The role of service innovation in mediating entrepreneurial orientation, organizational learning capability, and organizational performance relationship: a study on Directorate General of State Assets Management, Indonesia

Rima Pusparani (a) Wahdiyat Moko (b) Sri Palupi Prabandari (c)∗

(a) Master Management Student, Faculty of Economics and Business, University of Brawijaya, Malang City, Indonesia
(bk: Management Department, Faculty of Economics and Business, University of Brawijaya, Malang City, Indonesia

ABSTRACT

In 1997, Indonesia had a severe economic crisis, which prompted the Indonesian government to face significant pressure to promptly initiate governmental reform. This study investigates the role of service innovation as a mediator in the relationship between entrepreneurial orientation, organizational learning capability, and organizational performance. The study was conducted at the Directorate General of State Assets Management (DGSAM) in Indonesia. The questionnaires were collected from a total of 226 heads of offices, specifically from the heads of sections under the vertical agency of DGSAM, which is the State Assets and Auction Service Office (Kantor Pelayanan Kekayaan Negara dan Lelang/KPKNL). Quantitative approach was employed in order to elucidate, substantiate, and exemplify the hypothesis posited in the investigation pertaining to the observed events. The statistical technique employed for data processing was Partial Least Squares Structural Equation Modeling (PLS-SEM). This study demonstrates a significant and positive correlation between entrepreneurial approach and organizational learning capability, and both service innovation and organizational success. However, it is determined that service innovation does not act as a mediator in the relationship between entrepreneurial attitude and organizational learning capability in terms of organizational performance. The anticipated outcomes of this study are expected to make significant contributions to the field of science and its associated stakeholders.

Article history:
Received 12 Sept. 2023
Received in rev. form 17 Oct. 2023
Accepted 22 October 2023

Keywords:
Public Entrepreneurship, Entrepreneurial Orientation, Organizational Learning Capability, Service Innovation, Organizational Performance

JEL Classification:
O15, L26

© 2023 by the authors. Licensee SSBNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

Introduction

In 1997, Indonesia had an economic crisis, which subsequently evolved into a multifaceted catastrophe. The current circumstances have elicited fervent calls from all segments of society for the prompt implementation of management reforms by the government. Subsequent to that, noteworthy advancements in the domains of politics, law, economics, and bureaucracy have functioned as pivotal moments marking the commencement of a period characterized by reform. In order to fulfill the public's demands for high-quality public services and effective governance, it is imperative for the government to initiate bureaucratic reform. The government's endeavors to meet these expectations are evident in the performance of organizations, a fundamental notion in the field of public sector administration and management (Brewer and Selden, 2000; Andersen et al., 2016; George and Walker, 2019).

The scholarly literature on performance management and measurement has shown substantial growth in recent decades (Van Helden & Reichard, 2013). Performance can be defined as the ability of an organization to achieve preset objectives (Rofiaty et al., 2022). Given the perpetual pursuit of optimal results by firms, the significance of performance assessment cannot be overstated (Taouab...
and Issor, 2019). Taouab and Issor (2019) assert that performance assessment serves several purposes in management. These include acquiring knowledge and discerning effective management methods, forecasting future internal and external conditions, monitoring the alignment of circumstances and behavior with organizational objectives, and facilitating timely decision-making.

Meyerhardt and Diefenbach (2012) suggest that managers and organizations operating within the public sector are entrusted with responsibilities that extend beyond the mere implementation of legislation. According to Singla et al. (2018), managers operating within the public sector bear the responsibility of fulfilling the ever-growing service demands of the community. In addition to their obligation to meet social expectations, public sector organizations are confronted with the challenge of managing resources that are progressively diminishing (Singla et al., 2018). According to Zerbinati and Souitaris (2005), in situations where financing and budgets are reduced, services tend to become more costly, and the feasibility of implementing tax hikes becomes unattainable. Consequently, public institutions may exhibit entrepreneurial activity.

Public sector entrepreneurship refers to the occurrence of innovative endeavors within public sector entities, encompassing the creation and enhancement of services, technology, administrative methods, and strategic approaches (Kearney and Meynhardt, 2016; Morris and Jones, 1999). Entrepreneurial orientation is a study variable that encompasses the entirety of an organization's or company's decision-making processes, procedures, and activities (Al Mamun and Fazal, 2018). Entrepreneurial orientation encompasses the inclination to engage in innovation, display a propensity for risk-taking, exhibit autonomous decision-making, and demonstrate a proactive and assertive approach in relation to novel market prospects (Lumpkin & Dess, 1996). The assessment of entrepreneurial orientation encompasses the elements of risk-taking, innovativeness, and proactiveness, as proposed by Miller (1983). Additionally, Lumpkin and Dess (1996) introduced two additional elements to the entrepreneurial orientation framework initially proposed by Miller (1983), specifically competitive aggressiveness and autonomy.

To effectively navigate a dynamic and evolving landscape, it is imperative for businesses to possess the capability to consistently adapt and enhance their operations (Goh and Richard, 1997). The achievement of this objective is facilitated by the use of the theoretical framework of organizational learning. According to Goh (2003), organizations that embrace a continuous learning approach promote a culture where people are encouraged to consistently acquire new skills, engage in innovation, and explore novel processes and methodologies in order to effectively pursue the organization's strategic objectives. According to Goh (2003), learning organizations have the potential to enhance organizational performance through the implementation of efficiency improvements and the provision of superior services. According to Dibella et al. (1996), the process of developing new talents while simultaneously improving current ones has the potential to enhance organizational learning.

The concept of organizational learning capacities encompasses all the methods employed by an organization and its managers to aid the process of learning (Chiva et al., 2007). The capacity to acquire knowledge through experiential learning and retain it in the face of temporal and spatial limitations can be regarded as a component of an organization's learning capability (Zhang et al., 2020). In their seminal work, Chiva et al. (2007) put forth a comprehensive framework with five distinct dimensions that encompass the organizational learning capabilities. These dimensions include experimentation, risk-taking, contact with the external environment, conversation, and participatory decision-making. The enhancement of organizational performance is facilitated by organizational learning capabilities, which aid in the cultivation and utilization of knowledge to bolster strategies that contribute to the attainment of desired organizational objectives (Goh et al., 2019). According to Zhang et al. (2020), the establishment of a learning culture and environment inside an organization enhances its organizational learning capacities, hence facilitating the effective execution of professional policies.

The existing literature on the relationship between organizational learning capability, entrepreneurial orientation, and organizational performance has yielded inconclusive results. The studies conducted by Al-Dhaafri and Alosani (2020), Al-Dhaafri et al. (2016), Rofiati (2019), and Ruba et al. (2021) collectively establish that there exists a notable correlation between entrepreneurial approach and the performance of public sector companies. In the study conducted by Balasubramanian et al. (2020), it was shown that there is no statistically significant relationship between entrepreneurial orientation and organizational performance. This phenomenon arises from the inherent nature of an entrepreneurial approach, which lacks a direct impact on non-profit public organizations, and the challenge of evaluating the success of such organizations (Swann, 2016). Previous studies conducted by Esendemir and Zehir (2017) as well as Oviedo-Garcia et al. (2014) have established that organizational learning skills have a significant role in shaping the performance outcomes of public sector organizations. In a study conducted by Lukito et al. (2016), it was determined that the impact of organizational learning capability on the performance of public sector companies was shown to be insignificant. While the identification of learning-facilitating factors is crucial, it is insufficient to ensure enhanced and sustainable organizational performance (Gomes & Wojahn, 2017).

Further inquiry is necessary to comprehend the impact of entrepreneurial orientation and organizational learning capability on the performance of public sector organizations in Indonesia, as this area has not been adequately explored in the existing literature. Researchers aim to address the existing study gap by incorporating the mediating variable of service innovation to elucidate the connection between entrepreneurial orientation, organizational learning capability, and organizational performance. According to Alosani et al. (2020) and AlShehail (2022), there exists a notable impact of innovation on the performance of public organizations. Additionally, Nguyen (2022) and Al-Shami et al. (2022) demonstrate a significant association between entrepreneurial orientation and service innovation within the public sector. Furthermore, Sutanto (2016) asserts that organizational learning capability exhibits
a significant correlation with service innovation in the public sector. Hence, the primary aim of this study is to investigate the correlation between entrepreneurial orientation, organizational learning capability, and organizational performance within public companies in Indonesia. This study endeavors to examine the research problem at hand, with the intention of making a valuable contribution to the current body of knowledge on public sector management. Moreover, it seeks to offer valuable insights to policymakers in order to improve the efficiency and efficacy of public service delivery in the context of Indonesia.

**Literature Review**

**Theoretical and Conceptual Background**

**Entrepreneurial Orientation (EO)**

According to Morris and Jones (1999), entrepreneurship refers to efforts to create new businesses using original and creative concepts based on societal needs. Due to an entrepreneur's need for autonomy to make choices and take risks, private organizations and businesses are associated with entrepreneurship. Public organizations, on the other hand, are not regarded as the ideal setting for the development of entrepreneurship because they are characterized by a culture of bureaucracy, strong political control, and stringent regulations. The significance of entrepreneurship in public organizations has, however, started to gain attention over the last few decades.

Public-sector entrepreneurship is the process of generating value for citizens by combining special combinations of public and/or private resources to take advantage of social opportunities (Morris and Jones, 1999). Morris and Jones (1999) assert that public sector organizations differ from their private sector counterparts in that they lack an economic or profit motive in favor of being driven by social and political objectives, receive funding from taxpayers, receive little market exposure, have a hard time identifying customers, offer services that have an impact on others, subject to public scrutiny, and mistake avoidance. However, Morris and Jones (1999) argue that entrepreneurship is universal and can be applied to public organizations. According to Klein et al. (2010), public entrepreneurship is manifested through a variety of activities, such as altering the institutional environment or implementation rules, forming new public organizations, developing and managing new public resources, and utilizing the excess of private organizational activities for broader gains. These activities include creating public resources and making decisions on the allocation of existing resources.

Entrepreneurial orientation reflects the organizational efforts and managerial vision necessary to foster innovation and produce value for both customers and the organization (Smith and Jambulingam, 2018). Entrepreneurial orientation shows the tendency of organizational decision-making to support entrepreneurial activities within a company (Lumpkin and Dess, 1996). Covin and Slevin (1988) assert that top-level managers in entrepreneurial businesses have an entrepreneurial management style that is exhibited in the strategic choices and operations management principles of their organizations. Risk-taking, innovativeness, and proactiveness are components of the entrepreneurship measurement used by Miller (1983). The two new dimensions of entrepreneurship—competitive aggressiveness and autonomy—were added by Lumpkin and Dess (1996) to those Miller (1983) had already established. Lumpkin and Dess (1996) explain the various dimensions of entrepreneurial orientation as follows: (1) Autonomy is related to the independent actions of individuals or teams in expressing ideas or visions and implementing these ideas/visions to completion; (2) Innovativeness reflects the company's tendency to engage in and support new ideas, novelty, experimentation and creative processes that can produce new products, services or technological processes; (3) Risk taking can be interpreted as how far managers are willing to take large and risky resource commitments, namely those that have the possibility of failure; (4) Proactiveness is demonstrated by taking initiative by anticipating and pursuing new opportunities and by participating in newly developing markets; (5) Competitive aggressiveness refers to a company's tendency to directly and intensely challenge its competitors to enter or improve their position by outperforming industry rivals in the market.

**Organizational Learning Capability (OLC)**

Organizational learning is the capability (or process) inside an organization to sustain or enhance performance based on experience (Dibella et al., 1996). In order to create change plans to enhance learning capabilities, Dibella et al. (1996) said that understanding an organization's learning orientation is a good starting point. According to Goh (2003), organizational learning is the result of individual or groups applying what they have learned in order to realize the vision and performance objectives of the organization. This process can be aided or hindered by specific management techniques and internal factors. Goh (2003) came to the conclusion that an organization's capacity to implement suitable management practices, structures, and procedures that facilitate and encourage learning is known as its learning capability.

Based on a thorough investigation of the characteristics that support organizational learning, Chiva et al. (2007) put together an article that proposes a measurement scale for these capacities. The five components of organizational learning skills were described by Chiva et al. (2007) as experimentation, risk-taking, interaction with the external environment, dialogue, and participatory decision-making. The degree to which novel suggestions and ideas are taken into consideration and treated sympathetically is referred to as experimentation. Decision-making is defined as the ability to accept ambiguous and uncertain circumstances as well as various types of problems. Interaction with the external environment is defined as the scope of relationships with the external environment, which are factors that cannot be controlled and are directly influenced by the organization. Dialogue is defined as an ongoing collective
inquiry into the processes, assumptions, and certainties that shape everyday experience. Participative decision-making is demonstrated by the influence of employees in the decision-making process.

Service Innovation (SI)

Innovation has emerged as a critical component of day-to-day operations in the service sector, and organizations that don't adapt or offer service innovation will perform poorly (Huang, 2014). In order to accomplish their objectives, public organizations that are a part of the same ecosystem as private companies must also evolve alongside other organizations (Chen et al., 2019). Based on a thorough literature review, De Vries (2019) examined various forms of innovation in the public sector, including process innovation, product and service innovation, governance innovation, and conceptual innovation. According to Chen et al. (2019), a characteristic that distinguishes the objectives of public and private organizations is the orientation of public service innovation toward the creation of public value.

Avlonitis (2001) proposed four dimensions of service innovation: operating/delivery process newness, service modification, service newness to the market, and service newness to the company. The novelty of the operation and service delivery process can take the form of technological novelty in the customer service delivery process or novelty in the service development and marketing processes. Service modification shows the evolutionary nature of new services in the form of modification, revision, and/or repositioning of previously existing company services. The newness of services in the market demonstrates the newness in the market of the company's services and service delivery methods. The novelty of the service in the company demonstrates the novelty of the service in the company and the novelty of the target market.

Empirical Review and Hypothesis Development

Relationship between entrepreneurial orientation and organizational performance

Al-Dhaafri and Alosani (2020) conducted empirical research based on resource-based view research to examine the impacts of TQM, organizational excellence, and entrepreneurial orientation on organizational performance. Results of statistical tests indicate that TQM, organizational excellence, and entrepreneurial orientation have a favorable and significant impact on organizational performance. The findings of this study can help decision-makers, practitioners, and managers become more aware of the need to internalize the research's variables in order to boost productivity within their own organizations. Al-Dhaafri et al. (2016) conducted an investigation into the influence of entrepreneurial orientation on organizational performance in the Dubai Police. TQM was included in the research model to better explain the relationship between entrepreneurial orientation and organizational performance and to resolve inconsistencies in previous research. This research reveals that entrepreneurial orientation has a significant effect on organizational performance. TQM has a significant effect on organizational performance, and entrepreneurial orientation has a significant effect on TQM.

Rofiaty's (2019) research aims to examine the influence of entrepreneurial orientation and knowledge management on innovation, strategy implementation, and organizational performance at Islamic boarding schools. The study's findings demonstrate the importance and benefit of knowledge management and entrepreneurial orientation in fostering innovation. Furthermore, knowledge management is proven to have a positive effect on strategy implementation. Finally, entrepreneurial orientation, knowledge management, and strategy implementation have a significant effect on improving Islamic boarding school performance. Ruba et al. (2021) conducted research to analyze the relationship between entrepreneurial orientation and organizational performance in Congolese higher education institutions. The study's findings demonstrate that each dimension of entrepreneurial orientation makes a unique contribution to the understanding of organizational performance. Innovation, competitive aggressiveness, and proactive behavior were found to be the best predictors of performance in Congolese higher education institutions, as they have a positive and significant influence on overall organizational performance. However, risk-taking and autonomy were found to have no significant effect on organizational performance.

The theory described, the background information, and the problem formulation are used to form the following hypothesis:

H1: Entrepreneurial orientation has a positive and significant effect on organizational performance.

Relationship between organizational learning capabilities and organizational performance

Esendemir and Zehir's (2017) study aims to examine how innovation in the educational field affects schools' performance in terms of effectiveness and efficiency from a management perspective. All aspects of innovation have a positive and significant impact on performance dimensions, according to the results of hypothesis testing. Additionally, it has been demonstrated that organizational learning capacities and technical capabilities have a favorable and significant impact on performance. The mediation test reveals that technological capabilities and organizational learning partially mediate the link between innovation and performance. Ovieda-Garcia et al. (2014) conducted research on the Chilean National Pension Institute (NPI). The findings of the study demonstrate how dynamic knowledge storage and dissemination characterize organizational learning capabilities and how they enhance public organizations performance. Organizational learning capabilities influence NPI's ability to achieve goals or objectives (effectiveness) and to respond to the needs of service users and beneficiaries through opportunities, accessibility, accuracy, and sustainability of service delivery, as well as comfort and friendliness to service users (quality).
The theory described, the background information, and the problem formulation are used to form the following hypothesis:

**H2**: Organizational learning capability has a positive and significant effect on organizational performance.

**Relationship between service innovation and organizational performance**

Research by Alosani et al. (2020) investigated the joint impact of innovation and strategic planning on the organizational performance of the Dubai Police using empirical data. The study's findings support the notion that strategic planning and innovation affect the Dubai Police's performance. This can be interpreted to mean that in order to achieve the best organizational performance, public organizations need to implement innovative strategies and practices. AlShehail et al. (2022) carried out research to examine the structural relationship between TQM and sustainability performance in the United Arab Emirates (UAE) public service sector. The findings of the study demonstrate that TQM has a significant impact on service innovation and sustainability performance in the UAE public service sector. In addition, researchers can show that service innovation has a significant effect on the sustainability performance of public sector services and partially mediates the relationship between TQM and sustainability performance.

The theory described, the background information, and the problem formulation are used to form the following hypothesis:

**H3**: Service innovation has a positive and significant effect on organizational performance.

**Relationship between entrepreneurial orientation and service innovation**

Numerous empirical studies, such as those by Nguyen et al. (2022) and Al-Shami et al. (2022), have studied the beneficial effects of entrepreneurial orientation on creativity. Al-Shami et al. (2022) performed research at Dubai Airport to investigate the mediating roles of strategic alignment and learning orientation in the relationship between entrepreneurial orientation and innovation. The results of the studies show a strong correlation between innovation and an entrepreneurial mindset. Findings further show that the association between entrepreneurial orientation and innovation is mediated by strategy alignment and learning orientation. Nguyen et al. (2022) show that entrepreneurial orientation influences public sector innovation. The research results prove that paradoxical leadership influences entrepreneurial orientation, entrepreneurial orientation influences public sector innovation, and entrepreneurial orientation mediates the relationship between paradoxical leadership and public sector innovation, as well as the mediating and moderating function of goal congruence on the relationship between paradoxical leadership and public sector innovation.

The theory described, the background information, and the problem formulation are used to form the following hypothesis:

**H4**: Entrepreneurial orientation has a positive and significant effect on service innovation.

**Relationship between organizational learning capability and service innovation**

Sutanto (2016) conducted research to examine and test the impact of organizational learning capabilities and creativity on organizational innovation. The findings show that organizational learning capability and organizational creativity influence organizational innovation positively and significantly. The ability to learn is crucial for organizational development and innovation.

The theory described, the background information, and the problem formulation are used to form the following hypothesis:

**H5**: Organizational learning capabilities have a positive and significant effect on service innovation.

**Mediating role of service innovation**

Al-Dhaafri and Alosani's research (2020); Al-Dhaafri et al. (2016); Rofiaty (2019); and Ruba et al. (2021) show that entrepreneurial orientation has a positive and significant effect on organizational performance. A number of empirical studies support the positive impact of entrepreneurial orientation on innovation, including Al-Shami et al. (2022) and Nguyen et al. (2022). In the research of Alosani et al. (2020) and AlShehail et al. (2016), empirical findings have documented the positive effects of innovation on organizational performance. In the research of Esendemir and Zehir (2017) and Ovieda-Garcia et al. (2014), empirical findings have documented the positive effects of organizational learning capabilities on organizational performance. In the research of Esendemir and Zehir (2017) and Sutanto (2016), empirical findings have documented the positive effect of organizational learning capabilities on service innovation. In the research of Alosani et al. (2020) and AlShehail et al. (2016), empirical findings have documented the positive effects of innovation on organizational performance.

Based on the background, problem formulation, and theory described, a hypothesis is prepared:

**H6**: Mediating the service innovation relationship between entrepreneurial orientation and organizational performance

**H7**: Service innovation mediates the relationship between organizational learning capability and organizational performance.
**Research and Methodology**

**Research design**

The objective of this research's quantitative methodology is to describe, validate, and demonstrate the hypothesis put forth in the study on the phenomena under study. In quantitative research, the researcher's predictions or explanations for the expected results are based on the theory or findings of earlier studies (Creswell, 2014). The goal of research is to test or validate existing theories, not to create new ones (Creswell, 2014). Theory is used as a framework for the entire research process, building models of research problems or hypotheses and developing data collection procedures (Creswell, 2014).

**Sample selection and data collection**

This study was carried out at the State Assets and Auction Service Office (Kantor Pelayanan Kekayaan Negara dan Lelang/KPKNL), which is the Directorate General of State Assets' vertical agency. The object of the research is managers (echelon III and IV) at KPKNL. The research was conducted from July 2023 to August 2023. The population criteria in this study are the Head Offices and Head of Subdivisions and Sections at Kantor Pelayanan Kekayaan Negara dan Lelang. Based on these criteria, the research population was 70 heads of offices and 344 heads of subsections or sections. The sample size was rounded to 204 respondents. A questionnaire is a list of previously formulated written questions that respondents will record their responses to (Sekaran and Bougie, 2017). A Google Form link was used to distribute the questionnaires for the study.

**Measurement of variables**

Based on studies by Covin and Slevin (1988), Lumpkin and Dess (1996), Kim (2010), Meynhardt and Diefenbach (2012), and Rofiaty (2019), four indicators of entrepreneurial orientation—innovativeness, proactiveness, risk-taking, and autonomy—have been developed. Four indicators—experimentation, engagement with the external environment, conversation, and participatory decision-making—that are based on studies by Chiva et al. (2007) and Camps et al. (2011)—are used in this study to assess the organizational learning capabilities. Researchers in this study use the indicators suggested by Avlonitis (2001), Chen et al. (2011), and Alosani et al. (2020) to measure service innovation, which include the newness of services in the organization and service modifications. To measure organizational performance variables, researchers refer to the dimensions proposed by Kaplan and Norton (1992) and Mafini and Foose (2013), including: financial perspective, customer perspective, internal process perspective, and learning and growth perspective.

**Data analysis technique**

The PLS-PM algorithm (partial least squares path modeling) was used for a thorough data analysis. This option is suitable when the goal of the study is to decide whether to test a theory or to make predictions about patterns (Hair, Hult, Ringle, & Sarstedt, 2017).

**Findings and Discussions**

Starting with sample characterization, this section presents the study's main findings. Regarding gender, 71.7% of respondents were male (162 questionnaires were answered), and 28.3% were female (64 questionnaires were answered). According to job position, 23 questions were answered by respondents who held the post of head of office, while 203 questionnaires were answered by respondents who held the position of head of subdivision or department. When it came to length of employment, the sample showed that more than twenty years of employment ranked highest (63.7%), followed by ten to nineteen years (29.2) and one to nine years (7.1%).

---

**Figure 1:** Conceptual Model of the Study; Source: Authors
Convergent Validity

To begin checking the measurement models, we tested the parameters indicated in the literature (Hair et al., 2017). The first concerns convergence validity; where the average variance extracted (AVE) is above 0.50, the outer loading must be greater than 0.708. From the analysis, we found two indicators and one item with an index below recommended (0.5 for AVE and 0.5 for outer loading): autonomy, risk taking, and item X1.1 (work unit leaders are open to innovation). We excluded these indicators and items, then we ran another test without them (Table 1).

Table 1: Summary of Literature Review

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicators</th>
<th>Items</th>
<th>Outer</th>
<th>Test Results</th>
<th>AVE</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Orientation (EO)</td>
<td>Innovativeness</td>
<td>EO1_2</td>
<td>0.772</td>
<td>Valid</td>
<td>0.650</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EO1_3</td>
<td>0.799</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proactiveness</td>
<td>EO1_4</td>
<td>0.823</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EO1_5</td>
<td>0.830</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Learning Capabilities (OLC)</td>
<td>experimentation</td>
<td>OLC2_1</td>
<td>0.867</td>
<td>Valid</td>
<td>0.704</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OLC2_2</td>
<td>0.875</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interaction with the external environment</td>
<td>OLC2_3</td>
<td>0.876</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OLC2_4</td>
<td>0.757</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OLC2_5</td>
<td>0.840</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dialogue</td>
<td>OLC2_6</td>
<td>0.859</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OLC2_7</td>
<td>0.890</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>participatory decision-making</td>
<td>OLC2_8</td>
<td>0.808</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OLC2_9</td>
<td>0.766</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Innovation (SI)</td>
<td>Service newness to organization</td>
<td>SI1</td>
<td>0.841</td>
<td>Valid</td>
<td>0.755</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI2</td>
<td>0.845</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI3</td>
<td>0.896</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service modification</td>
<td>SI4</td>
<td>0.897</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI5</td>
<td>0.866</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Performance (OP)</td>
<td>Financial Perspective</td>
<td>OP1_1</td>
<td>0.831</td>
<td>Valid</td>
<td>0.684</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OP1_2</td>
<td>0.717</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OP1_3</td>
<td>0.856</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customer Perspective</td>
<td>OP4_1</td>
<td>0.798</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OP5_2</td>
<td>0.863</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OP5_3</td>
<td>0.869</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internal Process Perspective</td>
<td>OP7_4</td>
<td>0.899</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OP8_5</td>
<td>0.864</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OP9_6</td>
<td>0.841</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning and Growth Perspective</td>
<td>OP10</td>
<td>0.830</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OP11_1</td>
<td>0.705</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors

Discriminant Validity

For discriminant validation, we examined the Fornell-Larcker criterion. To establish the discriminant validity, the square root of the AVE of each latent variable should be higher than latent variable correlations (Fornell-Larcker, 1981). The analysis was appropriate (Table 2).

Table 2: Fornell-Larcker criterion

<table>
<thead>
<tr>
<th></th>
<th>Entrepreneurial Orientation</th>
<th>Organizational Learning Capabilities</th>
<th>Service Innovation</th>
<th>Organizational Performance</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Orientation</td>
<td>0.806</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Learning Capabilities</td>
<td>0.473</td>
<td>0.839</td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Innovation</td>
<td>0.556</td>
<td>0.762</td>
<td>0.869</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>0.498</td>
<td>0.812</td>
<td>0.690</td>
<td>0.827</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: Authors
Reliability indicators

Reliability testing can be done with two measurements, namely Cronbach's alpha and composite reliability. Cronbach's alpha and composite reliability are both values that must be greater than 0.70. The analysis was appropriate (Table 3).

### Table 3: Reliability testing

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Orientation</td>
<td>0.821</td>
<td>0.881</td>
</tr>
<tr>
<td>Organizational Learning Capabilities</td>
<td>0.947</td>
<td>0.955</td>
</tr>
<tr>
<td>Service Innovation</td>
<td>0.919</td>
<td>0.939</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>0.953</td>
<td>0.959</td>
</tr>
</tbody>
</table>

**Source:** Authors

Structural Models

The next step was to examine the results of the structural model. The values of Determination Coefficient ($R^2$ and adjusted $R^2$) and Predictive Relevance ($Q^2$) for each of the latent variables are shown in Table 4.

### Table 4: Determination Coefficient and Predictive Relevance

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R^2$</th>
<th>adjusted $R^2$</th>
<th>$Q^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Innovation</td>
<td>0.630</td>
<td>0.627</td>
<td>0.462</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>0.681</td>
<td>0.677</td>
<td>0.453</td>
</tr>
</tbody>
</table>

**Source:** Authors

Hypothesis Testing

We tested the direct relationship of the dimensions (Table 5), which already contained their related influences confirmed by BCa bootstrapping, with 5,000 replications. The direct effect test criteria are concluded to be significant if the t-statistic value is greater than the critical t value of 1.65 and the p value is less than 0.05 (5% significance level).

### Table 5: Direct Effect Test Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variables</th>
<th>Path Coefficient</th>
<th>Standard Dev.(STDEV)</th>
<th>T Statistic</th>
<th>P Values</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Entrepreneurial Orientation → Organizational Performance</td>
<td>0.118</td>
<td>0.066</td>
<td>1.796</td>
<td>0.036</td>
<td>Significant</td>
</tr>
<tr>
<td>H2</td>
<td>Organizational Learning Capabilities → Organizational Performance</td>
<td>0.670</td>
<td>0.085</td>
<td>7.902</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H3</td>
<td>Service Innovation → Organizational Performance</td>
<td>0.113</td>
<td>0.087</td>
<td>1.296</td>
<td>0.098</td>
<td>Not Significant</td>
</tr>
<tr>
<td>H4</td>
<td>Entrepreneurial Orientation → Service Innovation</td>
<td>0.252</td>
<td>0.064</td>
<td>3.915</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H5</td>
<td>Organizational Learning Capabilities → Service Innovation</td>
<td>0.643</td>
<td>0.069</td>
<td>9.272</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

**Source:** Authors

Indirect hypothesis testing is carried out to test the role or influence of one variable on other variables through mediating variables. This research examines the role of service innovation in mediating the influence of entrepreneurial orientation on organizational performance and the role of service innovation in mediating the influence of organizational learning capability on organizational performance.
Table 6: Indirect Effect Test Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variables</th>
<th>Path Coefficient</th>
<th>Standard Dev. (STDEV)</th>
<th>T Statistic (│O/STDEV│)</th>
<th>P Values</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H6</td>
<td>Entrepreneurial Orientation → Service Innovation → Organizational Performance</td>
<td>0.028</td>
<td>0.023</td>
<td>1.228</td>
<td>0.110</td>
<td>Not Significant</td>
</tr>
<tr>
<td>H7</td>
<td>Organizational Learning Capabilities → Service Innovation → Organizational Performance</td>
<td>0.073</td>
<td>0.058</td>
<td>1.264</td>
<td>0.103</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Source: Authors

Discussion

Relationship between entrepreneurial orientation and organizational performance

The findings from assessing the direct effect of entrepreneurial orientation (X1) on organizational performance (Y) generated a path coefficient of 0.118, a t statistic of 1.796 (> 1.65), and a p value of 0.0360 (< 0.05). It is clear from the results of testing the direct influence that entrepreneurial orientation has a positive and significant impact on organizational performance. The better the entrepreneurial orientation (X1) possessed by the work unit manager, the better the organizational performance (Y) will be. Thus, hypothesis 1 is accepted.

The results of this research are in line with the results of research conducted by Al-Dhaafri and Alosani (2020); Al-Dhaafri et al. (2016); Rofiaty (2019); and Ruba et al. (2021), which shows that entrepreneurial orientation has a positive and significant effect on organizational performance. Organizations that develop a proactive attitude will achieve better performance (Fadda, 2018). Proactive organizations are also better able to tailor their services to the needs of their customers, which leads to improved performance (Smith and Jambulingan, 2018). With a proactive mindset, organizations can also take advantage of opportunities that already exist and foresee changes or needs in the communities they serve (Lumpkin and Dess, 2001). If organizations want to achieve performance goals, they must support work unit leaders' capacity to adapt effectively to changes in organizational or governmental policies and social demands.

Relationship between organizational learning capability and organizational performance

The findings from assessing the direct effect of the organizational learning capability (X2) on organizational performance (Y) generated a path coefficient of 0.670, a t statistic of 7.902 (> 1.65), and a p value of 0.0000 (< 0.05). A conclusion that can be drawn from the direct influence test's findings is that organizational learning capability significantly influences organizational performance. The better the organizational learning capability (X2), the better the organizational performance (Y). Thus, hypothesis 2 is accepted.

The results of this research are in line with the research conducted by Esendemir and Zehir (2017) and Ovieda-Garcia et al. (2014), which states that organizational learning capabilities have a positive and significant effect on organizational performance. In order for organizational learning to be relevant for achieving organizational goals and to produce the anticipated positive results, organizations must align their organizational strategy with their learning strategies (Ovieda-Garcia et al., 2014). Various organizational learning strategies need to be accompanied by alignment with long-term organizational goals. Organizations must also support the development of instruments and structures allowing the dissemination of knowledge (Ovieda-Garcia et al., 2014).

Relationship between service innovation and organizational performance

The findings from assessing the direct effect of service innovation (Z) on organizational performance (Y) generated a path coefficient of 0.113, a t statistic of 1.296 (< 1.65), and a p value of 0.0980 (> 0.05). The results of testing the direct influence lead to the conclusion that service innovation does not significantly affect organizational performance. Increasing service innovation (Z) has no influence on organizational improvement (Y). Thus, hypothesis 3 is rejected.

The results of this study do not support research conducted by Alosani et al. (2020), which states that innovation significantly influences the performance of the Dubai Police, and AlShehail et al. (2022), which states that service innovation significantly influences the performance of the public service sector in the United Arab Emirates. The results of this research are in line with the results of research conducted by Walker et al. (2011) and Moreira et al. (2017), which show that service innovation has no significant effect on organizational performance. Public organizations face numerous challenges that necessitate innovation in processes, policies, programs, and products. However, organizations need specific conditions to initiate and benefit from innovation, as noted
by Demircioglu and Audretsch (2017). Numerous barriers prevent innovation from being implemented in the public sector. Cultural norms and societal values can either foster innovation or stifle it (van der Wal and Demircioglu, 2020). Effective innovation can also be hampered by risk aversion, knowledge management ambiguity, organizational silos, and a lack of a collaborative culture (Velayati et al., 2020).

**Relationship between entrepreneurial orientation and service innovation**

The findings from assessing the direct effect of entrepreneurial orientation (X1) on service innovation (Z) generated a path coefficient of 0.252, a t statistic of 3.915 (> 1.65), and a p value of 0.0000 (< 0.05). The results of testing the direct influence lead to the conclusion that entrepreneurial orientation has a positive and significant effect on service innovation. The better the entrepreneurial orientation (X1) possessed by the work unit manager, the better the service innovation (Z). Thus, hypothesis 4 is accepted.

The results of this research are in line with the results of research conducted by Al-Shami et al. (2022) and Nguyen et al. (2022), which states that entrepreneurial orientation has a positive and significant effect on service innovation. Entrepreneurial orientation motivates organizations to abandon old methods and do new things in a way that facilitates and enables organizations to improve their innovation performance (Makloufi et al., 2021). The tendency to take risks and proactive and innovative attitudes are just a few examples of how an organization's focus on entrepreneurial activities can be seen. This focus will boost innovation in the organization by displaying positive behavior and expertise in creating administrative and organizational facilities (Veidal and Korneliussen, 2013).

**Relationship between organizational learning capability and service innovation**

The findings from assessing the direct effect of organizational learning capability (X2) on service innovation (Z) generated a path coefficient of 0.643, a t statistic of 9.272 (> 1.65), and a p value of 0.0000 (< 0.05). The results of testing the direct influence lead to the conclusion that organizational learning capability has a positive and significant effect on service innovation. The better the organizational learning capability (X2), the better the service innovation (Z). Thus, hypothesis 5 is accepted.

The results of this research are in line with the results of research conducted by Sutanto (2016), which states that organizational learning capabilities have a positive and significant effect on service innovation. The greater the service innovation that is expected to be present in the organization, the greater the learning capability required by the organization. Organizational knowledge, both new knowledge and knowledge obtained from existing knowledge, will stimulate innovation in the organization. Therefore, organizations need to expand the learning environment and creativity to generate many new ideas that will improve service quality (Sutanto, 2016).

**The mediating role of service innovation in the relationship between entrepreneurial orientation and organizational performance**

The results of testing the indirect influence of service innovation on the relationship between entrepreneurial orientation (X1) and organizational performance (Y) generated a path coefficient of 0.028, a t statistic of 1.228 (< 1.65), and a p value of 0.1100 (> 0.05). According to the results of testing the indirect influence, service innovation (Z) does not significantly affect the relationship between entrepreneurial orientation (X1) and organizational performance (Y). Thus, hypothesis 6 is rejected.

According to studies on Hypothesis 1, entrepreneurial orientation may considerably and favorably affect organizational performance. The research findings supporting Hypothesis 3 indicate that service innovation does not significantly affect organizational performance. Thus, the results of this mediation are direct-only non-mediation, a type of mediation where the indirect influence of the mediating variable is not significant while the direct influence of the exogenous variable on the endogenous variable is significant. This can be interpreted as meaning that service innovation does not bridge the relationship between entrepreneurial orientation and organizational performance.

**The mediating role of service innovation in the relationship between organizational learning capability and organizational performance**

The results of testing the indirect influence of service innovation (Z) on the relationship between organizational learning capability (X2) and organizational performance (Y) generated a path coefficient of 0.0273, a t statistic of 1.264 (< 1.65) and a p value of 0.1030 (> 0.05). From the results of testing the indirect influence, it can be concluded that service innovation (Z) does not have a significant influence on the relationship between organizational learning capability (X2) and organizational performance (Y). Thus, hypothesis 7 is rejected.

The findings supporting Hypothesis 2 demonstrate that organizational learning capabilities can have a positive and significant impact on organizational performance. But hypothesis 3 indicates that service innovation does not significantly affect organizational performance. Thus, the results of this mediation are direct-only non-mediation. This can be interpreted as meaning that service innovation does not bridge the relationship between organizational learning capabilities and organizational performance.
Conclusions

The research findings indicate a notable and positive correlation between entrepreneurial orientation and organizational performance, as well as between organizational learning capability and organizational performance. Additionally, a positive association is observed between entrepreneurial orientation and service innovation, as well as between organizational learning capability and service innovation. Contrary to the initial hypothesis, the findings of this study indicate that there is no statistically significant correlation between service innovation and organizational performance. Consequently, the ability of service innovation to act as a mediator in the relationship between entrepreneurial orientation and organizational performance, as well as between organizational learning capability and organizational performance, is affected.

The findings of this study make a valuable contribution to the theoretical advancement of the constructs of entrepreneurial orientation and organizational learning capability in relation to organizational performance. The present study provides a theoretical contribution to the discourse around entrepreneurial orientation, organizational learning capabilities, and their influence on the performance of public organizations. However, in contrast to the previously suggested concept, empirical evidence indicates that there is no substantial impact of service innovation on organizational success. The findings of this study suggest the presence of direct-only non-mediation, wherein entrepreneurial attitude and organizational learning capability exert a direct influence on organizational performance, whereas the indirect impact of the mediating variable (service innovation) is deemed insignificant.

The adoption of an entrepreneurial attitude has the potential to boost organizational performance. The utilization of entrepreneurial oriented elements, such as innovativeness and proactiveness, by the Directorate General of State Assets Management can effectively contribute to the improvement of organizational performance. In the context of entrepreneurial orientation, the possession of innovative and proactive attitudes is regarded as crucial. These attitudes have the potential to facilitate the development of novel approaches to address community needs, as well as enhance an organization’s capacity to effectively respond to dynamic environmental changes. To ensure the achievement of performance objectives by the Directorate General of State Assets Management, it is imperative for managers to possess the ability to identify evolving social demands and effectively adapt to them. Additionally, managers should be capable of exploring novel techniques and seizing opportunities that arise in response to these changing demands.

Research has shown that the utilization of organizational learning capacities can lead to enhanced organizational performance. To optimize organizational performance, the Directorate General of State Assets Management may consider utilizing the characteristics associated with organizational learning capacities. In order to promote the attainment of performance objectives within the organization, it is imperative for the Directorate General of State Assets Management to cultivate novel concepts, ascertain pertinent data regarding the external milieu, comprehend and aptly address input from relevant stakeholders, and engage employees in the formulation of operational protocols.

The outcomes of the research suggest that the implementation of service innovation within businesses does not lead to a discernible enhancement in organizational performance. Furthermore, it has been shown that service innovation does not possess the potential to moderate the impact of entrepreneurial orientation and organizational learning capability on the overall performance. Hence, it is imperative for the Directorate General of State Assets Management to undertake an assessment of the factors that promote or hinder organizational innovation. Furthermore, in order to get the intended results, it is imperative for the Directorate General of State Assets Management to assess innovative tactics that align with the organizational structure and inherent characteristics.

It is imperative to consider several limitations inherent in this study. The limitations of this study are primarily attributed to its exclusive focus on the Directorate General of State Assets Management, hence confining the generalizability of the findings to this specific setting. Hence, this research is limited in its ability to accurately depict the overall state of the Indonesian Ministry of Finance and other public institutions. It is important to acknowledge that other organizations may exhibit varying relationships between the variables under consideration. Furthermore, the present study primarily used self-reported questionnaires as a means of assessing the variables. Participants were requested to complete surveys on Google Forms in order to offer their responses. Consequently, the viewpoints expressed by the participants are constrained, and the answers they furnish do not fully encompass their perspectives. The objectivity of the results may be compromised due to the potential for respondents to provide biased responses.

In order to enhance the robustness and validity of forthcoming research outcomes, it is imperative for researchers to consider a broader spectrum of study subjects, encompassing both intra-topic diversity and larger-scale investigations. This study employs a limited number of indicators to represent the existing variables. Consequently, future researchers have the opportunity to enhance and incorporate the research model by incorporating other indicators that are deemed relevant to the subject under investigation. Subsequent investigations could explore potential moderating factors, including contextual factors and strategy formulation, that may exert influence on the observed association within the context of this study. Future research may consider incorporating additional mediators, such as organizational competency, strategic orientation, and digital strategy, to further elucidate the relationship between the variables being investigated. In this study, the organizational performance indicators were assessed by subjective measures, specifically based on the perceptions of the respondents. It is anticipated that forthcoming research endeavors will ideally incorporate impartial assessments of organizational performance.
Acknowledgement

All authors have read and agreed to the published version of the manuscript.

Author Contributions: Conceptualization, Methodology, Data Collection, Formal Analysis, Writing—Original Draft Preparation, Writing, Review And Editing by authors with equal participation. All authors have read and agreed to the final version of the manuscript.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to restrictions.

Conflicts of Interest: The authors declare no conflict of interest.

References


Publisher’s Note: SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

© 2023 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

International Journal of Research in Business and Social Science (2147-4478) by SSBFNET is licensed under a Creative Commons Attribution 4.0 International License.