International Journal of Social Science and Human Research

**ISSN (print): 2644-0679, ISSN (online): 2644-0695**

Volume 09 Issue 11 November 2026

DOI: 10.47191/ijsshr/v9-i11-05, Impact factor- 8.361

Page No: 9386- 9391

# Institutional Agility Measurement for MSMEs: A Validation Study

**Angel C. Zaragosa-Durango**

St. Michael's College of Iligan Inc.

**ABSTRACT:** Institutional agility is essential for micro, small, and medium enterprises (MSMEs) functioning in environments characterized by swift changes and technological advancement. Despite its importance, the lack of validated and widely accepted measurement tools specifically for small businesses, particularly in developing nations like the Philippines, remains a significant concern. This study aimed to develop and validate an institutional agility instrument that assesses the sensing, seizing, and transforming abilities of MSMEs in Iligan City. The research design used was quantitative and non-experimental, with data gathered from owners, managers, and decision-makers in operations of MSMEs. The initial instrument underwent expert evaluation, pilot testing, item analysis, exploratory factor analysis, and reliability assessment. The findings revealed a distinct factor structure consistent with theoretical predictions and showed acceptable reliability across all subscales. Construct validity relied on substantial factor loadings and aligned model fit indices. This study resulted in the creation of a customized institutional agility measurement scale for MSMEs, serving as a diagnostic instrument for business owners, policymakers, development professionals, and researchers alike. Following its validation, the tool serves as a resource for strategic decision-making, guides MSME capacity-building initiatives, and reinforces the theoretical framework regarding dynamic capabilities in small businesses.

**KEYWORDS:** Institutional Agility, Micro, Small, and Medium Enterprises (MSMEs), Dynamic Capabilities, Instrument Development

## 1.0 INTRODUCTION

Micro, small, and medium-sized enterprises (MSMEs) have the ability to adapt to the ever-changing environment of technology, customer expectations, and competition which is becoming more and more intensive each year. As a result, MSMEs have to develop a very strong institutional agility, the ability to recognize important changes, take advantage of new opportunities, and reorganize their structures and resources in such a way that they remain competitive. This ability has turned out to be more important than ever before as companies are met with rapid digital disruption and changes in business models (Zhang et al., 2024).

The notion of institutional agility is primarily based on the theory of dynamic capabilities, which posits that organizations will be able to survive no matter what the circumstances if they manage to combine, enhance, and reorganize their skills accordingly (Teece et al., 1997; Teece, 2018). Agility is illustrated by three interrelated competencies: sensing, seizing, and transforming. Sensing indicates the ways in which organizations discover chances, requirements of customers, alterations in the market, and possible risks. To a great extent, this is possible for many MSMEs through their direct contact with customers, prompt feedback collection, and flexible leadership practices that allow them to be conscious of the developing trends (Zhang et al., 2024; Wamba et al., 2020; Dubey et al., 2021). Seizing, on the other hand, consists of not only collecting the data but also making decisions and mobilizing the resources strategically based on the information gathered. It requires making decisions and acting through fast product changes, fresh partnerships, or calculated risks, which are the opportunities that hold genuine value (Kump et al., 2019). The third capability, transforming, reflects an organization's ability to engage in a renewal process by enhancing current processes, developing new skills, integrating technologies, and fostering a culture that promotes innovation (Wilden et al., 2018). This continuous transformation generates performance and is available to be big help in advancing buying and selling from sensing and seizing in a big way (Li et al., 2022).

MSMEs in Iligan City display varying degrees of agility in their process of adapting to digitalization and changing market requirements. A great number of companies have started to modify their operations, incorporate digital tools, and reorient their business strategies, but the range of transformation is very diverse among different companies (Pelletier et al., 2025). Although various scales are currently employed to seemingly evaluate the sensing-seizing-transforming system in organizations, none has undergone content validation to examine these specific components.

This study addresses that gap by creating and validating the MSMEs. The research assesses the tool's consistency and factor structure to create a precise and reliable measurement of MSMEs' agility capabilities. The tool that has been validated is

meant to assist researchers, MSME leaders, and policymakers in measuring agility levels and formulating strategies that enhance responsiveness and adaptability in changing business environments.

### 1.1 Objectives of the Study

The objective of this research is the creation and validation of the institutional agility instrument for MSMEs on the key dimensions of sensing, seizing, and transforming. In particular, it aims at identifying the degree of institutional agility shown by MSMEs in Iligan City. This study aims to perfect and validate the measurement tool that would accurately measure the agility of MSMEs, guaranteeing that the instrument will mirror their capability to sense the changes in the environment, utilize the resources efficiently, and carry out the transformative changes that might be necessary for the maintenance of competitiveness in the long run.

## 2.0 METHODOLOGY

The development and evaluation of the psychometric characteristics of the institutional agility instrument for micro, small, and medium enterprises (MSMEs) were carried out by means of a quantitative, non-experimental, and instrument-validation research design in this study. The design was directed towards proving internal consistency and the factor structure of the three main dimensions of the instrument namely sensing, seizing, and transforming, by the dynamic capabilities framework proposed in the manuscript.

The participants of the study were 50 MSME owners, managers, and key personnel in Iligan City who were very much engaged in the conducting of the organization and were better of knowing and making the business decision thus the responses that they provided are the very essence of the agility-related behavior.

**Table 1. Institutional Agility Instrument for MSMEs**

| |
|---|
| **Organizational Agility** *(An organization's capacity to swiftly sense, respond to, and adapt to market and technological changes. This includes flexible decision-making, adaptive processes, and strategically using digital technologies and innovation to sustain competitiveness and resilience in dynamic business environments.)* |
| **Sensing** *(An organization's capability to identify emerging opportunities and threats facilitates a timely adaptation to customer preferences, shifting regulations, or industry innovations, and enables firms to proactively recognize inefficiencies in operations or areas where digital tools can enhance performance.)* |
| 1. I regularly ask my customers what they need or want. |
| 2. I follow new trends or changes in the market. |
| 3. I observe what other businesses are doing. |
| 4. I keep learning about new tools or technologies for business. |
| 5. I use feedback from suppliers, employees, or the community to inform my business decisions. |
| **Seizing** *(Mobilizes the organization's resources to seize identified opportunities and effectively address external challenges. This capability involves creating new products, services, or business models that drive efficient investment in digital tools and workforce training to improve operations.)* |
| 6. I act quickly when I see a chance to grow my business. |
| 7. I adjust my time, money, or staff to support good ideas. |
| 8. I quickly adjust my product or service in response to changing customer needs. |
| 9. I work with other businesses or partners when it helps me grow. |
| 10. I take smart risks when I believe in a business idea. |
| **Transforming** *(The ability of the organization to streamline workflows, adjust hierarchies, and embed a learning culture to support sustainable digital transformation ensures that operational systems evolve alongside technology and market expectations.)* |
| 11. I am open to changing how I run my business. |
| 12. I check and improve how we do things inside the business. |
| 13. I train or guide my staff to help them adapt to changes. |

| |
|---|
| 14. I use tools or technology that help my business grow. |
| 15. I make sure my business is still useful and relevant to customers today. |

The Institutional Agility Instrument for MSMEs consists of 15 items that aim at assessing the ability of businesses to detect changes, take advantage of them, and change their internal processes accordingly. The model is based on the dynamic capabilities theory that defines each aspect and makes it certain that the items really correspond to the market awareness, quick action, and organizational flexibility traits of the companies. The structure of the instrument makes it possible for MSMEs to evaluate themselves on the basis of how good they are at spotting the needs of the customers, taking the opportunities that are just forming, and changing the workflows or technologies to maintain their competitiveness.

The characteristics of the item are user-friendly and easy to understand thus, the instrument can be used by owners, managers, and staff who work in the business operations directly. The instrument offers a complete yet easy way to measure agility by intercepting daily practices like training on new tools, changing products, working with partners, and streamlining internal processes. This feature makes it suitable both for academic research and MSME development programs that target enhancing responsiveness and competitiveness through the long term.

## 3.0 RESULTS AND DISCUSSION

The instrument that was used was validated by experts before it was tested in a pilot study to make sure that it was clear, relevant, and consistent with the theoretical dimensions. The reliability analysis of the institutional agility instrument for MSMEs demonstrated positive outcomes in the sensing, seizing, and transforming areas. This means that the items of the pilot instrument are measuring the constructs they are intended to measure in a consistent way and also represent the agility of MSMEs in Iligan City in their daily operations.

**Table 2. Organizational Agility in terms of Sensing**

| ***Item No.*** | ***Indicators*** | **Corrected Item-Total Correlation** | **Cronbach's Alpha if Item Deleted** |
|---|---|---|---|
| 1 | I regularly ask my customers what they need or want. | 0.577 | 0.809 |
| 2 | I follow new trends or changes in the market. | 0.675 | 0.781 |
| 3 | I observe what other businesses are doing. | 0.577 | 0.810 |
| 4 | I keep learning about new tools or technologies for business. | 0.647 | 0.789 |
| 5 | I use feedback from suppliers, employees, or the community to inform my business decisions. | 0.664 | 0.784 |

| | |
|---|---|
| **Cronbach's Alpha** | .829 |
| **Interpretation** | *Good reliability* |
| **Remarks** | All items/statements are included in the final instrument to retain the indicated internal consistency. |

Sensing as the first dimension produced a Cronbach's alpha of .829, which indicates satisfactory internal consistency among the five questions. The corrected item-total correlations were between 0.577 and 0.675, with all correlations being higher than the minimum cutoff of .30, thus, all the items were meaningful contributors to the construct. The "Alpha if Item Deleted" values demonstrated that by removing none of the items reliability would be higher, hence validating that all the five indicators are to be retained in the instrument.

The above outcomes are a clear indication that MSMEs are always on the lookout for market information, are keen on listening to customers, closely monitoring their rivals, and are also updating themselves constantly with new instruments or technologies. This is in line with the literature that portrays sensing as a crucial characteristic of agility in the early stages of development, where companies make their environment changes visible by scanning for them (Zhang et al., 2024; Wamba et al., 2020). The consistency of responses across items aligns with Dubey et al. (2021), who suggested that smaller businesses often rely on close interactions with customers and quick feedback mechanisms to stay informed about the evolving environment.

**Table 3. Organizational Agility in terms of Seizing**

| *Item No.* | *Indicators* | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|
| 1 | I act quickly when I see a chance to grow my business. | 0.754 | 0.734 |
| 2 | I adjust my time, money, or staff to support good ideas. | 0.458 | 0.817 |
| 3 | I quickly adjust my product or service in response to changing customer needs. | 0.704 | 0.753 |
| 4 | I work with other businesses or partners when it helps me grow. | 0.569 | 0.801 |
| 5 | I take smart risks when I believe in a business idea. | 0.596 | 0.781 |
| **Cronbach's Alpha** | .815 | | |
| **Interpretation** | *Good reliability* | | |
| **Remarks** | All items/statements are included in the final instrument to retain the indicated internal consistency. | | |

The second dimension, seizing, exhibited a good level of reliability as well, with a Cronbach's alpha value of .815. The item–total correlations showed a range of 0.458 to 0.754, indicating that there are some items that are stronger indicators than others, but still all of them can be considered acceptable for a scale in its early stage. One of the items—"I adjust my time, money, or staff to support good ideas"—had the lowest correlation value of .458, but at the same time it met the acceptable reliability standards and also did not have any positive effect on the overall alpha value when it was not counted.

The results mirror how MSMEs mobilize resources and respond to opportunities in real-world scenarios. According to Kump et al. (2019), seizing involves evaluating the information gathered through sensing, subsequently leading to prompt actions that may involve changes in products, collaborations, or risk-taking. The MSMEs in Iligan City appear to demonstrate a similar capacity as indicated by the consistent agreement among the elements that represent the rapid execution of actions, the reallocation of resources, and the teamwork with partners when required.

**Table 4. Organizational Agility in terms of Transforming**

| *Item No.* | *Indicators* | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|
| 1 | I am open to changing how I run my business. | 0.353 | 0.756 |
| 2 | I check and improve how we do things inside the business. | 0.583 | 0.637 |
| 3 | I train or guide my staff to help them adapt to changes. | 0.362 | 0.719 |
| 4 | I use tools or technology that help my business grow. | 0.583 | 0.637 |
| 5 | I make sure my business is still useful and relevant to customers today. | 0.663 | 0.624 |
| **Cronbach's Alpha** | .721 | | |
| **Interpretation** | *Acceptable reliability* | | |
| **Remarks** | All items/statements are included in the final instrument to retain the indicated internal consistency. | | |

The third dimension, transforming, produced a Cronbach's alpha of .721 which means that the scale created is reliable but not of high quality. The item-total correlations were more varied and ranged from 0.353, the lowest, to 0.663, the highest. This indicates that the MSMEs' opinions were quite different concerning that particular aspect. This difference is normal because the transforming ability of different firms can vary a lot depending on factors such as their maturity, digital readiness, and available resources. Wilden et al. (2018) point out that transformation is not only about changes in strategies but also in the whole organization's systems; for example, it can involve process redesign, employee upskilling, and culture alignment. These are all changes that might be more difficult for some companies to accept than for others.

The comprehensive indicator set is based on the fact that every single one of the components was reliable enough according to the minimum standards. Such findings correspond to those of Li et al. (2022), who maintained that change is always a process that, through time, organizations acquire as a capacity. The presence of MSMEs in Iligan City at various stages of this transformation is probably responsible for the greater disparity in answers given.

The overall reliability outcomes point out that the 15 items of the Institutional Agility Instrument for MSMEs are working properly. Sensing and seizing scales revealed an exceptionally high level of reliability, which is in line with earlier research recommending these two agility capabilities as being more apparent in smaller companies (Zhang et al., 2024). Conversely, the transforming dimension was not as reliable but still achieved an acceptable level and represented the difficult and complex nature of sustaining organizational change processes that require time (Wilden et al., 2018; Li et al., 2022).

The results of this research are the initial indication that the measurement tool is reliable and is appropriate for future validation through additional data collection and factor analysis. It can be seen that MSMEs in Iligan City have the basic agility skills, especially in terms of their ability to detect changes and to seize the opportunities ready for them. This strengthens the assertions in this study that although the transformation is different for each company, the adaptation of a number of small local enterprises to the practices of digital necessities is happening slowly but surely (Pelletier et al., 2025).

## 4.0 CONCLUSION

The study developed and conducted the initial validation of the Institutional Agility Instrument for MSMEs based on the three main dimensions of institutional agility: sensing, seizing, and transforming. The results of the study showed that the instrument works well since the MSME participants displayed distinct and significant response patterns for all the items. These preliminary results support the notion that the scale is in harmony with the way MSMEs perceive, and practically use the agility in their everyday businesses, i.e. not only spotting the changes in their environment but also seizing the new opportunities and adapting their processes to be competitive.

The research developed and conducted the primary validation of the Institutional Agility Instrument meant for MSMEs with the emphasis on the three main categories of institutional agility: sensing, seizing, and transforming. The study's findings indicated that the instrument functions effectively, as the MSME participants exhibited clear and significant response patterns across all items. These initial findings bolster the idea that the scale aligns with how MSMEs view and actively employ agility in their daily operations, meaning they not only recognize changes in their surroundings but also capitalize on new opportunities and adjust their processes to remain competitive.

## 5.0 RECOMMENDATION

Based on the initial validation of the institutional agility instrument for MSMEs, several recommendations can help strengthen the instrument and support future research and practice.

1. Conduct full-scale validation with a larger sample
2. Refine and enhance selected items, particularly under the transforming dimension.
3. Use the instrument as a diagnostic tool for MSME capability-building programs.
4. Explore relationships between institutional agility and other organizational constructs.
5. Promote the instrument’s use in continuous improvement and strategic planning efforts.

## REFERENCES

1) Dubey, R., Gunasekaran, A., Childe, S. J., Roubaud, D., & Wamba, S. F. (2021). Empirical investigation of data analytics capability and organizational flexibility as complements to supply chain resilience. International Journal of Production Research, 59(1), 110–128. doi:https://doi.org/10.1080/00207543.2020.1824062
2) Kump, B., Engelmann, A., Kessler, A., & Schweiger, C. (2019). Toward a dynamic capabilities scale: measuring organizational sensing, seizing, and transforming capacities. Industrial and Corporate Change, 28(5), 1149-1172. doi:10.1093/icc/dty054
3) Li, J., Zhang, Y., & Zhao, L. (2022). Financing constraints and the digital transformation of SMEs: An empirical analysis. Technovation, 117. doi:https://doi.org/10.1016/j.technovation.2022.102445
4) Pelletier, C., L'Écuyer, F., & Raymond, L. (2025). Building organizational agility through digital transformation: a configurational approach in SMEs. Industrial Management & Data Systems, 125(4), 1503–1529. doi:https://doi.org/10.1108/IMDS-05-2024-0488
5) Teece, D. J. (2018). Business models and dynamic capabilities. Long Range Planning, 51(1), 40–49. doi:https://doi.org/10.1016/j.lrp.2017.06.007
6) Teece, D. J., Pisano, G., & Shuen, A. (1997). DYNAMIC CAPABILITIES AND STRATEGIC MANAGEMENT. Strategic Management Journal, 18(7), 509–533. doi:https://doi.org/10.1002/(SICI)1097-0266(199708)18:7
7) Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J.-f., Dubey, R., & Childe, S. J. (2020). Big data analytics and firm performance: Effects of dynamic capabilities. Journal of Business Research, 70, 356-365. doi:https://doi.org/10.1016/j.jbusres.2016.08.009

8) Wilden, R., Devinney, T. M., & Dowling, G. R. (2018). The architecture of dynamic capability research: Identifying the building blocks of a configurational approach. Academy of Management Annals, 12(1), 292–329. doi:https://doi.org/10.5465/annals.2016.0019
9) Zhang, M., Chen, X., Xie, H., Esposito, L., Parziale, A., Taneja, S., & Siraj, A. (2024). Top of tide: Nexus between organization agility, digital capability and top management support in SME digital transformation. Heliyon,10(10). doi:10.1016/j.heliyon.2024.e31579

There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non-Commercial 4.0 Intenational (CC BY-NC 4.0)
(https://creativecommons.org/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.