

**BUKTI KORESPONDENSI ARTIKEL PADA JURNAL
INTERNASIONAL BEREPUTASI**



PENGUSUL

Dr. Lyna Latifah, S.Pd, S.E, M.Si/ NIDN. 0023097909

**UNIVERSITAS NEGERI SEMARANG
TAHUN 2022**

Yth. Penilai Pada Usulan PAK

Bersama dengan surat ini, saya bermaksud menyertakan bukti bukti korespondensi proses artikel pada Jurnal Internasional dengan judul "Business strategy – MSMEs' performance relationship: innovation and accounting information system as mediators", *Journal of Small Business and Enterprise Development*, Vol. 28 No. 1, pp. 1-21, Publikasi isu Tahun 2021, ISSN (e): 1462-6004, Adapun susunan kronologi bukti korespondensi terdiri dari beberapa poin, pada tabel di bawah ini:

No	Tanggal	Aktivitas
1.	24 April 2020	Mendapatkan review round 1
2.	09 Mei 2020	Pemberitahuan hasil revisi yang dikirimkan lewat OJS diterima jurnal
3.	24 Juni 2020	Pemberitahuan artikel accepted
4.	9 oktober 2020	Permintaan format paper yang sesuai

Demikian, agar dapat menjadi periksa.

Terimakasih

Semarang, 27 September 2022

Hormat saya,



Lyna Latifah



lyna latifah <lyna.unnes@gmail.com>

Journal of Small Business and Enterprise Development - Decision on Manuscript ID JSBED-04-2019-0116.R1

4 messages

Journal of Small Business and Enterprise Development

Fri, Apr 24, 2020 at 12:47 PM

<onbehalfof@manuscriptcentral.com>

Reply-To: vanevenj@uww.edu

To: lyna.unnes@gmail.com

24-Apr-2020

Dear Mrs. Latifah:

Manuscript ID JSBED-04-2019-0116.R1 entitled "BUSINESS STRATEGY - MSMEs PERFORMANCE RELATIONSHIP: INNOVATION AND ACCOUNTING INFORMATION SYSTEM AS MEDIATORS" which you submitted to the Journal of Small Business and Enterprise Development, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter.

The reviewer(s) have recommended revisions to the submitted manuscript, before it can be considered for publication. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript. Please pay particular attention to the reviewers comments. there are still a few from the original feedback that remain. eg. Pg.15 line 26, "This means that the strategy variable does not influence directly to performance" statistik, produk, indeks, indikator. and faktor. There are inconsistencies in the citations within the text. in some cases, the writers' names were mentioned in full whiles the word 'et al.' was also used in other instances. in other instances, the abbreviated names were also included in the citation eg pg. 8 (M. E. Porter, 1985) this is consistent throughout the entire text and must be addressed prior to publication.

To revise your manuscript, log into <https://mc.manuscriptcentral.com/jsbed> and enter your Author Centre, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.

You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. Please also highlight the changes to your manuscript within the document by using the track changes mode in MS Word or by using bold or coloured text.

Once the revised manuscript is prepared, you can upload it and submit it through your Author Centre. The deadline for uploading a revised manuscript is 16-May-2020 from receiving this email. If it is not possible for you to resubmit your revision within this timeframe, we may have to consider your paper as a new submission.

When submitting your revised manuscript, you will be able to respond to the comments made by the reviewer(s) in the space provided. You can use this space to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the reviewer(s).

IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Please note that Emerald requires you to clear permission to re-use any material not created by you. If there are permissions outstanding, please send these to Emerald as soon as possible. Emerald is unable to publish your paper with permissions outstanding.

Once again, thank you for submitting your manuscript to the Journal of Small Business and Enterprise Development and I look forward to receiving your revision.

Yours sincerely,
Dr. Jeff Vanevenhoven
Editor, Journal of Small Business and Enterprise Development
vanevenj@uww.edu, vanevenj@uww.edu

Referee(s)' Comments to Author:
Referee: 1

Recommendation: Minor Revision

Comments:
Dear Sir or Madam,

Please take my comments for your consideration to further improve your article. I consider it pivotal to address some areas for further improvement. However, the research is definitely worthwhile to publish and it is relevant to both practitioners and scholars alike. And last but not least, I truly enjoyed reading your paper and see the progress you made!

All the best with finishing-up your article!

Additional Questions:

Do you want credit for reviewing this manuscript in Publons? [[what's this?](https://publons.com/in/Emerald/)]

By selecting "Yes" you are opting in to the Publons service and data about this review (including your name and the review itself) will be transferred to Publons. You may opt-out of this service at any time.: Yes

1. Originality: Does the paper contain new and significant information adequate to justify publication?: The paper provides insightful answers to the relation between performance, innovation and accounting. This is a relevant, yet somewhat neglected topic in small business research. Positive to see this article addressing the subject.

However, the abstract already makes a reader struggle on the relationships:

"Based on the results of the study, that the relationship between strategy and performance is mediated by innovation and performance,"

Please ensure that performance is not considered being both a dependent and a mediating variable. Should this not be innovation and accounting? This sentence already makes me doubt in how far it is already worthwhile to proceed reading the article. But anyway, I am a friend of this subject-area and I am delighted of assisting in improving your papers.

Furthermore, I am not familiar with the Indonesian currency. Do you mind, putting the corresponding US Dollar in the introduction?

Regarding the introduction, I believe the paper might benefit from shortening the introduction (currently three pages) towards a more condensed form of presenting your argument. Some elements of the intro might better be placed in the Literature review section.

2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: The literature section clearly improved and provides a good overview of relevant papers. Given the fact that all elements of the relationship are well developed, it is reasonable to proceed towards a causal model in the methodology. This link might of course be made more explicit but it is already addressed which is good to see.

3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: The methodology is appropriate and reasonably grounded in existing theory. Somewhat more attention might be paid towards the underlying assumptions in the existing theory. In particular, when reasoning that most existing theory is based on mid-market/ corporate companies and lack a connection with MSME's. You carefully need to prevent any question looming if the current theory is sufficient in understanding the phenomenon of MSME's in a developing country when clearly the existing literature did not cope with both factors in any depth. One might play the advocates devil and suggest to first invoke on theory-developing (and a qualitative design) before formulating and testing causal relationships in a quantitative manner.

4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: The results are clearly presented and compelling.

5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?: The conclusion clearly addresses the relevance to practitioners. However, somewhat more attention to the theory would not be mistaken. The results point towards a certain

direction. Can we link those back to the theoretical discussion?

Furthermore, the constraints and suggestions for further research are a little weak. Please ensure that your research outlines areas of further research that goes further than indicating the limitations regarding the sample size.

6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.: The paper improved compared with its previous version. I would not yet consider it being finished but progress is apparent and I am fully convinced that the link between theory and method can still be slightly improved in terms of language, reasoning and structure. It was a pleasure, seeing the process of this paper!

Referee: 2

Recommendation: Minor Revision

Comments:

1. There are lots of inconsistencies in the citations within the text. In some cases, the writers' names were mentioned in full while the word 'et al.' was also used in other instances. eg. (Dabić, Lažnjak, Smallbone, & Švarc, 2018); (Davila et al., 2009). In other instances, the abbreviated names were also included in the citation eg pg. 8 (M. E. Porter, 1985) this is consistent throughout the entire text.
2. The following acronyms were not defined in the text, MCS, SMEs, and R&D
3. The following words were wrongly spelled in the text, statistik, produk, indeks, indikator. and faktor. these can be located in the methodology, the figures, and the tables section of the text.
4. In parts of the text and the entire tables, commas were employed to indicate decimal figures instead of full stop. eg. Pg 13 line 9, $((102 \times 1) / 5) = 20,4$ instead of 20.4
5. there are several grammatical errors in the text. eg. i) Pg.15 line 26, "This means that the strategy variable does not influence directly to performance".
ii) pg. 18 line 48 "accounting information systems have a positive influence on influences"
iii) pg 8 lines 50-51 "Innovation is defined the adoption of ideas or behaviors relate to the new practices implemented by an organization.
these are to mention but just a few.
6. possessive nouns in the text were ignored eg. Pg 4 line 38 "This study will contribute to MSMEs researches": Pg 16 lines 35-36 "trend analysis of company capability that will influence the company performance," these errors are consistent in the entire text. I will, therefore, advise that you seek the help of an English speaker the help with the errors

Additional Questions:

Do you want credit for reviewing this manuscript in Publons? [[what's this?](https://publons.com/in/Emerald/)]

By selecting "Yes" you are opting in to the Publons service and data about this review (including your name and the review itself) will be transferred to Publons. You may opt-out of this service at any time.: No

1. Originality: Does the paper contain new and significant information adequate to justify publication?: Yes
2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: Appropriate literature has been cited
3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: Yes
4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: Yes
5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?: Yes
6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and

readability, such as sentence structure, jargon use, acronyms, etc.: There are few grammatical errors and communication errors in the text, which requires additional corrections to be made. with those effectively corrected, the paper will be interesting based on the topics discussed. I will recommend a thorough reading to correct such mistakes to make the paper suitable for publication.

Some acronyms were also not defined in the text, eg. MCS, SMEs, and R&D.

 * **How-to-submit-a-revision.pdf**
669K

lyna latifah <lyna.unnes@gmail.com>
To: Doddy Setiawan <doddy.setiawan@gmail.com>

Fri, Apr 24, 2020 at 2:35 PM

[Quoted text hidden]

 * **How-to-submit-a-revision.pdf**
669K

lyna latifah <lyna.unnes@gmail.com>
To: Doddy Setiawan <doddy.setiawan@gmail.com>

Fri, Apr 24, 2020 at 2:39 PM

----- Forwarded message -----

From: **Journal of Small Business and Enterprise Development** <onbehalfof@manuscriptcentral.com>

Date: Fri, Apr 24, 2020 at 12:47 PM

Subject: Journal of Small Business and Enterprise Development - Decision on Manuscript ID JSBED-04-2019-0116.R1

To: <lyna.unnes@gmail.com>

[Quoted text hidden]

 * **How-to-submit-a-revision.pdf**
669K

lyna latifah <lyna.unnes@gmail.com>
To: wijangsakitri@mail.unnes.ac.id

Sat, Apr 25, 2020 at 9:44 AM

----- Forwarded message -----

From: **Journal of Small Business and Enterprise Development** <onbehalfof@manuscriptcentral.com>

Date: Fri, Apr 24, 2020 at 12:47 PM

Subject: Journal of Small Business and Enterprise Development - Decision on Manuscript ID JSBED-04-2019-0116.R1

To: <lyna.unnes@gmail.com>

[Quoted text hidden]

 * **How-to-submit-a-revision.pdf**
669K



lyna latifah <lyna.unnes@gmail.com>

Journal of Small Business and Enterprise Development - JSBED-04-2019-0116.R2

1 message

Journal of Small Business and Enterprise Development

Sat, May 9, 2020 at 8:09 AM

<onbehalf@manuscriptcentral.com>

Reply-To: vanevenj@uww.edu

To: lyna.unnes@gmail.com

09-May-2020

Dear Mrs. Latifah,

Your revised manuscript entitled "BUSINESS STRATEGY - MSMEs PERFORMANCE RELATIONSHIP: INNOVATION AND ACCOUNTING INFORMATION SYSTEM AS MEDIATORS" has been successfully submitted online and is presently being given full consideration for publication in the Journal of Small Business and Enterprise Development.

Your manuscript ID is JSBED-04-2019-0116.R2.

Please mention the above manuscript ID in all future correspondence or when calling the office for questions. If there are any changes in your street address or e-mail address, please log in to ScholarOne Manuscripts at <https://mc.manuscriptcentral.com/jsbed> and edit your user information as appropriate.

You can also view the status of your manuscript at any time by checking your Author Centre after logging in to <https://mc.manuscriptcentral.com/jsbed>

Please note that Emerald requires you to clear permission to re-use any material not created by you. If there are permissions outstanding, please upload these when you submit your revision or send directly to Emerald if your paper is accepted immediately. Emerald is unable to publish your paper with permissions outstanding.

Open Access?

All of our subscription journals give you the option of publishing your article open access, following payment of an article processing charge (APC). To find the APC for your journal, please refer to the APC price list: http://www.emeraldgrouppublishing.com/openaccess/apc_price_list.pdf

Emerald has established partnerships with national consortium bodies to offer a number of APC vouchers for eligible regions and institutions. To check your eligibility please refer to the open access partnerships page: <http://www.emeraldgrouppublishing.com/openaccess/oapartnerships.htm>

If you would like to publish your article open access please contact openaccess@emeraldgroup.com

Thank you for submitting your manuscript to the Journal of Small Business and Enterprise Development.

Yours sincerely,
Jeff Vanevenhoven
Journal of Small Business and Enterprise Development Assistant Editor
vanevenj@uww.edu



lyna latifah <lyna.unnes@gmail.com>

JSBED-04-2019-0116.R2 | 650159 - Manuscript needed in proper format

4 messages

Barathalomeo, Shibu (TNQ) <shibu.emerald@tnq.co.in>
To: lyna.unnes@gmail.com

Fri, Oct 9, 2020 at 9:07 PM

Dear Lyna,

I hope you are well.

I am currently preparing your manuscript '*BUSINESS STRATEGY - MSMEs PERFORMANCE RELATIONSHIP: INNOVATION AND ACCOUNTING INFORMATION SYSTEM AS MEDIATORS*' for production and I have noticed that provided manuscript seems to be in different format. Could you please check and provide manuscript in word or LaTeX format to proceed further.

Unfortunately, we are unable to proceed without this. Please can you send the respective files over via email at your earliest convenience. Your manuscript will be kept on hold in the meantime.

Please let me know if you have any questions on this.

Best wishes,

Shibu

lyna latifah <lyna.unnes@gmail.com>
To: "Barathalomeo, Shibu (TNQ)" <shibu.emerald@tnq.co.in>

Sat, Oct 10, 2020 at 5:16 PM

Dear Mr Barathalomeo

Thank you for your email. I will send it soon. Should I upload manuscript in ScholarOne?

best regard

lyna
[Quoted text hidden]

Barathalomeo, Shibu (TNQ) <shibu.emerald@tnq.co.in>
To: lyna latifah <lyna.unnes@gmail.com>

Mon, Oct 12, 2020 at 5:11 PM

Dear Dr Latifah,

Thanks for the email,

It would be helpful if you share the manuscript in an editable format through email and not through the Scholar one.

Best regards,

Shibu

[Quoted text hidden]

lyna latifah <lyna.unnes@gmail.com>
To: "Barathalomeo, Shibu (TNQ)" <shibu.emerald@tnq.co.in>

Tue, Oct 13, 2020 at 1:46 PM

Dear Mr Barathalomeo, Shibu

Thank you for your email.

Referring to our paper: JSBED-04-2019-0116.R2 - BUSINESS STRATEGY - MSMEs PERFORMANCE RELATIONSHIP: INNOVATION AND ACCOUNTING INFORMATION SYSTEM AS MEDIATORS

Please find attached file of our accepted paper in Word doc version and LaTeX version. If you still have any queries regarding that paper, please do not hesitate to contact us. Thank you.

Best Regards,

Lyna Latifah

[Quoted text hidden]

2 attachments

 **JSBED_lyna.tex**
88K

 **JSBED_lyna.docx**
120K



lyna latifah <lyna.unnes@gmail.com>

Journal of Small Business and Enterprise Development - Decision on Manuscript ID JSBED-04-2019-0116.R2

Journal of Small Business and Enterprise Development

Wed, Jun 24, 2020 at 6:40

<onbehalf@manuscriptcentral.com>

AM

Reply-To: vanevenj@uww.edu

To: lyna.unnes@gmail.com, doddy.setiawan@staff.uns.ac.id, whyanniar@gmail.com, rahmaw2005@yahoo.com

24-Jun-2020

Dear Latifah, Lyna; Setiawan, Doddy; Aryani, Y. Anni; Rahmawati, Rahmawati

It is a pleasure to accept your manuscript JSBED-04-2019-0116.R2, entitled "BUSINESS STRATEGY - MSMEs PERFORMANCE RELATIONSHIP: INNOVATION AND ACCOUNTING INFORMATION SYSTEM AS MEDIATORS" in its current form for publication in Journal of Small Business and Enterprise Development. Please note, no further changes can be made to your manuscript.

Please go to your Author Centre at <https://mc.manuscriptcentral.com/jsbed> (Manuscripts with Decisions for the submitting author or Manuscripts I have co-authored for all listed co-authors) to complete the Copyright Transfer Agreement form (CTA). We cannot publish your paper without this.

All authors are requested to complete the form and to input their full contact details. If any of the contact information is incorrect you can update it by clicking on your name at the top right of the screen. Please note that this must be done prior to you submitting your CTA.

If you have an ORCID please check your account details to ensure that your ORCID is validated.

By publishing in this journal your work will benefit from Emerald EarlyCite. As soon as your CTA is completed your manuscript will pass to Emerald's Content Management department and be processed for EarlyCite publication. EarlyCite is the author proofed, typeset version of record, fully citable by DOI. The EarlyCite article sits outside of a journal issue and is paginated in isolation. The EarlyCite article will be collated into a journal issue according to the journals' publication schedule.

FOR OPEN ACCESS AUTHORS: Please note if you have indicated that you would like to publish your article as Open Access via Emerald's Gold Open Access route, you are required to complete a Creative Commons Attribution Licence - CCBY 4.0 (in place of the standard copyright assignment form referenced above). You will receive a follow up email within the next 30 days with a link to the CCBY licence and information regarding payment of the Article Processing Charge. If you have indicated that you might be eligible for a prepaid APC voucher, you will also be informed at this point if a voucher is available to you (for more information on APC vouchers please see <http://www.emeraldpublishing.com/oapartnerships>

Thank you for your contribution. On behalf of the Editors of Journal of Small Business and Enterprise Development, we look forward to your continued contributions to the Journal.

Yours sincerely,

Dr. Jeff Vanevenhoven

Editor, Journal of Small Business and Enterprise Development

vanevenj@uww.edu, vanevenj@uww.edu

Business strategy – MSMEs’ performance relationship: innovation and accounting information system as mediators

Strategy and
MSME’s
performance
relationship

1

Lyna Latifah

*Faculty of Economics and Business, Universitas Sebelas Maret,
Surakarta, Indonesia and*

Faculty of Economics, Universitas Negeri Semarang, Semarang, Indonesia, and

Doddy Setiawan, Y. Anni Aryani and Rahmawati Rahmawati

*Faculty of Economics and Business, Universitas Sebelas Maret,
Surakarta, Indonesia*

Received 8 April 2019
Revised 16 November 2019
9 May 2020
Accepted 24 June 2020

Abstract

Purpose – This study provides empirical evidences on the relationship between business strategy and micro, small and medium enterprises (MSMEs) performance. Additionally, the study aims to explore the role of innovation and accounting information systems (AISs) in the strategy performance linkage among MSMEs in Indonesia.

Design/methodology/approach – A questionnaire-based survey was conducted, which produced 102 valid responses. Surveys were distributed to MSME owners throughout Solo, Yogyakarta and Semarang, Indonesia. Data were analyzed by using structural equation model with partial least squares.

Findings – The result shows that business strategy has indirect impacts on MSMEs’ performance. Both innovation and AIS positively mediate the relationship between business strategy and MSMEs’ performance.

Research limitations/implications – The performance variable was measured based on the owners’ perception. This makes the results not to be reflective of the real performance situation.

Practical implications – Alignment between strategy and innovation plays a vital role in improving the performance of MSMEs. The differentiation strategy that focuses on product uniqueness and quality requires innovation to add value to the product and the customer. The innovation process is at high risk of failure, so MSMEs owners need accurate calculations in decision making. AISs are part of management control to reduce risk by identifying standards and directing organizational goals.

Originality/value – This study considers the contingency factors in the relationship between strategy and performance by providing innovation variables and AIS.

Keywords Business strategy, Innovation, Accounting information system, MSMEs’ performance

Paper type Research paper

Introduction

Majority of businesses in a developing country are micro, small and medium enterprises (MSMEs), and they play an important role as they can eradicate unemployment and increase gross domestic product (GDP) (OECD/ERIA, 2018). In Indonesia, the percentage of MSMEs reaches 99.99% for all business sectors (Bank Indonesia, 2015). Based on the ministry’s data in 2016 of cooperatives and small and medium enterprises (SMEs), the contribution of MSMEs to national GDP was (521,360,523,965,465 USD) or 62.57% of GDP (industry bisnis.com, 2018). Furthermore, MSMEs contribute to export revenue by as much as 14.06% (521360523.97 USD) of the total of national export (Bank Indonesia, 2015). As the contribution



Journal of Small Business and
Enterprise Development
Vol. 28 No. 1, 2021
pp. 1-21

© Emerald Publishing Limited
1462-6004

DOI 10.1108/JSEB-04-2019-0116

Funding: This study uses the researchers’ personal funds. Special thank you for Dinas Koperasi dan UKM Daerah Istimewa Yogyakarta and Dinas Koperasi dan UKM Surakarta.

of MSMEs is extensive across many sectors, researchers should guide small business owners to have good management practices to improve their work performances (Williams *et al.*, 2018).

The performance of MSMEs has become the main priority in all countries in the world as a result of global perspectives that acknowledge MSMEs as the economic growth engine in both developed and developing countries (Agwu, 2014; Naala *et al.*, 2017). Some studies confirm the report by Swamidass and Newell (1987), who asserted that company performance is influenced by business strategy and that companies with high work performance have clear strategies. Badri *et al.* (2000) also found out that different strategies can result in different company performances. Strategy development also plays a vital role in increasing the company's competitiveness (Singh *et al.*, 2010).

The difficult challenge faced by MSMEs in encountering global economic competition encourages researches on strategic management concepts and frameworks as the instruments for improving organizational performance. This need for MSMEs' contextual strategy development is caused by high levels of variation in sociocultural and environmental volatility (Bellamy *et al.*, 2019). This research on strategy has answered many questions on the importance, uniqueness and impacts of strategy on MSMEs' performance (Leitner and Gldenbergs, 2010).

Organizations may choose a strategy to compete in wide markets or within a specific market segment. The consequence depends on whether an organization chooses to apply a low-cost strategy or a differentiation strategy (Leitner and Gldenbergs, 2010). A strategy of leadership finance emphasizes on providing lower costs compared to competitors, while differentiation strategies focus on product and service creativities. Some companies view the product differentiation strategy as more suitable for them to have greater competitiveness compared to the finance leadership strategy (Aliqah, 2012). A tight competition at the globalized era demands that MSMEs should improve their competitiveness by providing added value to customers. The differentiation strategies give a wider scope for yielding a product with added value (Baines and Langfield-Smith, 2003). Some studies also illustrate that the differentiation strategy can increase leading competitiveness, and then later increase the company performance (Miller and Friesen, 1986; Slater *et al.*, 2006).

Besides the implemented strategy, substantial evidence also shows that an innovative process and an innovative product are the important things to determine a company's performance; in fact, innovative companies can conquer stagnant companies (Hoffman and Novak, 1998; Klomp and Van Leeuwen, 2001; Mansury and Love, 2008; Prajogo and Ahmed, 2006; Roper and Love, 2002). For an organization that develops its capacity to innovate continuously, such as implementing innovation as an important strategy component, it is necessary to provide new products, resources and structure collaboration, and process to solve problems creatively and to correlate innovation and the existing businesses (Bhaskaran, 2006). Innovation is the key to a sustainable business for MSMEs. MSME owners need to take business risks to be innovative for a better competitive advantage (Gorgellis *et al.*, 2000).

Innovation done by MSMEs is quite different from the innovation done by big companies. Unlike a big company, MSMEs have constraints, such as their resource limitations, which can be the barriers to innovation. Moreover, great efforts required for innovation development do not guarantee the success of innovation, as the process risk of innovation is very high (Howell *et al.*, 2005; Wakasugi and Koyata, 1997). Therefore, the process of innovation in MSMEs must be done carefully. Management control systems (MCS) play an important role in dealing with environmental uncertainty in innovating MSMEs (Davila *et al.*, 2009). Accounting information systems (AISs) have become important as part of MCS because of their role in helping with the internal decision-making process and as a measurement tool for managers'

strategies in MSMEs (Blomkvist *et al.*, 2016). The AIS is considered important for building that capacity (King and Burgess, 2006).

Almost all companies compete in a dynamic environmental view that organizational innovation and AIS should be the basic capabilities owned by any company. However, many works of literature have not explored specifically the complex interaction between strategy, innovation, AIS and performance. Thus, a deeper exploration of how innovation, AIS and performance can affect management decisions positively in choosing many alternatives in uncertain and dynamic conditions is required.

This study will contribute to the existing literature on MSMEs. First, it enriches the literature on strategy, innovation, AIS and performances of MSMEs. Second, it is expected to be able to give an illustration of the importance of strategy, innovation and AIS, so that there can be an improvement in MSMEs' performance. Third, the findings of this study can be a consideration for policy-makers in empowering MSMEs through suitable strategies and innovation.

Many previous studies have become the foundation of this study and have been developed deeper. First, this study discusses the strategies used and innovations done by MSMEs that present great differences when compared to big companies. Secondly, this study considers the contingency factors in the relationship between strategy and performance by providing innovation variables and AISs. Third, this study is conducted in a developing country, Indonesia.

Review literature and hypothesis development

Accounting and MCS of innovative companies (MSMEs context)

Accounting information is often deemed less useful in decision-making in entrepreneurship literature due to its focus on the past, unlike innovation which pertains to the future. However, innovation researches on MSMEs recently prove that accounting information is very important for managers of innovative companies. Accounting information currently serves as part of management control, which is the central part of internal decision-making and managers' strategic measures in innovative companies (Blomkvist *et al.*, 2016).

The traditional view assumes that management control is designed to identify standardization and lead to the achievement of organizational objectives; thus, it eliminates innovation whose process is inefficient and at high risk of failure (Karmeni *et al.*, 2018). Management control redirects the company toward its designated objectives effectively. Therefore, such control is assumed to be a constraint on innovation, which is characterized by full of freedom, experiment and flexibility. Contrarily to the traditional view, the new paradigm of control recently highlighted the relevance of accounting and control in innovation and entrepreneurship (Davila *et al.*, 2009). The contemporary view believes that accounting may enhance innovation. Information may reduce uncertainty and facilitate dialogue between participants distributed in such innovation processes. Additionally, accounting information may become an instrument for mediating between internal and external parties in relation to expectations and deliverables (Feeney and Pierce, 2018).

An appropriate MCS design may minimize deviation (for example, unexpected occurrences); thus, it may bring an organization back to its designated objectives (Davila *et al.*, 2009). The findings in the MCS field suggest that innovation can enhance financial performance if accounting information is used in budgeting decisions during planning (Blomkvist *et al.*, 2016). Control plays a role in creating knowledge, and there is a positive relationship between creation of knowledge and innovation (Karmeni *et al.*, 2018). New emerging ideas produced during the planning phase may be anticipated before an organization steps into the next phase. Control takes place during further phases to reduce variation and deviation of the developed rules (Davila *et al.*, 2009).

Hypothesis development

Differentiation strategy–performance relationship

Small and startup companies' business sustainability is quite low, making strategic business development a critical factor in MSMEs' business sustainability (Lechner and Gudmundsson, 2014). One factor which inhibits MSMEs' sustainability, competitiveness and performance is lack of focus on coherent strategic orientation (Acquaah and Agyapong, 2015). Various competitive strategic classifications have been proposed by researchers, but the models developed by Miles and Snow (1986), Miles *et al.* (1978) and Porter (1980) attract more attention. Until now, the typologies of competition strategy developed by Porter (1980) and Miles and Snow (1986) are the most frequently quoted typologies that are tested by both big organizations and MSMEs (Parnell, 2013).

According to Porter (1980), a business may have superior performance to its competitors by developing a cost leadership strategy or differentiation strategy, and he claims that such strategy may be applied to all industries, organizational types and sizes (Parnell, 2013). The differentiation and low-cost strategies play an important role for MSMEs. Unfortunately, MSMEs find it difficult to apply the cost leadership strategy, since production efficiency becomes the main factor in this strategy (Leitner and Güldenber, 2010). The cost leadership strategy needs substantial financial resources, which is a constraint to MSMEs. The differentiation strategy, which is based on speed, customer service and flexibility, becomes the best choice for MSMEs since it focuses more on an innovative approach, which is appropriate to MSMEs' characteristics (Lechner and Gudmundsson, 2014).

Some researchers have proven that cost leadership and differentiation strategies influence MSMEs' performance (Acquaah and Agyapong, 2015; Lechner and Gudmundsson, 2014). The research conducted by Leitner and Güldenber (2010) states that MSMEs that do not apply any strategy have lower growth than MSMEs that apply either the low-cost strategy or the differentiation strategy. Meanwhile, qualitative research conducted by Linton and Kask (2017) concludes that the differentiation strategy may influence MSMEs' performance if used in combination with innovation and a proactive approach. This research's hypotheses are:

H1. There is a positive influence of strategy on performance.

Innovation–performance relationship

MSMEs are reactive, flexible and risky organizations, but they are more innovative than bigger companies (Ruiz-Palomo *et al.*, 2019). Innovation is always correlated with decision-making out of unexpected opportunities, exceptions, new relations and uncertainty of result, and it is at high risk of failure (Davila *et al.*, 2009). Besides serving as a factor to trigger competitive advantage, innovation also encourages enhancement of corporate performance, particularly MSMEs (Exposito and Sanchis-Llopis, 2018). MSMEs may also lead to value creation through innovation. Similarly, innovation in MSMEs offers competitive non-price medium, since innovation-based advantage has greater potential for sustainability than that of price-based advantage (Dabić *et al.*, 2018).

There is recently an increase of interest in research related to innovation in the context of MSMEs, which is motivated by MSMEs' central role in countries' economic development. The research conducted by Exposito and Sanchis-Llopis (2018) with SMEs in Spain concludes that innovation significantly influences SMEs' performance. Researches in different areas provide results different from those obtained by Corral de Zubielqui *et al.* (2019), Gronum *et al.* (2012) and Sok *et al.* (2013).

H2. There is a positive influence of innovation on performance.

Accounting information system–performance relationship

The objective of an AIS is to direct an organization to achieve its designated objectives (Davila *et al.*, 2009). Information and planning systems are useful for the management as instruments for the achievement of corporate objectives (Esparza-Aguilar *et al.*, 2016). AIS design is a method for enhancing organizational performance (Chenhall *et al.*, 2011; Soudani, 2012). An AIS is part of MCS which is highly important for corporate performance, since accounting information is used in the resource planning and resource allocation phases to analyze, measure and evaluate any alternatives in decision-making process (Davila and Foster, 2005; Esparza-Aguilar *et al.*, 2016). Manager's measure, which is based on accounting information, will influence corporate performance (Lucas, 1975). In addition, accounting information utilization may reduce asymmetry of information with creditors. Therefore, good accounting information quality may enhance the probability of obtaining funds from creditors, thus influencing corporate performance (Esparza-Aguilar *et al.*, 2016).

Some previous researches prove that accounting information and formal control influence performance. The research conducted by Lucas (1975) proposed a model of influence from the use of AISs, analysis on corporate performance. The research result implies that information systems provision should consider some matters for consideration during management decision-making. Grande *et al.*, (2011) conclude that the implementation, investment and correction of MSMEs information systems are correlated with their financial results. Meanwhile, Esparza-aguilar *et al.* (2016) prove that accounting and financial information utilization is positively correlated with performance through empirical results from MSMEs in Mexico. Thus, a hypothesis is developed as follows.

H3. Accounting information systems have a positive influence on performance.

The influence of strategy on performance through innovation

Innovation is defined as the adoption of ideas or behaviors related to the new practices implemented by an organization (Zaltman *et al.*, 1973). Innovation is correlated with organizational needs for greater competitiveness. During the recent free-trade era, the competition is getting tighter, and most organizations try to decrease the performance gap through innovation (Aghion *et al.*, 2005) and also to develop product differentiation strategy (Porter, 1985). Companies that implement product differentiation face the need to develop and change their products. With innovation, an organization can create unique products so that added value can be given to customers (Porter, 1985). Innovation is the key to an adaptive and manageable environment for a company (Cohen and Cyert, 1973), and innovative strategy often relates to organizational performance (Conant *et al.*, 1990; Hambrick, 1983; Robinson and Fornell, 1985). However, not all companies can respond to their environment in the same way (Garcia-Pont and Nohria, 2002). Some companies may react to the changes of an environment by making innovative strategies such as finding out new markets and new products, while others may apply the same strategy (Kumar and Kober, 2012).

A research done by Chenhall *et al.* (2011) to test the influence of strategy on innovation found out that a product differentiation strategy influences company performance. Even though there are differences in strategy types to adapt to the market changes, there is not any superior strategy that can increase the performance (Miles *et al.*, 1978). Next, Hambrick (1983) explained that differences in performance depend on the innovations done. The research conducted by Woodside *et al.* (1999) provided a view into the relationship between orientation strategy, innovation capability and performance. The researchers reported that orientation strategy differences between big companies and MSMEs can yield different performances. Thus, product differentiation strategy can lead to creative innovation on both product and process for improving performance.

H4. There is a positive relationship between strategy and performance through innovation.

The influence of strategy on performance through accounting information system

An AIS based on a computer can increase control and coordination in an organization (Nicolaou, 2000). Without the existence of information, it would be difficult for MSMEs to achieve greater performance, identify customers and supplier bills and forecast the future performance (Amidu and Abor, 2005; Ismail and King, 2005; Kharuddin *et al.*, 2010). The innovative activities equipped by accounting information can produce better information quality. Moreover, implementing strategy and innovation can also be a company control measure. Then, performance can be improved. Differentiation strategy, generally, needs a commitment to seriously practice research and development. This process certainly needs many funds. Much of the research and development with high creativity are mostly overloading. That causes lack of control over the money spent. Thus, it is very important to provide quick, precise and accurate financial information. Further, research and development activities can provide new products with the expected quality and specifications, and targeted funds.

Studies have been conducted about the harmonious relationship between business and IT strategies and their impacts on performance by some researchers (Bendoly and Jacobs, 2004; Sabegh and Motlagh, 2012; Sabherwal and Chan, 2001; Velcu, 2010). The researchers applied different profiles to explore the relationship between harmony and performance. Next, that research was retested by Pollard and Morales (2015) at MSMEs. Their findings supported that of Sabherwal and Chan (2001). They argued that harmony between business and information system strategy could not improve the company performance significantly. However, the researches were conducted only at big companies. Thus, there are still chances to do research on the relationship between business strategy and IT strategy on MSMEs' performance.

H5. There is a positive relationship between strategy and performance through accounting information system.

Method

Research respondents

This research was a survey research. In collecting the data, the questionnaires were distributed using both direct and online system (Google doc). The research respondents were MSME owners living at Yogyakarta, Solo and Semarang as these areas have become the MSME centers of creative industries in Central Java and D.I. Yogyakarta. There were 115 questionnaires that could be collected, but 13 questionnaires were dropped as they did not meet the criteria due to their different business models. The questionnaires that were finally used were 102. The chosen SEM requires 100 to 200 samples (Hair *et al.*, 1995).

Operational definition and variables measurement

This research is to test the influence of strategy on MSMEs' performance with the mediation of an AIS and MSMEs' performance innovation. The performance of MSMEs in this study is defined as the result of the company strategy implemented to achieve the target market and financial goals of an organization. The performance measurement has used the items developed by Khandwalla (1977) and validated by Miller (1987) and also implemented by some researchers such as Cragg *et al.* (2002) and Pollard and Morales (2015). The measurement covers long-run profitability, sales growth, resources (liquidity and investment capacity) and customer loyalty with 5-point Likert scale.

Strategy

Strategy in this study means the differentiation strategy. It can be explained further as the creation of products that are different from others and have added value for customers. This variable measurement was developed by Luo and Zhao (2004), Wolff and Pett (2006), Namiki (1988) and Camison and Villar-Lopez (2010).

Accounting information system

An AIS is a data-processing and financial transaction provided by users to make decisions. The measurement of accounting information uses the characteristics of accounting information, namely, reliability, relevance and timeliness, instruments developed by Marshall and Steinbart (2006), Sori (2016) and Sajady et al. (2008).

Innovation

Innovation is the adoption of a new idea or behavior in implementing new things in an organization. The innovation measurement uses the instruments developed by Capon et al. (1992) and Scott and Tiessen (1999). These items ask about new products that have been launched, product modifications over the last 3 years, how often a company enters new markets and how many products that have been planned for are being produced.

Data analysis technique and hypothesis test

The statistic method applied to test the hypothesis in this study was a SEM through PLS. This study measures two parts; they are (1) the influence of strategy on performance through innovation and AIS variables and (2) the direct influence of strategy, innovation and AISs on performance. The path analysis technique in this study used the program called Smart PLS 3.0. Then, the analysis stages applied PLS-SEM, with 5 steps, as follows: (1) having a model concept, (2) determining the algorithm analysis method, (3) determining the resampling method, (4) drawing the path diagram and (5) model evaluation (Ghozali, 2014).

Findings and discussion

MSMEs characteristics

The companies that are included as samples in this study are MSMEs manufactures. Besides, the samples have had an AIS, either computerized or are using a manual one. The characteristics of companies are illustrated in Table 1.

Description of sampling company characteristics

The respondent characteristics based on business types are classified into three categories that are food and beverages, fashion, and craft. These three businesses need high innovation to exist amidst the competition. The data from Table 1 show that the respondents are divided into three categories at a percentage of 36.3% for food and beverages, 30.4% for fashion and 33.3% for craft. In this case, the food and beverages category covers agricultural industries,

No	Business type	Total	Percentage (%)
1	Food	37	36.3
2	Fashion	31	30.4
3	Craft	34	33.3
Total		102	100

Table 1.
Descriptive characteristics of sample companies

culinary and snacks. Next, the fashion category consists of batik and garments, while the craft business presents various categories.

Respondent demography characteristics

The respondents have various characteristics. They can be seen on [Table 2](#).

The respondent's category based on the area is not spread evenly. Most of them are in Solo (66.66%) and in Semarang (4.9%). Based on the age category, most respondents are more than 50 years old (40.2%), while the least number of respondents (12.7%) are within the ages of 20–30. Further, the composition of respondents was balanced evenly between men and woman (42.2 and 57.8%, respectively). The educational background comprised mostly of bachelor's degrees (48%). There were also respondents who undertook a masters' program (2% of the respondents).

Description of variables

The four variables in this study comprise of strategy, innovation, AIS and performance. The four constructs are depicted by using average and index formula. The indexation is done to know the illustration of respondents' perception of the variables under study ([Augusty, 2006](#)).

The average scale is for knowing the tendency of respondent's answers or data centering. If the answer ranges from 1 up to 5, the median is 3. If the average answer of respondents is 4 or 5, the respond position is positive and high. However, if the average score is 1 or 2, the responsible position is negative and low. The scoring technique used to calculate the index was based on the following formula

$$\text{Index score} = ((\%F1 \times 1) + (\%F2 \times 2) + (\%F3 \times 3) + (\%F4 \times 4) + (\%F5 \times 5))/5 \tag{1}$$

Explanation. *F1* is the frequency of respondents answering 1, *F2* is the frequency of having 2 as the respondent answer and so on. *F5* is for answering 5 from the score used at the list of

No	Respondents' demographic characteristics	Total	Percentage (%)
1	<i>Demographic area</i>		
	Yogyakarta	29	28.3
	Solo	68	66.66
2	Semarang	5	4.9
	<i>Age</i>		
	20–30	15	12.7
	30–40	33	14.7
	40–50	41	32.4
3	>50	13	40.2
	<i>Gender</i>		
	Male	43	42.2
4	Female	59	57.8
	<i>Education</i>		
	Junior high school	2	2
	Senior high school	31	2.9
	Vocational school	3	30.4
	Diploma 1	3	2.9
	Diploma 2	12	11.8
Bachelor's degree	49	48	
Master's degree	2	2	

Table 2. Respondents' demographic characteristics

questions. The answer ranges in answering the question dimension (closed question) of every variable are determined by the three-box method (Augusty, 2006). In this study, the answer range for score interpretation from the 102 respondents will start from the minimum $((102 \times 1)/5) = 20.4$ up to the maximum $((102 \times 5)/5) = 102$. In other words, the range is 102–20.4; then, it is divided by 3. Finally, it has the range of 27.2, which becomes the basis of index score interpretation; they are:

- (1) Index score 20.4–47.6 = low interpretation
- (2) Index score 47.7–74.9 = moderate interpretation
- (3) Index score 75–102 = high interpretation

Strategy

The strategy in this study refers to differentiation strategy applied by a company. The strategy variables measured by nine question items are developed by Camison and Villar-Lopez (2010), Luo and Zhao (2004), Namiki (1988) and Wolff and Pett (2006). Based on confirmatory factor analysis (CFA), there are five item questions only that are valid, while the other four are dropped. The description of variables is statistically presented at Table 3.

The indexes are calculated by implementing the following formula (1):

The data on Table 3 present the average calculation and the index of respondents' questions, when measuring the strategy variables. The findings show that all questions from D1 up to D9 have an average score ranging from 2.92 up to 3.48, and the index is categorized as moderate.

Innovation

The innovation variable is measured by an instrument developed by Capon et al. (1992) and Scott and Tiessen (1999). The measurement of the innovation variable used 4 question items with a 5-point Likert scale. The CFA analysis results show that all the question items in innovation variables have good quality, so that they are valid to be used in data analysis. Table 4 presents the statistical description of the variables.

No	Question item	Min	Max	Mean	Index
D1	The company has shown innovation and creativity in the market	1	5	3.39	69.2
D2	The company focuses on providing customer satisfaction	1	5	3.48	71
D3	Companies build images to provide consistent service and products	1	5	3.42	69.8
D4	The company continuously designs differentiation based products	1	5	3.32	67.8
D5	Companies use different technologies for products	1	5	3.15	64.2
D6	The company continues to see product quality based on differentiation	1	5	3.36	68.6
D7	The company tries to innovate by introducing new products to the market	1	5	3.32	67.8
D8	The company provides a special budget for R&D	1	5	2.92	59.6
D9	The company creates new features as the market need	1	5	3.31	67.6

Table 3.
Descriptive statistics strategy

No	Question item	Min	Max	Mean	Index
1	How often do companies create new products	1	5	3.37	68.8
2	How often do companies modify existing products	1	5	3.28	67
3	How often do companies enter new markets	1	5	3.06	62.4
4	How often do companies plan new products	1	5	3.27	66.8

Table 4.
Descriptive statistics innovation

Based on the calculation of descriptive statistics, [Table 4](#) depicts the average score and index of the items which are at a moderate category.

Accounting information system

[Table 5](#) shows the descriptive statistics of accounting system variable. The average score and the index of respondents' responses on the questions on measuring the AISs variable are categorized as moderate.

Performance

The performance variable is measured by using 5 questions. It can be seen at the performance variable in [Table 6](#).

Based on the data shown in [Table 6](#), the average score on the performance variable is from 2.94 up to 3.09. The index of respondents' answers is from 60 to 63, and it can be categorized under the moderate category.

Hypothesis test

The analysis used in the study is PLS-SEM with Smart PLS 3.0. software. There are 2 sub-measurement models in the analysis, namely, the measurement model or outer model, and the structural model or inner model. PLS does not require a certain assumption of distribution to estimate the parameter so that a parametric technique is not necessarily used ([Ghozali, 2014](#)).

Table 5.
Descriptive statistics
accounting
information system

No	Question item	Min	Max	Mean	Index
1	The storage of a company's accounting information system contributes to the integrity of financial reporting	1	5	3.58	73
2	Data storage in a company's accounting information system provides detailed information that is accurate and reflects the actual company's assets	1	5	3.56	72.6
3	Data processing in accounting information systems companies can result in different decisions related to production results from the past, present, and future	1	5	3.56	72.6
4	Collecting data related to a company's accounting system can reduce the time and costs incurred	1	5	3.54	72.2
5	Data processing related to accounting information systems of companies can improve the quality of financial statements and facilitate the ease of the company's transaction process	1	5	3.56	72.6
6	Automation in collecting data in an accounting information system can speed up the preparation of financial statements	1	5	3.59	73.2
7	Automation in collecting data on the accounting information system of a company can mask human weaknesses	1	5	3.52	71.8

Table 6.
Descriptive statistics
performance

No	Question item	Min	Max	Mean	Index
1	Profitability	1	5	3.02	61.6
2	Sales growth	1	5	3.05	62.2
3	Liquidity	1	5	3.09	63
4	Investment capacity	1	5	2.94	60
5	Customer loyalty	1	5	3.09	63

Measurement of model evaluation or outer model

This outer model is implemented to measure the validity and reliability of a model. The validity test is viewed by convergent and discriminant validity. To test the construct, the reliability in the SmartPLS 3.0 program, Cronbach's alpha and composite reliability are applied.

After analyzing the data, the results are presented in Table 7.

Based on data in Table 7, the results of the outer model test can be obtained. The loading factor greater than 0.70 means all the construct indicators are valid. Besides, based on the data written in Table 7, the AVE score yielded by all the constructs are above 0.50. Then, it can meet the convergent validity requirements. The Cronbach's alpha and composite reliability scores yielded by all the reflective constructs are very good, as they are above 0.70. It can, therefore, be concluded that the indicators are reliable.

Inner model evaluation

The inner model is evaluated by using the percentage of variance explained, which is by looking at the R-square score for endogenous latent variables. The result of R-square is illustrated in Table 8.

The R-square values of AIS, innovation and performance variables are 0.487, 0.368 and 0.357, respectively, and hence they are all in the low category.

Construct	Indicators	Loading	Cronbach alpha	Composite reliability	AVE
Accounting information system	S1	0.928	0.950	0.963	0.867
	S3	0.908			
	S4	0.934			
	S7	0.953			
Innovation	I1	0.811	0.864	0.905	0.706
	I2	0.885			
	I3	0.824			
	I4	0.837			
Strategy	D1	0.909	0.938	0.950	0.792
	D4	0.904			
	D6	0.872			
	D7	0.910			
Performance	P1	0.854	0.877	0.911	0.719
	P2	0.898			
	P3	0.787			
	P5	0.848			

Table 7. Reliability and validity constructs

Note(s): AVE: average variance extracted

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	p-values
Accounting information system	0.487	0.490	0.080	6.094	0.000
Innovation	0.368	0.378	0.080	4.586	0.000
Performance	0.357	0.390	0.101	3.522	0.000

Table 8. Inner model R-square

Hypothesis test. The hypothesis test was done by looking at T statistically and the significance value on the coefficient path. The completed results are presented in [Tables 9](#) and [10](#) as follows.

Results of the hypothesis test

The test for knowing the relationship of construct variables shows directly that the influence of strategy on performance has a T count of as much as 1.505 with the significance of 0.133. This means that the differentiation strategy does not directly influence performance. Based on [Table 9](#) and see [Figure 1](#), it can be seen that the test result of innovation and performance relationship statistically has T as many as 2.196 with the significance of 0.029. The second hypothesis, which is innovation influences performance positively, is accepted. The test for the third hypothesis that says there is a positive influence of the AIS on performance is also accepted, as the T statistically is 2.119 with a significance of 0.035.

The indirect influence of innovation and accounting information system as the mediating variables

The test results of the indirect influence of strategy on performance with the AIS as the mediating variable is presented in [Table 10](#). This test obtains the value of T statistically as 2.068 with a significance level of 0.039. This shows that the alternative hypothesis, there is an indirect influence of the AIS on performance, is accepted. Further, the indirect influence of strategy on performance with innovation as the mediating variable statistically has a T -value

Table 9.
Hypothesis testing
result (direct effect)

Hypothesis	Relationship	Original sample (O)	Sample mean (M)	Standard deviation	T statistic	p	Decision
H1	Strategy - > Performance	0.195	0.208	0.130	1.505	0.133	Rejected
H2	Innovation - > Performance	0.290	0.291	0.132	2.196	0.029*	Accepted
H3	Accounting information system - > Performance	0.224	0.221	0.106	2.119	0.035*	Accepted

Note(s): *Significant at 0.05 level

Table 10.
Hypothesis testing
result (indirect effect)

Hypothesis	Relationship	Original sample (O)	Sample mean (M)	Standard deviation	T statistic	p	Decision
H4	Strategy - > Innovation - > Performance	0.176	0.178	0.084	2.098	0.036*	Accepted
H5	Strategy - > Accounting information system - > Performance	0.156	0.154	0.076	2.068	0.039*	Accepted

Note(s): *Significant at 0.05 level

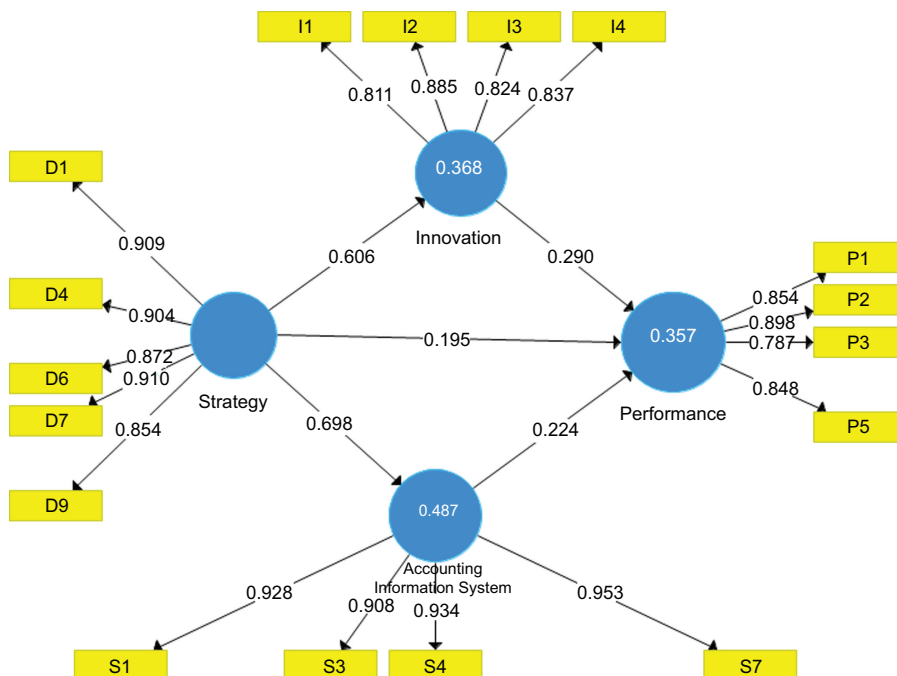


Figure 1. CFA analysis

of 2.098 with a significance level of 0.036. This means that the alternative hypothesis that says there is an indirect influence of strategy performance through innovation variable is accepted.

Discussion

The influence of strategy to performance

The result of the hypothesis test shows that strategy does not influence performance directly. This means that the differentiation strategy implemented by MSMEs does not impact directly on improving performance. The previous studies on strategy and performance relationships also have various findings. However, the research on strategic management has failed in building a clear and consistent relationship between the diversification strategy and performance as most of the researches cannot be concluded, and the findings are contradictory (Davila *et al.*, 2009).

There has recently been a giant leap in business because of the development of technology and information. The tight competition pushes companies to create excellent and competitive products and services. Nowadays, companies tend to have unique and qualified products. According to Barney (1991), MSMEs can be said to be superior if they can create value and exploit their own resources well.

An AIS is very important for an organization because it can help the management staff in collecting the information, raw data and original data that can be changed into financial data for decision-making and controlling the organization (Dandago and Rufai, 2014; Harash, 2015; Harash *et al.*, 2014). Then AIS helps track transactions and provides internal and external reporting data, financial reports and trend analysis to improve control (Fagbemi *et al.*, 2016). The importance of AIS for MSMEs is that it can improve the

effectiveness in the decision-making process because it provides good and well-managed accounting information. The main goals of a business entity in adopting this system is to repair the efficiency of a business and to improve the competition in business (Hla and Teru, 2015).

The positive influence of innovation on performance

Based on the hypothesis test, there is a positive influence of innovation on performance. This means that the higher the innovation, the better the performance will be. The findings are in line with researches conducted by Anderson *et al.* (2014), Lee and Habte-giorgis (2004) and Wolff and Pett (2006). These researchers have found that there is a positive influence of innovation on MSMEs' performance.

The tight competition encourages the MSMEs to be innovative in order to portray excellence and competitiveness. Hence, the process of innovation development needs careful management to improve performance (Howell *et al.*, 2005; Wakasugi, 1997). Innovation on products, services and business models can give chances to MSMEs to survive and win the competition (Porter, 1980). Thus, MSMEs will gain profitability, such as through customer loyalty and price sensitivity, because the customers always consider the uniqueness and innovation of products (Lieberman and Montgomery, 1988).

The positive influence of accounting information system on performance

The results of data analysis show that there is a positive influence of AISs on performance. This means that the better the AIS, the better the company performance will be. That finding is in line with the researches conducted by Harash *et al.* (2014) and Esparza-Aguilar *et al.* (2016). They concluded that the implementation of AISs at MSMEs can influence the performance of those MSMEs in Iraq and Mexico. They said that AIS has important roles for MSMEs to improve performance (Lallo and Selamat, 2013; Sabegh and Motlagh, 2012).

To compete in the global arena, MSMEs should be responsive in facing environmental changes because of technology and information revolution. The adaptation to the fast environmental changes needs precision and accurateness for decision-making. The owners of MSMEs, which also have the positions of managers, are faced with many alternative choices that relate to efficiency, for example, the material choices, product design, market, distribution and services to customers. Therefore, an accurate calculation is required in every decision-making and action. Many MSMEs use AISs with the aim of collecting more information to help the owners make decisions. Finally, this leads to efficiency improvement, profitability and MSMEs' performance.

The positive influence of strategy on performance through innovation

The influence of strategy on performance with innovation as the intervening variable shows a positive and a significant relationship. Next, the influence of mediation also shows a significant effect at a 5% significance level. Thus, the indirect effect of the strategy variable on performance through innovation is accepted. This means that a good differentiation strategy will improve company performance. It will be higher if it is supported by high innovation. Differentiation strategy can be optimized if it is supported by innovation activities. Innovation focuses not only on product design but also on the innovation in other aspects, for example, service to customers, innovation in marketing the products, innovation to product distribution and innovation of after-sales service. Innovation, which is in line with this strategy, makes a company develop a uniqueness that can raise added value for customers. The global competition era requires companies to create added value for their

customers by creating a uniqueness that differentiates them from their competitors. The added value makes the customers indifferent if they are compared to their rivals. Finally, it can increase the profitability of companies.

The influence of strategy on performance through accounting information system

The test result of strategy influence on performance through AIS shows that there is a positive and significant relationship. Further, the differentiation strategy applied will improve the performance if it is supported by a good AIS. Then, it can be concluded that AISs have been successful in fully mediating the influence of strategy on performance. MSMEs may have some constraints such as finance, human resources and also technology, yet the differentiation strategy needs many funds, especially for conducting research and development (R&D). Meanwhile, the competitors may also offer a lower price. In this case, the owners of MSMEs should be careful in making decisions and engaging in various alternative actions. An AIS is responsible for analyzing and monitoring the financial condition of the company, preparing the documents needed for taxes and providing information to support the other organizational functions such as production, marketing, human resources management and strategic planning. Without the system, it is very hard for SMEs to determine the performance, identify the balance of customers' and suppliers' accounts and predict the future organizational performance (Amidu and Abor, 2005; Amidu *et al.*, 2011; Ismail and King, 2005; Kharuddin *et al.*, 2010).

Conclusion

This study aims at testing the roles of innovation and AIS variables in mediating the influence of business strategy on MSMEs' performance. The respondents are the owners of MSMEs in Yogyakarta, Solo and Semarang. Based on the PLS-SEM analysis, the conclusion is that strategy does not have a direct influence on performance; innovation has a positive effect on performance; AISs have a positive impact on performance; AISs mediate the effect of strategy on performance; and innovation fully mediates the effect of strategy on performance.

This study has some implications for the owners of MSMEs. The implications for the owners of MSMEs are as follows. First, differentiation strategies cannot produce significant results unless the owner encourages innovation. There should be an alignment between the strategy implemented and innovation to increase the performance of MSMEs. The differentiation strategy certainly emphasizes uniqueness and product quality and needs various innovations in product manufacturing. Although it requires high investments, the owners of MSMEs should promote innovation to provide added value to the customers. Secondly, significant investment in implementing the differentiation strategy with a high risk on the output of innovation encourages the managers to have accurate calculations in decision-making. Thus, MSMEs should implement AIS as a part of management control to identify standardization and lead to achieve organizational objectives; thus, it eliminates innovation of which process is inefficient and at high risk of failure.

Constraints and future research

This study has some constraints. First, the sample size in this study is relatively small, with 102 respondents consisting of MSMEs in three regions, namely, Semarang, Solo and Yogyakarta. This is due to the limited number of MSMEs that already have AISs and have received training in it. It is expected that future research can increase the number of samples by expanding the scope and area of study. Second, the proportion of respondents is not balanced on the demographic aspects, so it does not adequately describe the actual conditions in the three regions studied. The researcher recommends that future researchers pay more

attention to the equitable distribution of samples through proportional sampling techniques. Third, the performance variable has been measured based on the owners' perception. This results in the probability that the results do not reflect the real condition. Then, the measurement of MSMEs based on secondary data should also be implemented in future research.

References

- Acquaah, M. and Agyapong, A. (2015), "The relationship between competitive strategy and firm performance in micro and small businesses in Ghana: the moderating role of managerial and marketing capabilities", *Africa Journal of Management*, Vol. 1 No. 2, pp. 172-193, doi: [10.1080/23322373.2015.1025684](https://doi.org/10.1080/23322373.2015.1025684).
- Aghion, P., Bloom, N., Blundell, R., Griffith, R. and Howitt, P. (2005), "Competition and innovation: an inverted-U relationship", *The Quarterly Journal of Economics*, Vol. 120 No. 2, pp. 701-728.
- Agwu, M.O. (2014), "Issues, challenges and prospects of small and medium scale enterprises (SMEs) in port-harcourt city", *European Journal of Sustainable Development*, Vol. 3 No. 1, pp. 101-114, doi: [10.14207/ejsd.2014.v3n1p101](https://doi.org/10.14207/ejsd.2014.v3n1p101).
- Aliqah, K.M.A. (2012), "Differentiation and organizational performance: empirical evidence from Jordanian companies", *Journal of Economics*, Vol. 3 No. 1, pp. 7-11, doi: [10.1080/09765239.2012.11884946](https://doi.org/10.1080/09765239.2012.11884946).
- Amidu, M. and Abor, J. (2005), "Accounting information and management of SMEs in Ghana", *African Journal of Finance and Management*, Vol. 14 No. 1, pp. 15-23, doi: [10.4314/ajfm.v14i1.24406](https://doi.org/10.4314/ajfm.v14i1.24406).
- Amidu, M., Effah, J. and Abor, J. (2011), "E-accounting practices among small and medium enterprises in Ghana", *Journal of Management Policy and Practice*, Vol. 12 No. 4, p. 146.
- Anderson, N., Potočnik, K. and Zhou, J. (2014), "Innovation and creativity in organizations: a state-of-the-science review, prospective commentary, and guiding framework", *Journal of Management*, Vol. 40 No. 5, pp. 1297-1333, doi: [10.1177/0149206314527128](https://doi.org/10.1177/0149206314527128).
- Augusty, F. (2006), *Metode Penelitian Manajemen*, Badan Penerbit Universitas Diponegoro, Semarang.
- Badri, M., Davis, D. and Davis, D. (2000), "Operations strategy, environmental uncertainty and performance: a path analytic model of industries in developing countries", *Omega*, Vol. 28 No. 2, pp. 155-173, available at: <http://www.scopus.com/inward/record.url?eid=2-s2.0-0034165399&partnerID=40&md5=93510cc4f6d28e8a9095b3826d8dbe4d>.
- Baines, A. and Langfield-Smith, K. (2003), "Antecedents to management accounting change: a structural equation approach", *Accounting, Organizations and Society*, Vol. 28 Nos 7-8, pp. 675-698, doi: [10.1016/S0361-3682\(02\)00102-2](https://doi.org/10.1016/S0361-3682(02)00102-2).
- Bank Indonesia (2015), *Profil Bisnis Usaha Mikro, Kecil Dan Menengah (Umkm) Kerjasama LPPI Dengan Bank Indonesia Tahun 2015*, Bank Indonesia dan LIPI, Jakarta.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Bellamy, L.C., Amoo, N., Mervyn, K. and Hiddlestone-Mumford, J. (2019), "The use of strategy tools and frameworks by SMEs in the strategy formation process", *International Journal of Organizational Analysis*, Vol. 27 No. 2, pp. 337-367, doi: [10.1108/IJOA-02-2018-1363](https://doi.org/10.1108/IJOA-02-2018-1363).
- Bendoly, E. and Jacobs, F.R. (2004), "ERP architectural/operational alignment for order-processing performance", *International Journal of Operations and Production Management*, Vol. 24 No. 1, pp. 99-117, doi: [10.1179/str.2006.53.4.005](https://doi.org/10.1179/str.2006.53.4.005).
- Bhaskaran, S. (2006), "Incremental innovation and business performance: small and medium-size food enterprises in a concentrated industry environment", *Journal of Small Business Management*, Vol. 44 No. 1, pp. 64-80, doi: [10.1111/j.1540-627X.2006.00154.x](https://doi.org/10.1111/j.1540-627X.2006.00154.x).
- Blomkvist, M., Johansson, J. and Malmström, M. (2016), "Accounting knowledge in innovative firms - direct contacts with external auditors for strategic actions", *International Journal of*

- Managerial and Financial Accounting*, Vol. 8 Nos 3–4, pp. 209-229, doi: [10.1504/IJMFA.2016.10002742](https://doi.org/10.1504/IJMFA.2016.10002742).
- Camison, C. and Villar-Lopez, A. (2010), "Foreign intensity and economic performance: the mediating role of internationally", *Journal of Small Business Management*, Vol. 48 No. 2, pp. 116-151, doi: [10.1111/j.1540-627X.2010.00289.x](https://doi.org/10.1111/j.1540-627X.2010.00289.x).
- Capon, N., Farley, J.U., Lehmann, D.R. and Hulbert, J.M. (1992), "Profiles of product innovators among large U.S. manufacturers", *Management Science*, Vol. 38 No. 2, pp. 157-169, doi: [10.1287/mnsc.38.2.157](https://doi.org/10.1287/mnsc.38.2.157).
- Chenhall, R.H., Kallunki, J.P. and Silvola, H. (2011), "Exploring the relationships between strategy, innovation, and management control systems: the roles of social networking, organic innovative culture, and formal controls", *Journal of Management Accounting Research*, Vol. 23 No. 1, pp. 99-128, doi: [10.2308/jmar-10069](https://doi.org/10.2308/jmar-10069).
- Cohen, K.J. and Cyert, R.M. (1973), "Strategy: formulation, implementation, and monitoring", *The Journal of Business*, Vol. 46 No. 3, p. 349, doi: [10.1086/295545](https://doi.org/10.1086/295545).
- Conant, J.S., Mokwa, M.P. and Varadarajan, P.R. (1990), "Strategic types, distinctive marketing competencies and organizational performance: a multiple measures-based strategy", *Strategic Management Journal*, Vol. 11 No. 5, pp. 365-383, doi: [10.1002/smj.4250110504](https://doi.org/10.1002/smj.4250110504).
- Corral de Zubielqui, G., Lindsay, N., Lindsay, W. and Jones, J. (2019), "Knowledge quality, innovation and firm performance: a study of knowledge transfer in SMEs", *Small Business Economics*, Vol. 53 No. 1, pp. 145-164, doi: [10.1007/s11187-018-0046-0](https://doi.org/10.1007/s11187-018-0046-0).
- Cragg, P., King, M. and Hussin, H. (2002), "IT alignment and firm performance in small manufacturing firms", *European Journal of Information Systems*, Vol. 11 No. 2, pp. 108-127, doi: [10.1057/palgrave.ejis.3000422](https://doi.org/10.1057/palgrave.ejis.3000422).
- Dabić, M., Lažnjak, J., Smallbone, D. and Švarc, J. (2019), "Intellectual capital, organisational climate, innovation culture, and SME performance: evidence from Croatia", *Journal of Small Business and Enterprise Development*, Vol. 26 No. 4, pp. 522-544, doi: [10.1108/JSBED-04-2018-0117](https://doi.org/10.1108/JSBED-04-2018-0117).
- Dandago, K.I. and Rufai, A.S. (2014), "Information technology and accounting information system in the Nigerian banking industry", *Asian Economic and Financial Review*, Vol. 4 No. 5, pp. 655-670.
- Davila, A. and Foster, G. (2005), "Adoption decisions: evidence and early-stage/startup companies", *The Accounting Review*, Vol. 80 No. 4, pp. 1039-1068, available at: <http://ezlibproxy1.ntu.edu.sg/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=18611746&site=eds-live&scope=site>.
- Davila, A., Foster, G. and Oyon, D. (2009), "Accounting and control, entrepreneurship and innovation: venturing into new research opportunities", *European Accounting Review*, Vol. 18, doi: [10.1080/09638180902731455](https://doi.org/10.1080/09638180902731455).
- Esparza-Aguilar, J.L., García-Pérez-de-Lema, D. and Duréndez, A. (2016), "The effect of accounting information systems on the performance of Mexican micro, small and medium-sized family firms: an exploratory study for the hospitality sector", *Tourism Economics*, Vol. 22 No. 5, pp. 1104-1120, doi: [10.5367/te.2015.0515](https://doi.org/10.5367/te.2015.0515).
- Exposito, A. and Sanchis-Llopis, J.A. (2018), "Innovation and business performance for Spanish SMEs: new evidence from a multi-dimensional approach", *International Small Business Journal: Researching Entrepreneurship*, Vol. 36 No. 8, pp. 911-931, doi: [10.1177/0266242618782596](https://doi.org/10.1177/0266242618782596).
- Fagbemi, T.O. and Olaoye, J.A. (2016), "An evaluation of accounting information system and performance of small scale enterprises in Kwara State, Nigeria", *DBA African Management Review*, Vol. 6 No. 1, pp. 1-16.
- Feeney, O. and Pierce, B. (2018), "Accounting and new product development: the importance of interactions within social and technical structures", *Qualitative Research in Accounting and Management*, Vol. 15 No. 2, pp. 251-279, doi: [10.1108/QRAM-05-2017-0045](https://doi.org/10.1108/QRAM-05-2017-0045).

- Garcia-Pont, C. and Nohria, N. (2002), "Local versus global mimetism: the dynamics of alliance formation in the automobile industry", *Strategic Management Journal*, Vol. 23 No. 4, pp. 307-321, doi: [10.1002/smj.225](https://doi.org/10.1002/smj.225).
- Georgellis, Y., Joyce, P. and Woods, A. (2000), "Entrepreneurial action, innovation and business performance: the small independent business", *Journal of Small Business and Enterprise Development*, Vol. 7 No. 1, pp. 7-17, doi: [10.1108/EUM000000006801](https://doi.org/10.1108/EUM000000006801).
- Ghozali, I. (2014), *SEM Metode Alternatif Dengan Menggunakan Partial Least Squares (PLS)*, Badan Penerbit Universitas Diponegoro, Semarang.
- Grande, E.U., Estebanez, R.P. and Colomina, C.M. (2011), "The impact of Accounting Information Systems (AIS) on performance measures: empirical evidence in Spanish SMEs", *The International Journal of Digital Accounting Research*, Vol. 11 No. 1, pp. 25-43.
- Gronum, S., Verreynne, M.L. and Kstelle, T. (2012), "The role of networks in small and medium-sized enterprise innovation and firm performance", *Journal of Small Business Management*, Vol. 50 No. 2, pp. 257-282, doi: [10.1111/j.1540-627X.2012.00353.x](https://doi.org/10.1111/j.1540-627X.2012.00353.x).
- Hair, J.F.R.E., Anderson, R.T., Tatham, R.R.L. and Black, W.C. (1995), *Multivariate Data Analysis*, Pearson Prentice Hall, Upper Saddle River, NJ.
- Hambrick, D.C. (1983), "High profit strategies in mature capital goods industries: a contingency approach", *Academy of Management Journal*, Vol. 26 No. 4, pp. 687-707, doi: [10.5465/255916](https://doi.org/10.5465/255916).
- Harash, E. (2015), "The role of environmental uncertainty in the link between accounting information system and performance small and medium enterprises in Iraq", *Global Journal of Management and Business Research*, Vol. 15 No. 2, pp. 26-32.
- Harash, E., Al-Timimi, S. and Radhi, A.H. (2014), "The influence of accounting information systems (AIS) on performance of small and medium enterprises (SMEs) in Iraq", *Journal of Business and Management*, Vol. 3 No. 4, pp. 48-57, doi: [10.12735/jbm.v3i4p48](https://doi.org/10.12735/jbm.v3i4p48).
- Hla, D. and Teru, S.P. (2015), "International journal of multidisciplinary and current research efficiency of accounting information system and performance measures-literature review", *Journal of Multidisciplinary and Current Research*, Vol. 3, available at: <http://ijmcr.com>.
- Hoffman, D.L. and Novak, T.P. (1998), "Bridging the digital divide: the impact of race on computer access and internet use", *Science*, Vol. 280 No. 1998, pp. 390-391, doi: [10.1126/science.280.5362.390](https://doi.org/10.1126/science.280.5362.390).
- Howell, J.M., Shea, C.M. and Higgins, C.A. (2005), "Champions of product innovations: defining, developing, and validating a measure of champion behavior", *Journal of Business Venturing*, Vol. 20 No. 5, pp. 641-661, doi: [10.1016/j.jbusvent.2004.06.001](https://doi.org/10.1016/j.jbusvent.2004.06.001).
- Ismail, N.A. and King, M. (2005), "Firm performance and AIS alignment in Malaysian SMEs", *International Journal of Accounting Information Systems*, Vol. 6 No. 4, pp. 241-259, doi: [10.1016/j.accordion.2005.09.001](https://doi.org/10.1016/j.accordion.2005.09.001).
- Karmeni, K., de la Villarmois, O. and Beldi, A. (2018), "Impact of control on innovation: the case of franchising", *Management Decision*, Vol. 56 No. 7, pp. 1485-1505, doi: [10.1108/MD-09-2015-0428](https://doi.org/10.1108/MD-09-2015-0428).
- Khandwalla, P. (1977), *The Design of Organizations*, Harcourt Brace Jovanovich, New York.
- Kharuddin, S., Ashhari, Z.M. and Nassir, A.M. (2010), "Information system and firms' performance: the case of Malaysian small medium enterprises", *International Business Research*, Vol. 3 No. 4, p. 28, doi: [10.5539/ibr.v3n4p28](https://doi.org/10.5539/ibr.v3n4p28).
- King, S.F. and Burgess, T.F. (2006), "Beyond critical success factors: a dynamic model of enterprise system innovation", *International Journal of Information Management*, Vol. 26 No. 1, pp. 59-69, doi: [10.1016/j.ijinfomgt.2005.10.005](https://doi.org/10.1016/j.ijinfomgt.2005.10.005).
- Klomp, L. and Van Leeuwen, G. (2001), "Linking innovation and firm performance: a new approach", *International Journal of the Economics of Business*, Vol. 8 No. 3, pp. 343-364, doi: [10.1080/13571510110079612](https://doi.org/10.1080/13571510110079612).

- Kumar, A. and Kober, B. (2012), "Urbanization, human capital, and cross-country productivity differences", *Economics Letters*, Vol. 117 No. 1, pp. 14-17, doi: [10.1016/j.econlet.2012.04.072](https://doi.org/10.1016/j.econlet.2012.04.072).
- Lallo, N.Y. and Selamat, M.H. (2013), "Developing standardised accounting information system (AIS) course for Iraqi higher education: a conceptual framework", *Asian Journal of Business and Accounting*, Vol. 6 No. 1, pp. 39-58.
- Lechner, C. and Gudmundsson, S.V. (2014), "Entrepreneurial orientation, firm strategy and small firm performance", *International Small Business Journal*, Vol. 32 No. 1, pp. 36-60, doi: [10.1177/0266242612455034](https://doi.org/10.1177/0266242612455034).
- Lee, J. and Habte-Giorgis, B. (2004), "Empirical approach to the sequential relationships between firm strategy, export activity, and performance in US manufacturing firms", *International Business Review*, Vol. 13 No. 1, pp. 101-129, doi: [10.1016/j.ibusrev.2003.05.003](https://doi.org/10.1016/j.ibusrev.2003.05.003).
- Leitner, K.H. and Guldenberg, S. (2010), "Generic strategies and firm performance in SMEs: a longitudinal study of Austrian SMEs", *Small Business Economics*, Vol. 35 No. 2, pp. 169-189, doi: [10.1007/s11187-009-9239-x](https://doi.org/10.1007/s11187-009-9239-x).
- Lieberman, M.B. and Montgomery, D.B. (1988), "First-mover advantages", *Strategic Management Journal*, Vol. 9 No. S1, pp. 41-58.
- Linton, G. and Kask, J. (2017), "Configurations of entrepreneurial orientation and competitive strategy for high performance", *Journal of Business Research*, Vol. 70, pp. 168-176, doi: [10.1016/j.jbusres.2016.08.022](https://doi.org/10.1016/j.jbusres.2016.08.022).
- Lucas, H.C. (1975), "The use of an accounting in formation system", *Action and Organizational Performance*, Vol. 50 No. 4, pp. 735-746.
- Luo, Y. and Zhao, H. (2004), "Corporate link and competitive strategy in multinational enterprises: a perspective from subsidiaries seeking host market penetration", Vol. 10, pp. 77-105, doi: [10.1016/j.intman.2003.12.006](https://doi.org/10.1016/j.intman.2003.12.006).
- Mansury, M. and Love, J. (2008), "Innovation, productivity and growth in US business services: a firm-level analysis", Vol. 28, pp. 52-62, doi: [10.1016/j.technovation.2007.06.002](https://doi.org/10.1016/j.technovation.2007.06.002).
- Marshall, R. and Steinbart, P.J. (2006), *Accounting Information System*, Salemba Empat, Jakarta.
- Miles, R.E. and Snow, C.C. (1986), "Organizations: new concepts for new forms", *California Management Review*, Vol. 28 No. 3, pp. 62-73, doi: [10.2307/41165202](https://doi.org/10.2307/41165202).
- Miles, R.E., Snow, C.C., Meyer, A.D. and Coleman, H.J. Jr (1978), "Organizational strategy, structure, and process", *Academy of Management Review*, Vol. 3 No. 3, pp. 546-562.
- Miller, D. (1987), "Strategy making and structure: analysis and implications for performance", *Academy of Management Journal*, Vol. 30 No. 1, pp. 7-32.
- Miller, D. and Friesen, P.H. (1986), "Porter's (1980) generic strategies and performance: an empirical examination with American data.* Part I: testing porter", *Organization Studies*, Vol. 37 No. 55, pp. 37-55.
- Naala, M.I.N., Nordin, N. and Omar, W.A.W. (2017), "Innovation capability and firm performance relationship: a study of pls-structural equation modeling (Pls-Sem)", *International Journal of Organization & Business Excellence*, Vol. 2 No. 1, pp. 39-50.
- Namiki, N. (1988), "Export strategy for small business", *Journal of Small Business Management*, Vol. 26 No. 2, p. 32.
- Nicolaou, A.I. (2000), "A contingency model of perceived effectiveness in accounting information systems: organizational coordination and control effects", *International Journal of Accounting Information Systems*, Vol. 1 No. 2, pp. 91-105.
- OECD/ERIA (2018), *SME Policy Index Asean 2018 Boosting Competitiveness and Inclusive Growth*, OECD Publishing, Paris/Economic Research Institute for ASEAN and East Asia, Jakarta.
- Parnell, J.A. (2013), "Uncertainty, generic strategy, strategic clarity, and performance of retail SMEs in Peru, Argentina, and the United States", *Journal of Small Business Management*, Vol. 51 No. 2, pp. 215-234, doi: [10.1111/jsbm.12010](https://doi.org/10.1111/jsbm.12010).

- Pollard, C.E. and Morales, M. (2015), "Exploring the impact of aligning business and IS strategy types on performance in small firms", *Journal of Small Business*, Vol. 25 No. 1, pp. 26-45.
- Porter, B. (1980), *Competitive Strategy*, Free Press, New York.
- Porter, M.E. (1985), *Competitive Advantage: Creating and Sustaining Superior Performances*, Free Press, New York.
- Prajogo, D.I. and Ahmed, P.K. (2006), "Relationships between innovation stimulus, innovation capacity, and innovation performance", *R&D Management*, Vol. 36 No. 5, pp. 499-515.
- Robinson, W.T. and Fornell, C. (1985), "Sources of market pioneer advantages in consumer goods industries", *Journal of Marketing Research*, Vol. 22 No. 3, pp. 305-317.
- Roper, S. and Love, J.H. (2002), "Innovation and export performance: evidence from the UK and German manufacturing plants", *Research Policy*, Vol. 31 No. 7, pp. 1087-1102.
- Ruiz-Palomo, D., Diéguez-Soto, J., Duréndez, A. and Santos, J.A.C. (2019), "Family management and firm performance in family SMEs: the mediating roles of management control systems and technological innovation", *Sustainability*, Vol. 11 No. 14, doi: [10.3390/su11143805](https://doi.org/10.3390/su11143805).
- Sabegh, M.A.J. and Motlagh, S.M. (2012), "The role and relevance of IT governance and IT capability in business - IT alignment in medium and large companies", *Business and Management Review*, Vol. 2 No. 6, pp. 16-23, available at: [http://www.businessjournalz.org/bmr%0Ahttp://www.businessjournalz.org/articlepdf/BMR-2513aug2\(6\)12c.pdf](http://www.businessjournalz.org/bmr%0Ahttp://www.businessjournalz.org/articlepdf/BMR-2513aug2(6)12c.pdf).
- Sabherwal, R. and Chan, Y.E. (2001), "Alignment between business and IS strategies: a study of prospectors, analyzers, and defenders", *Information Systems Research*, Vol. 12 No. 1, pp. 11-33.
- Sajady, H., Dastgir, M. and Hashem Nejad, H. (2008), "Evaluation of the effectiveness of accounting information systems", *International Journal of Information Science and Management*, Vol. 6 No. 2, pp. 49-59.
- Scott, T.W. and Tiessen, P. (1999), "Performance measurement and managerial teams", *Accounting, Organizations and Society*, Vol. 24 No. 3, pp. 263-285.
- Singh, R.K., Garg, S.K. and Deshmukh, S.G. (2010), "The competitiveness of SMEs in a globalized economy: observations from China and India", *Management Research Review*, Vol. 33 No. 1, pp. 54-65, doi: [10.1108/01409171011011562](https://doi.org/10.1108/01409171011011562).
- Slater, S.F., Olson, E.M. and Hult, G.T.M. (2006), "Research notes and commentaries the moderating influence of strategic orientation on the strategy formation capability - performance relationship", Vol. 1231, pp. 1221-1231, doi: [10.1002/smj](https://doi.org/10.1002/smj).
- Sok, P., O'Cass, A. and Sok, K.M. (2013), "Achieving superior SME performance: overarching role of marketing, innovation, and learning capabilities", *Australasian Marketing Journal*, Vol. 21 No. 3, pp. 161-167, doi: [10.1016/j.ausmj.2013.04.001](https://doi.org/10.1016/j.ausmj.2013.04.001).
- Sori, Z.M. (2016), "Accounting information systems (AIS) and knowledge management: a case study", *American Journal of Scientific Research*, Vol. 4 No. 4, pp. 36-44.
- Soudani, S.N. (2012), "The usefulness of an accounting information system for effective organizational performance", *International Journal of Economics and Finance*, Vol. 4, No. 5, pp. 136-145, doi: [10.5539/ijef.v4n5p136](https://doi.org/10.5539/ijef.v4n5p136).
- Swamidass, P.M. and Newell, W.T. (1987), "Manufacturing strategy, environmental uncertainty and performance: a path analytic model", *Management Science*, Vol. 33 No. 4, pp. 509-524.
- Velcu, O. (2010), "Information and management strategic alignment of ERP implementation stages: an empirical investigation", *Information and Management*, Vol. 47 No. 3, pp. 158-166, doi: [10.1016/j.im.2010.01.005](https://doi.org/10.1016/j.im.2010.01.005).
- Wakasugi, R. and Koyata, F. (1997), "R&D, firm size and innovation outputs: are Japanese firms efficient in product development?", *Journal of Product Innovation Management*, Vol. 14 No. 2, pp. 383-392.

- Williams, R.I. Jr., Pieper, T.M., Kellermanns, F.W. and Astrachan, J.H. (2018), "Family firm goals and their effects on strategy, family and organization behavior: a review and research agenda", *International Journal of Management Reviews*, Vol. 20, pp. S63-S82.
- Wolff, J.A. and Pett, T.L. (2006), "Small-Firm performance: modeling the role of product and process improvement", *Journal of Small Business Management*, Vol. 44 No. 2, pp. 268-284.
- Woodside, A.G., Sullivan, D.P. and Trappey, R.J. III. (1999), "Assessing relationships among strategic types, distinctive marketing competencies, and organizational performance", *Journal of Business Research*, Vol. 45 No. 2, pp. 135-146.
- Zaltman, G., Duncan, R. and Holbek, J. (1973), *Innovations and Organizations*, John Wiley & Sons, New York.

Corresponding author

Lyna Latifah can be contacted at: lyna.unnes@gmail.com, lyna.latifah@mail.unnes.ac.id

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com