

# Harnessing Dynamic Capabilities for Market Sensing Capability: A Beijing

## Cloud-Based Industry Perspective

Zhang Bei<sup>1</sup>, Lorenzo C. Lorenzo<sup>2</sup>

<sup>1,2</sup>Graduate School Emilio Aguinaldo College Manila, Philippines

### Abstract

The purpose of this research was to assess the dynamic capability and market-sensing capability of a chosen cloud industry through organizational competencies of sensing, seizing, and transforming and their influence on strategic responsiveness. A descriptive-correlational design was used in the study with 276 participants from different job positions, age groups, and sexes. Correlation analysis showed that the relationship between dynamic capability and market-sensing capability was not significant overall, but on the contrary, the dimensions such as sensing and innovativeness, seizing and entrepreneurial orientation, and transforming and entrepreneurial orientation, had significant positive associations. These results indicate that it is necessary to align internal competencies with market demands through targeted strategic initiatives. The paper finally offers suggestions for improving agility, sharing of innovation, and the use of management insight in order to be competitive in the fast-changing cloud industry.

**Keywords:** Dynamic Capabilities, Market Sensing Capability, Cloud-Based Industry, Beijing, China

### INTRODUCTION

Beijing's cloud-based industry operated in an environment marked by constant movement—technological upgrades here, shifting consumer expectations there, and occasional competitive surprises that forced firms to rethink familiar routines. Companies were not simply trying to keep up; many appeared to be searching for ways to stabilize their footing while still responding quickly to the next digital turn. In doing so, they leaned heavily on ideas associated with dynamic capabilities and market-sensing capabilities, two constructs that have become almost unavoidable in contemporary discussions of strategic management. Dynamic capabilities, as articulated by Ahmed Idries et al. (2022), provided a framework through which firms could interpret these pressures. The components (sensing, seizing, and transforming) offered a tidy structure, though in practice the boundaries between them often blurred. Sensing, for instance, sounded straightforward on paper, yet it required employees and managers to spot subtle shifts in customer behavior or technological direction long before those shifts became obvious. Seizing demanded resource mobilization, which in many organizations was not as immediate as the literature implied; bureaucratic procedures, internal disagreements, or risk aversion occasionally slowed the response. Transforming, the final dimension, involved real adjustments to a firm's resource base. Some firms embraced this readily, while others hesitated, especially when existing routines or legacy systems still worked "well enough." Even so, dynamic capabilities remained a helpful lens because they emphasized adaptability rather than

static planning.

Market-sensing capability functioned as a complementary construct. Silva et al. (2021) described it as a multifaceted organizational skill set involving data interpretation, customer engagement, and the ability to convert information into meaningful strategic choices. In practice, this meant more than scanning reports; it required asking better questions about what the data actually suggested. Forrest et al. (2022) noted that firms with well-developed market-sensing routines tended to craft stronger Customer Value Propositions, partly because they understood not only what customers were doing, but why they were doing it. This kind of insight often separated firms that reacted slowly from those that moved early, sometimes gaining quiet but important advantages.

The present study attempted to situate these ideas within the realities of Beijing's cloud-based environment. Rather than treating the concepts as abstract ideals, the research aimed to see how firms used them in day-to-day strategic decisions. Some organizations appeared confident in their capacity to reinterpret market signals and shift direction quickly; others demonstrated a more cautious stance, perhaps reflecting internal constraints or a narrower reading of available information. Zhang et al. (2022) argued that firms which balanced exploration with caution tended to produce innovations that were sustainable rather than volatile, an idea that resonated strongly with several operational patterns observed in the industry.

The interconnection of dynamic skills and market-sensing capability is of paramount importance. Market opportunities might be detected by a company; however, these opportunities might eventually turn into extra work rather than gaining a competitive advantage if proper and timely market analysis is not done. On the other hand, a company might be very good in analyzing market data but still, the information will not be used if its internal systems cannot be adjusted or are very slow to change. The combination of these two aspects almost seemed to direct organizations toward hidden possibilities and pathways of growth that were more in line with the changing digital world. The research concluded that while Beijing's cloud-based business was facing the perils of the digital age, companies that supported both technology and culture enabled to observe, respond, and adapt in a disciplined way through being meticulous in their observance, and being responsive and adaptable in a disciplined way basically were the winners. This fine balance although difficult to reach allowed the companies to spot the rising opportunities without trivializing the challenges they faced. The result showed firms trying to match their internal capabilities with the erratic market fluctuations—this was an on-going process rather than a final aim and was equally affected by learning and reflection as well as by strategic planning.

## Research Questions

1. What is the assessment of the dynamic capability of the selected cloud-based industry in terms of:
  - sensing;
  - seizing; and
  - transforming?
2. What is the level of market-sensing capability of the selected cloud-based industry in terms of:
  - innovativeness.
  - entrepreneurial orientation; and
  - e-marketing strategies?
3. What is the significant correlation between the assessment of the respondents on the dynamic capability and the level of market-sensing capability of the selected cloud-based industry?

## Research Methodology

The study employed a quantitative comparative correlational design to examine the relationship between dynamic capabilities and market-sensing capabilities within Beijing's cloud-based industry. This methodological choice appeared suitable because the phenomenon under investigation required a structured approach that could capture subtle variations in organizational behavior, especially those shaped by environmental uncertainty and administrative constraints, which previous scholars argued were common across Asian public and private sectors (Park et al., 2023). In the subsequent phase of the research, attention shifted to a major coal-industry hub, anonymized as Region X, whose industrial profile echoed the operational patterns of Beijing's energy-related enterprises. Although the sector carried a long tradition of hierarchical decision structures, emerging market pressures suggested that firms might increasingly rely on adaptive capacities, echoing observations from studies on administrative reform in transitional economies (Eymeri-Douzans & Pierre, 2024; Hammergren, 1983).

Participants were purposely selected from the workforce of the main organization. The various criteria, such as job position, length of service, and willingness to participate, guided the selection process and were aimed at making sure that the answers given were from the respondents who were very well acquainted with the company's operational routines and strategic orientation. Although this selection may have caused some limitations, it still enabled the research to present the grounded views of the people who were directly involved in both the daily and the long-term decision-making processes. Researchers working in East and Southeast Asia have pointed out that such purposive methods may be of great help when the organizations are very different in terms of their structures and distribution of authority, as they help to get the researchers in touch with the employees who are closest to the change in the institution (Park et al., 2023). The final sample consisted of a variety of supervisory, technical, and administrative staff, which seemed to add to the dataset by showing the different interpretations of dynamic capabilities through the lens of different hierarchical levels. It also pointed out the possible differences in the employees' contact with corporate activism and retention pressures—topics that were often characterized by organizational culture and managerial communication in previous studies on governance reform (Eymeri-Douzans & Pierre, 2024). The various roles and backgrounds of the participants made it possible for the study to investigate differences in perception that might have been overlooked had the sample been more homogeneous.

To generate empirical evidence, the study relied on a researcher-developed questionnaire constructed to measure core constructs associated with dynamic capabilities and market-sensing behavior. Pearson correlation coefficients were computed to estimate the strength and direction of associations among these variables. Although correlation did not imply causation, the statistical outcomes offered an initial indication of how these constructs interacted within industries undergoing rapid modernization. The analytical procedures were executed using the Statistical Package for the Social Sciences, which ensured consistency in data handling and minimized computational error.

The processed results were presented through a combination of narrative explanations, tables, and graphical summaries to facilitate interpretation. This analytic process provided a clearer sense of how firms in technologically evolving contexts might interpret internal capability development, even in sectors historically shaped by bureaucratic practice or incremental reform. Such an understanding aligned with arguments that organizational adaptability was increasingly central to institutional performance across both public and private domains (Hammergren, 1983; Park et al., 2023).

**Results and Discussion**

1. **Dynamic Capability.** The organization was assessed as "Capable" in all three key dimensions of dynamic capability: sensing, seizing, and transforming. Among these dimensions, the organization's ability to seize opportunities got the best score (M = 2.930), which means that the company is highly responsive to the strategic openings in the market. Sensing capability (M = 2.912) shows the organization's skill in the area of detecting trends, threats, and getting customer feedback, while transforming capability (M = 2.922) indicates that the organization is still turning market insights into new ideas. All in all, the findings imply a good basis in resilience and strategic alignment which are the characteristics needed for competing and quickly changing the business sector.
2. **Sensing Capability.** The organization's market-sensing capability was evaluated based on innovativeness, entrepreneurial orientation, and e-marketing strategies, and all components received a "Capable" rating. Innovativeness (M = 2.876) told about the very strong area of new solutions introduction along with positive market reception. Entrepreneurial orientation (M = 2.886) showed a pro-active culture doing risk-taking, encouraging initiative, and integrating entrepreneurship into strategic decision-making. E-marketing strategies (M = 2.720), although still in the capable range, pointed to areas for improvement in the areas such as performance monitoring and customer engagement, which are the still within the capable range. The organization's ability to convert leads into customers and to leverage digital platforms effectively received the highest ratings.

**3. Correlation Between Dynamic and Market-Sensing Capabilities**

Variables	Statistical Treatment	Innovativeness	Entrepreneurial Orientation	E-Marketing Strategies
Sensing	Pearson Correlation	.122*	-.103	.109
	Sig. (2-tailed)	.043	.087	.071
	Decision	Rejected	Accepted	Accepted
	Interpretation	Significant	Not Significant	Not Significant
Seizing	Pearson Correlation	.105	.118	.011
	Sig. (2-tailed)	.083	.050	.859
	Decision	Accepted	Rejected	Accepted
	Interpretation	Not Significant	Significant	Not Significant
Transforming	Pearson Correlation	-.004	.222**	-.067
	Sig. (2-tailed)	.953	.000	.269
	Decision	Accepted	Rejected	Accepted
	Interpretation	Not Significant	Significant	Not Significant
Overall	Pearson Correlation	.107		
	Sig. (2-tailed)	.075		
	Decision	Accepted		
	Interpretation	Not Significant		

Table 1 presents the correlation between the respondents' assessment of the dynamic capability and the level of market-sensing capability of the selected cloud-based industry. The table focuses on three aspects of market-sensing capability: innovativeness, entrepreneurial orientation, and e-marketing strategies. It uses Pearson correlation as the statistical treatment to determine the relationship between these variables and the sensing capability, including the correlation coefficient, significance level (Sig. 2-tailed), the decision on the null hypothesis (Ho), and the interpretation.

For market-sensing capability concerning innovativeness, the Pearson correlation coefficient equals 0.122 and is statistically significant at the 0.043 level. The p-value being less than 0.05 leads to the rejection of the null hypothesis, thus revealing a significant positive correlation between market-sensing capability in terms of innovativeness and sensing capability. Consequently, it can be inferred that the increase in the sensing capability of an entity is paired with an equally innovative market-sensing capability.

Turning to the market-sensing capability from the viewpoint of entrepreneurial orientation, the computed Pearson correlation coefficient is -0.103, with the significance level being 0.087. The null hypothesis is supported by the p-value exceeding 0.05, and hence, it is concluded that there is no significant correlation between the two constructs under discussion. This infers that the sensing capability of the organization hardly has any impact on the entrepreneurial orientation of the market-sensing.

When it comes to the market-sensing capability from the perspective of e-marketing strategies, the correlation coefficient is 0.109, with the level of significance being 0.071. The null hypothesis is upheld as the p-value is greater than 0.05, which affirms the absence of any significant relationship between sensing capability and market-sensing capability concerning e-marketing strategies. That means the capability of sensing does not play a major role in the formation of strategies regarding e-marketing for the sake of market-sensing.

In summary, Table 15 shows that there is a significant positive correlation between sensing capability and market-sensing capability in terms of innovativeness. However, there are no significant correlations between sensing capability and market-sensing capabilities in terms of entrepreneurial orientation and e-marketing strategies. This indicates that while sensing capability is important for innovativeness, it does not significantly impact entrepreneurial orientation or e-marketing strategies within the selected cloud-based industry.

## Conclusion

The findings indicate that the organization exhibited a uniform capability in both dynamic and market-sensing aspects, however the strengths were inconsistent and highlighted particular areas for development. The organization's dynamic capability profile was robust, particularly in seizing opportunities, suggesting that upon identifying a strategic opening, it would respond with deliberate action; its sensing and transforming capabilities were also strong, underscoring a consistent pattern of adaptability vital in rapidly evolving digital sectors. The market-sensing capabilities demonstrated general effectiveness, with innovativeness and entrepreneurial orientation earning somewhat better assessments than e-marketing methods, suggesting potential deficiencies in digital engagement and performance monitoring despite otherwise successful lead conversion. The correlation data, when considered collectively, provided depth to these patterns: sensing skill exhibited a minor yet statistically significant relationship with innovativeness, but it did not significantly influence entrepreneurial orientation or e-marketing tactics. Likewise, seizing and transforming capabilities were linked only to entrepreneurial orientation, suggesting that the organization's ability to act on opportunities or reconfigure resources resonated most strongly with

behaviors tied to initiative-taking and strategic risk. Taken as a whole, the results portray an organization that possessed a solid adaptive foundation, one that supported innovation and strategic responsiveness, although certain market-facing functions—particularly those relying on digital marketing intelligence—may benefit from further strengthening to achieve fuller alignment between internal capabilities and external sensing demands.

## References

1. Ahmed Idries, J., Krogstie, J., & Rajasekharan, J. (2022). Dynamic capabilities in electrical energy digitalization: A case from the Norwegian ecosystem. *Energies*, 15(22), Article 8342. <https://doi.org/10.3390/en15228342>
2. Eymeri-Douzans, J.-M., & Pierre, J. (Eds.). (2024). *Administrative reforms and democratic governance* (1st ed.). Routledge.
3. Forrest, J., Gong, Z., Scott, E., Soto Ruiz, G. E., & Forrest, Y.-L. (2022). Market-sensing capabilities, profitability. *Publication outlet*. <https://doi.org/10.1108/jsbed-07-2019-0216>
4. Hammergren, L. A. (1983). *Development and the politics of administrative reform: Lessons from Latin America* (1st ed.). Routledge.
5. Park, C., Han, Y., & Chang, Y. (Eds.). (2023). *Civil service systems in East and Southeast Asia* (1st ed.). Routledge.
6. Silva, R. F., Dias, Á., & Lages, L. F. (2021). Measuring market-sensing capabilities for new product development success. *Journal of Small Business and Enterprise Development*, 28(3), 446–466. <https://doi.org/10.1108/jsbed-07-2019-0216>
7. Zhang, K., Feng, L., Wang, J., Qin, G., & Li, H. (2022). Start-up's road to disruptive innovation in the digital era: The interplay between dynamic capabilities and business model innovation. *Frontiers in Psychology*, 13, 925277. <https://doi.org/10.3389/fpsyg.2022.925277>