficient background and include all relevant references?

Yes

Can be improved

Must be improved

Not applicable

☐

☐

☒

☐

Is the research design appropriate?

☐

☐

☒

☐

Quality of English Language

☐ Extensive editing of English language and style required.

☐ Moderate English changes required.

☒ English language and style are fine/minor spell check required.

☐ I am not qualified to assess the quality of English in this paper.

Does the introduction provide sufficient background and include all relevant references?

Yes

Can be improved

Must be improved

Not applicable

☐

☐

☒

☐

Is the research design appropriate?

☐

☐

☒

☐

Are the methods adequately described?

☐

☐

☒

☐

Are the results clearly presented?

☐

☒

☐

☐

Are the conclusions supported by the results?

☐

☐

☒

☐

Comments and Suggestions for Authors

Thank you for the opportunity to read the presented paper. I would share some insights for authors' consideration for improvements. Please see the comments below.

Research gap better to be in the Introduction clearly revealed in the Introduction section.

Risks mentioned in the abstract are not explored neither in the literature review nor in the dimensions nor in the research. Different risk dimensions such as technical, nontechnological, social and financial, and the impact of those risks into the development of the maturity during the digital transformation are explored in recent researches.

In line 96-97 the authors refer that the term *maturity* talks about the *perfect condition*. Though most publications present maturity as a process with the levels rather than a status.

In the section on *Research method* the research methods are not explained. There are comparative analysis and qualitative research as the approach mentioned but then concrete research methods should be identified and the usage of them explained based on the scientific literature.

The authors might consider to structure the paper separating methodology, findings and results.

Conclusions could focus more on what can the authors conclude out of results rather than make a summary even if it is interesting. Implications to scientific, political and practical field should be expanded to demonstrate the contribution to the above mentined areas. Limitations and future research might be expanded to demonstrate the possible enrichment to the future science.

Submission Date

16 November 2022

Date of this review

22 Dec 2022 18:14:50

# Reviewer Round 2 30 Desember 2022

[Home](#)
[Journals](#)
[Topics](#)
[Initiatives](#)
[About](#)

[tining.haryanti@gmail.com](#)
[My Profile](#)
[Logout](#)
[Submit](#)

---

Account

- [Dashboard](#)
- [Manage Accounts](#)
- [Change Password](#)
- [Profile](#)
- [Logout](#)

Submissions

- [Submit](#)
- [Submitted Manuscripts](#)
- [Co-Authoring Manuscripts](#)
- [Author Services](#)
- [Discount Vouchers](#)
- [Invoices](#)
- [LaTex Word Count](#)

Reviewer

- [Reviews](#)
- [Volunteer Preferences](#)

Journal

BDOCC (ISSN 2504-2289)

Manuscript ID

BDOCC-2068716

Type

Article

Title

The Extended Digital Maturity Model

Authors

Tining Haryanti \* , Nur Aini Rakhmawati , Apol Priyadi Subriadi

Special Issue

Human Factor in Information Systems Development and Management

Abstract

The Digital Transformation (DX) potentially affects productivity and efficiency while offering high risks to organizations. Necessary frameworks and tools to help organizations navigate such radical changes are needed. An extended framework of DMM is presented through a comparative analysis of various digital maturity models and qualitative approaches through expert feedback. The maturity level determination uses the Emprise test of the international standard ISO / IEC Assessment known as SPIICE. This research reveals seven interrelated dimensions to support the success of DX as a form of development of existing Maturing Digital DX – Self Assessment Maturity Model (DX-SAMM) is built to guide organizations by providing a broad roadmap for improving digital maturity. This article presents a digital maturity model from a holistic point of view and meets the criteria for assessment maturity. The case study results show that DX-SAMM can identify DX maturity levels while providing roadmap recommendations for increasing maturity levels in every aspect of its dimensions. It offers practical implications for improving maturity levels and the ease of real-time monitoring and evaluating digital maturity. With the development of maturity measurement, DX-SAMM contributes to the sustainability of the organization through the organization's DX achievement escort.

The cover letter for this review report has been saved in the database. You can safely close this window.

Authors' Responses to Reviewer's Comments (Reviewer 2)

Author's Notes

Please see the attachment.

Author's Notes File

Report Notes

Review Report Form

Quality of English Language

☐ The English is very difficult to understand/incomprehensible.  
☒ Extensive editing of English language and style required.  
☒ Moderate English changes required.  
☐ English language and style are fine/minor spell check required.  
☐ I am not qualified to assess the quality of English in this paper.

	Yes	Can be improved	Must be improved	Not applicable
Does the introduction provide sufficient background and include all relevant references?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is the research design appropriate?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Are the methods adequately described?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Are the results clearly presented?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Are the conclusions supported by the results?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Comments and Suggestions for Authors

Thanks to the authors for their efforts. After reading the updated version it looks like there has been some time missing to consider necessary improvements. The authors declare some of the comments were not relevant, nevertheless the comments were included after carefully reading the paper. I try to be more specific this time. The paper requires to be read, edited, and restructured carefully.

The part on risks is still not analysed, only one sentence stays from the first version of the publication. As said in the comments earlier many recent researches show an important role of risk management in the digital transformation processes and shouldn't be ignored. If the authors' decision is to skip this comment, then it is a significant limitation and an area for future research.

Adding more analysis of the maturity levels, sectors like manufacturing (e.g. automotive which is a perfect example of mass production). Though the empirical research is conducted in the education sector which might be referred to as the public service. And the second case used an example of a ride-hailing startup which is supposed to be a digital-born business model. The justification of the validity of the research model for so different sectors with so different digital transformation levels.

The text is duplicated in several places, e.g. lines 235-239 and 175-178.

Sections methods, findings, and results exist in the first version of the publication but the contents in those sections are mixed up. It is not clear (neither in the title of sections nor in the contents) the difference between findings and results. Some of the methods are described in the findings, some results are in the findings, and the methods are mentioned but not explained in either section.

Account

Dashboard

Manage Accounts

Change Password

Profile

Logout

Submissions

Submit

Submitted Manuscripts

Co-Authored Manuscripts

Author Services

Discount Vouchers

Invoices

LaTeX Word Count

Reviewer

Reviews

Volunteer Preferences

	Yes	Can be improved	Must be improved	Not applicable
Does the introduction provide sufficient background and include all relevant references?	( )	(x)	( )	( )
Is the research design appropriate?	( )	( )	(x)	( )
Are the methods adequately described?	( )	( )	(x)	( )
Are the results clearly presented?	( )	( )	(x)	( )
Are the conclusions supported by the results?	( )	( )	(x)	( )

Comments and Suggestions for Authors

Thanks to the authors for their efforts. After reading the updated version it looks like there has been some time missing to consider necessary improvements. The authors declare some of the comments were not relevant, nevertheless the comments were included after carefully reading the paper. I try to be more specific this time. The paper requires to be read, edited, and restructured carefully.

The part on risks is still not analysed, only one sentence stays from the first version of the publication. As said in the comments earlier many recent researches show an important role of risk management in the digital transformation processes and shouldn't be ignored. If the authors' decision is to skip this comment, then it is a significant limitation and an area for future research.

Adding more analysis of the maturity levels, sectors like manufacturing (e.g. automotive which is a perfect example of mass production). Though the empirical research is conducted in the education sector which might be referred to as the public service. And the second case used an example of a ride-hailing startup which is supposed to be a digital-born business model. The justification of the validity of the research model for so different sectors with so different digital transformation levels.

The text is duplicated in several places, e.g. lines 235-239 and 175-178.

Sections methods, findings, and results exist in the first version of the publication but the contents in those sections are mixed up. It is not clear (neither in the title of sections nor in the contents) the difference between findings and results. Some of the methods are described in the findings, some results are in the findings, and the methods are mentioned but not explained in either section.

As in the previous comments each method has its own requirements and its own protocol. Now we can find comparative analysis (line 255), conducting assessments with a rating scale (line 220), expert opinions (line 251), qualitative research method (line 228), and case studies (lines 249-251). The literature search is described in lines 174-177 but no scientific literature analysis method is described. It is not clear what are the reasons to include literature from Scopus and Google Scholar but not including from Wef of Science, especially when referring to the „reputable“ (line 238) journals. The inclusion and exclusion criteria of the publications should be presented when following any research method of scientific literature analysis. There are many qualitative methods (line 228) and it is not mentioned which method is used and how the research protocol for the specific research method is followed. All the methods, including expert assessment, should follow research ethics which is missing in the paper.

The Likert scale in line 433 is mentioned and also the questionnaire in lines 424-451 is mentioned. Minor mistyping: there is a mistake in the word Likert, please check it. More important comment: the questionnaire as a research instrument is not either mentioned or justified in the section methods.

Section Discussion usually includes the debate between own research results and the findings of other closely related researchers.

Limitations and future research are important parts of the research. Scholars will be relying on the research results. After carefully reading the presented paper I notice a number of limitations – if not considered the quality of the research of other scholars might decrease. The opportunities for future research would guide other scholars on the path which would increase their contribution to the scientific field. The quality of their research is based on a decent understanding of where limitations lie and where the opportunities for future research can be determined. This part of the publication requires to be expanded.

I do hope the comments will be found useful by the authors.

Submission Date

16 November 2022

Date of this review

30 Dec 2022 16:34:17

© 1990-2025 MDPI (Basel, Switzerland) unless otherwise stated

Disclaimer

Terms and Conditions

Privacy Policy

# Reviewer Round 3 7 Januari 2023

Journal

BDOCC (ISSN 2504-2289)

Manuscript ID

BDOCC-2068716

Type

Article

Title

The Extended Digital Maturity Model

Authors

Tining Haryanti \*, Nur Aini Rakhmawati, Apol Pribadi Subriadi

Special Issue

Human Factor in Information Systems Development and Management

Abstract

The Digital Transformation (DX) potentially affects productivity and efficiency while offering high risks to organizations. Necessary frameworks and tools to help organizations navigate such radical changes are needed. An extended framework of DMM is presented through a comparative analysis of various digital maturity models and qualitative approaches through expert feedback. The maturity level determination uses the Emprise test of the international standard ISO / IEC Assessment known as SPICE. This research reveals seven interrelated dimensions to support the success of DX as a form of development of existing Maturity Model. DX – Self Assessment Maturity Model (DX-SAMM) is built to guide organizations by providing a broad roadmap for improving digital maturity. This article presents a digital maturity model from a holistic point of view and meets the criteria for assessment maturity. The case study results show that DX-SAMM can identify DX maturity levels while providing roadmap recommendations for increasing maturity levels in every aspect of its dimensions. It offers practical implications for improving maturity levels and the ease of real-time monitoring and evaluating digital maturity. With the development of maturity measurement, DX-SAMM contributes to the sustainability of the organization through the organization's DX achievement escort.

The cover letter for this review report has been saved in the database. You can safely close this window.

Authors' Responses to Reviewer's Comments (Reviewer 2)

Author's Notes

Please see the attachment.

Author's Notes File

Report Notes

Review Report Form

Quality of English Language

The English is very difficult to understand/incomprehensible.

Extensive editing of English language and style required.

Moderate English changes required.

☒

English language and style are fine/minor spell check required.

I am not qualified to assess the quality of English in this paper.

Yes

Can be improved

Must be improved

Not applicable

Does the introduction provide sufficient background and include all relevant references?

☒

Is the research design appropriate?

☒

Are the methods adequately described?

☒

Are the results clearly presented?

☒

Are the conclusions supported by the results?

☒

Comments and Suggestions for Authors

The publication has been improved.

Submission Date

16 November 2022

Date of this review

07 Jan 2023 08:33:30

© 1996-2025 MDPI (Basel, Switzerland) unless otherwise stated

Disclaimer

Terms and Conditions

Privacy Policy

Accepted 10 Januari 2023

Account

Dashboard

Manage Accounts

Change Password

Profile

Logout

Submissions

Submit

Submitted Manuscripts

Co-Authoring Manuscripts

Author Services

Discount Vouchers

Invoices

LaTeX Word Count

Reviewer

Reviews

Volunteer Preferences

Journals

Topics

Information

Author Services

Initiatives

About

tining.haryanti@gmail.com

My Profile

Logout

Submit

Article Information Overview

Manuscript ID

BDDC-2068716

Status

Website online

DOI

10.3390/bddc7010017

Publication Certificate

Download Publication Certificate (PDF) ▾

Banner

Download Banner (PDF)

Website Links

[Abstract](#) [HTML version](#) [PDF version](#) [Manuscript](#)

Article type

Article

Title

The Extended Digital Maturity Model

Journal

Big Data and Cognitive Computing

Volume

7

Issue

1

Special Issue


Human Factor in Information Systems Development and Management

Abstract

The Digital Transformation (DX) potentially affects productivity and efficiency while offering high risks to organizations. Necessary frameworks and tools to help organizations navigate such radical changes are needed. An extended framework of DMM is presented through a comparative analysis of various digital maturity models and qualitative approaches through expert feedback. The maturity level determination uses the Emprise test of the international standard ISO/IEC Assessment known as SPICE. This research reveals seven interrelated dimensions for supporting the success of DX as a form of development of an existing Maturity Model. The DX-Self Assessment Maturity Model (DX-SAMM) is built to guide organizations by providing a broad roadmap for improving digital maturity. This article presents a digital maturity model from a holistic point of view and meets the criteria for assessment maturity. The case study results show that DX-SAMM can identify DX maturity levels while providing roadmap recommendations for increasing maturity levels in every aspect of its dimensions. It offers practical implications for improving maturity levels and the ease of real-time monitoring and evaluating digital maturity. With the development of maturity measurement, DX-SAMM contributes to the sustainability of the organization by proposing DX strategies in the future based on the current maturity achievements.

Keywords

digital maturity; extended framework maturity; organization sustainability; digital dimension; self-assessment

 **data**

Data are of paramount importance to scientific progress, yet most research data are hidden in supplementary files or remain private. Enhancing the transparency of data processes will help to render scientific research results reproducible and thus more accountable. Co-submit your methodical data-processing articles or data descriptors for a linked dataset in *Data* journal to make your data more citable and reliable.

- Deposit your dataset in an online repository, obtain the DOI number or link to the deposited dataset.
- Download and use the [Microsoft Word template](#) or [LaTeX template](#) to prepare your data article.
- Upload and send your data article to the [Data](#) journal [here](#).

Submit To Data

Author Information

Submitting Author

Tining Haryanti

Corresponding Author

Tining Haryanti

Author #1

Tining Haryanti

Affiliation

1. Information System, Faculty of Intelligent Electrical and Informatics Technology (F-Electrics), Institut Teknologi Sepuluh Nopember, Surabaya 60111, Indonesia  
2. Informatics Department, Faculty of Engineering, Universitas Muhammadiyah Surabaya, Surabaya 60113, Indonesia

E-Mail

tining.haryanti@gmail.com (corresponding author email)

Author #2

Nur Aini Rakhmawati

Affiliation

1. Information System, Faculty of Intelligent Electrical and Informatics Technology (F-Electrics), Institut Teknologi Sepuluh Nopember, Surabaya 60111, Indonesia

E-Mail

nur.aini@is.its.ac.id (co-author email has not been published)

Author #3

Apol Pribadi Subriadi

Affiliation

1. Information System, Faculty of Intelligent Electrical and Informatics Technology (F-Electrics), Institut Teknologi Sepuluh Nopember, Surabaya 60111, Indonesia

E-Mail

apolpribadi@gmail.com (co-author email has not been published)



Account

Dashboard

Manage Accounts

Change Password

Profile

Logout

Submissions

Submit

Submitted Manuscripts

Co-Authored Manuscripts

Author Services

Discount Vouchers

Invoices

LaTeX Word Count

Reviewer

Reviews

Volunteer Preferences

Manuscript Information

Received Date

16 November 2022

Revised Date

10 January 2023

Accepted Date

10 January 2023

Published Date

17 January 2023

Submission to First Decision (Days)

54

Submission to Publication (Days)

61

Round of Revision

3

Size of PDF

2389 KiB

Word Count

8927

Page Count

28

Figure Count

10

Table Count

6

Reference Count

84

Citations

30

Editor Decision

Decision

Accept in current form

Decision Date

10 January 2023

Review Report

Reviewer 1

Review Report (Round 1)

Reviewer 2

Review Report (Round 1)

Review Report (Round 2)

Review Report (Round 3)

APC information

Journal APC:

1,400.00 CHF

Total Payment Amount:

1,400.00 CHF

Funding

Funding information

Sepuluh Nopember Institute of Technology: 996/PKS/ITS/2022

Related Papers Published in MDPI Journals

Aras, A.; Büyükkökan, G. Digital Transformation Journey Guidance: A Holistic Digital Maturity Model Based on a Systematic Literature Review. *Systems* **2023**, *11*, 213. doi: 10.3390/systems11040213

Lee, K.; Song, Y.; Park, M.; Yoon, B. Development of Digital Transformation Maturity Assessment Model for Collaborative Factory Involving Multiple Companies. *Sustainability* **2024**, *16*, 8087. doi: 10.3390/su16188087

Mick, M.M.A.P.; Kowaleski, J.L.; Mick, R.L.; Chirolì, D.M.G. Developing a Sustainable Digital Transformation Roadmap for SMEs: Integrating Digital Maturity and Strategic Alignment. *Sustainability* **2024**, *16*, 8745. doi: 10.3390/su16208745

Tubis, A.A. Digital Maturity Assessment Model for the Organizational and Process Dimensions. *Sustainability* **2023**, *15*, 15122. doi: 10.3390/su152015122

Kadoić, N.; Monlau Jaques, T.; Lacueva Rueda, J. Measuring the Digital Maturity of Organisations in the People Care Sector. *Sustainability* **2024**, *16*, 9053. doi: 10.3390/su16209053

Publish 17 Januari 2023