



Local Government Innovation: Trends, Determinants, and Implications for Public Services in Indonesia

Achmad Hafizar¹

¹ Universitas Pembangunan Nasional Veteran, Jakarta, Indonesia

Abstract

Article history:

Received: July 7, 2022

Revised: August 27, 2022

Accepted: November 20, 2022

Published: December 30, 2022

Keywords:

Accountability,
Innovation,
Public Services,
Regional Government,
Transparency.

Identifier:

Zera Open

Page: 99-117

<https://zeraopen.com/journal/igr>

Innovation is the main pillar in encouraging changes in local governance in Indonesia. This article aims to examine the concept of innovation, the development of public service trends, and the factors that support and hinder its implementation. Using a literature study method, this study examines several academic articles published in the last five years that discuss regional innovation, including service digitization, e-government, community participation, and regulations. The results of the analysis show that innovations at the regional level have resulted in significant improvements in the efficiency, transparency, and quality of public services. Models such as Public Service Mall and digital health services are examples of successful innovations that have a direct impact on society. However, obstacles in the form of limited resources, bureaucratic resistance, and program sustainability issues still need serious attention. Therefore, the strategy to strengthen innovation must emphasize aspects of inclusivity, clear regulations, visionary leadership, and cross-sector collaboration so that innovation truly becomes an instrument of sustainable bureaucratic transformation.



1. Introduction

Innovation is one of the key concepts in contemporary development, especially in the context of local government implementation. In general, innovation can be understood as the process of creating or developing new ideas, methods, services, and products that provide added value, both in the form of efficiency, effectiveness, quality, and real social impact on society. In the realm of public administration, innovation is different from invention, because innovation emphasizes the application of existing ideas in order to be able to produce practical benefits in governance and public services.¹ This added value is an important indicator to assess whether a government policy or program is really able to improve the quality of public services.

The development of innovation in government, especially in Indonesia, can be seen from the increasing number of initiatives at the regional level that focus on modernizing public services. Governance innovation emerged in response to bureaucratic complexity, community demands for faster and more transparent services, and the impact of globalization that demands the competitiveness of local governments. Local governments, as the spearhead of development and public services, are required to be able to present new breakthroughs in the implementation of government that is responsive, adaptive, and oriented towards community

¹ Arif Budy Pratama. "The landscape of public service innovation in Indonesia: A comprehensive analysis of its characteristic and trend." *Innovation & Management Review* 17, no. 1 (2020): 25-40.

satisfaction.² Therefore, innovation is a vital element in answering the increasingly dynamic challenges of governance.

Efforts to strengthen innovation in the public sector in Indonesia also receive support from national regulations. One of them is Government Regulation No. 38 of 2017 concerning Regional Innovation which provides a legal umbrella for local governments to develop innovative policies, programs, and services. This regulation aims to encourage the creation of a bureaucracy that is more open, accountable, and responsive to the needs of the community. With this legal basis, local governments have the legitimacy to conduct policy experiments in order to improve service quality, while reducing resistance from bureaucratic actors who tend to maintain traditional work patterns.³ The close relationship between regulations and innovation practices in this area confirms that the success of innovation depends not only on the creativity of local governments, but also on policy support from the central government.

However, the implementation of innovation at the regional level is not without obstacles. Research shows that various obstacles such as limited human resources, resistance to change, weak coordination between stakeholders, and financial limitations are still the main challenges in the implementation of innovation.⁴ On the other hand, supporting factors such as regulatory support,

² Wisber Wiryanto. "Initiative and implementation of the public service innovation by regional government in Indonesia." *Journal of Governance and Local Politics (JGLP)* 2, no. 2 (2020): 201-215.

³ Farida Ida and Lestari Annisa. "Implementation of E-government as a Public Service Innovation in Indonesia." *Bulletin of Peoples' Friendship University of Russia. Series: Public and Municipal Administration* 8, no. 1 (2021): 72-79.

⁴ Marzenna Cichosz, Carl Marcus Wallenburg, and A. Michael Knemeyer. "Digital transformation at logistics service providers: barriers, success factors and leading practices." *The International Journal of Logistics Management* 31, no. 2 (2020): 209-238.

digital technology development, community involvement, and visionary leadership, are important capital for local governments to continue to develop innovative services. Thus, the balance between supporting and inhibiting factors determines whether innovation can run effectively and sustainably.

A number of indicators also need to be considered to measure the success of innovation in the public sector. These indicators include efficiency (saving time, cost, effort), effectiveness (improving service quality), transparency, accountability, community satisfaction, and sustainability of innovation. Studies in the city B show that public service innovations can have a real impact on increasing community satisfaction and the sustainability of local government programs, although their implementation still requires consistency in management.⁵ This shows that innovation is not just a short-term program, but a bureaucratic transformation process oriented towards continuous improvement.

Reflecting on a number of these phenomena, it can be understood that innovation in local government has a strategic role in providing public services that are more effective, responsive, and adaptive to the needs of the community. Furthermore, innovation is also an important instrument for local governments to build legitimacy in the eyes of the public while increasing competitiveness in the context of national development. This article aims to discuss the basic concepts of innovation, the development of innovation in government, supporting and inhibiting factors, success indicators, as well as strategies and examples of regional

⁵ Robert K. Christensen, Laurie Paarlberg, and James L. Perry. "Public service motivation research: Lessons for practice." *Public Administration Review* 77, no. 4 (2017): 529-542.

innovation implementation. By discussing these dimensions, this paper is expected to be able to provide a more comprehensive understanding of the importance of innovation in local governance in Indonesia.

2. Literature Review

A literature review on local government innovation in Indonesia shows that there are significant developments in efforts to provide public services that are adaptive to the needs of the community. According to Pratama,⁶ public service innovations in Indonesia can be mapped into various characteristics and trends, ranging from digital technology-based innovations to social innovations that involve community participation. The study emphasizes that innovation is not just a technical breakthrough, but also includes a paradigm shift in governance. Wiryanto⁷ emphasized that local government initiatives in implementing innovation are not only driven by internal needs of the bureaucracy, but also by external incentives such as public innovation awards given by the central government. The mechanism encourages healthy competition between regions to produce more efficient and transparent public services. However, these innovations still face obstacles such as limited resources, resistance to change, and lack of coordination across sectors.

⁶ Arif Budy Pratama. "The landscape of public service innovation in Indonesia: A comprehensive analysis of its characteristic and trend." *Innovation & Management Review* 17, no. 1 (2020): 25-40.

⁷ Wisber Wiryanto. "Initiative and implementation of the public service innovation by regional government in Indonesia." *Journal of Governance and Local Politics (JGLP)* 2, no. 2 (2020): 201-215.

Furthermore, Muluk and Pratama⁸ highlight the dynamics of public service innovation competitions in Indonesia through a study of the Public Service Innovation Competition. The competition opens up space for local governments to propose creative innovation models, both in the form of e-government, digital health services, and social innovation. However, the study also emphasizes the challenge of innovation sustainability, where many programs stop when regional leadership changes. From these studies, it can be seen that innovation in Indonesia's public sector is the result of a combination of regulatory encouragement, external incentives, and practical needs of the community. The literature shows optimism about the development of innovation at the regional level, although the success of its implementation is largely determined by leadership factors, regulatory support, and program sustainability.

3. Method

This study uses the library research method as the main approach. Literature studies were chosen because the focus of research lies in the collection, analysis, and synthesis of ideas, theories, and results of previous research that are relevant to the theme of local government innovation. This approach allows researchers to identify the development of concepts, practice trends, as well as challenges and opportunities faced in the implementation of innovations in public services at the local level. The research stage begins with a search of academic sources from online databases,

⁸ Mujibur Rahman Khairul Muluk and Muhammad Rizki Pratama. "Public Sector Innovation In a Developing Country: Progress And Challenges Of Public Service Innovation Competition In Indonesian Government." *Public Policy and Administration* 20, no. 4 (2021): 452-465.

especially journal articles indexed on trusted platforms such as Google Scholar, Elsevier, and ResearchGate. The criteria for selecting sources are strictly determined, namely articles published in the last five years, relevant to the context of local government innovation, and have a focus on public services. With this criterion, the research can ensure that the literature used is up-to-date and supports the validity of the analysis conducted.

Furthermore, each selected article was analyzed using a thematic approach. Thematic analysis was carried out by grouping the content of the article based on major themes such as the basic concept of innovation, supporting and inhibiting factors, success indicators, and innovation implementation strategies in the regions. From these groupings, researchers then build a consistent framework of thought to understand how innovation is positioned in local governance. In addition to journal articles, this research also refers to relevant national regulatory documents, especially Government Regulation Number 38 of 2017 concerning Regional Innovation. The presence of these regulations is used as a normative reference to understand the legal framework that underlies innovation in local government. Thus, this study not only examines academic perspectives, but also pays attention to juridical aspects that serve as implementation guidelines.

In data compilation, this method emphasizes comparative and critical techniques. Comparative means examining the differences and similarities between the findings of previous research, while critical means assessing the strengths and weaknesses of each study to produce a more comprehensive synthesis. Therefore, the results of the study are expected not only to replicate previous findings, but also

to provide a new mapping of the direction of innovation development in local governance in Indonesia. With this literature study framework, the research is expected to be able to present a complete conceptual and empirical understanding of innovation practices in local government. It also provides a theoretical contribution to the public administration literature, as well as practical input for local governments in designing innovation strategies that are more sustainable and responsive to the needs of the community.

4. Results

4.1. Trends and Characteristics of Innovation in Local Government

The results of the study show that innovation in Indonesian local government develops in various forms and characteristics that reflect the dynamics of community needs as well as the adaptability of the bureaucracy. According to Pratama,⁹ the trend of public service innovation in Indonesia can be seen from the diversification of forms of innovation, ranging from the digitization of information technology-based services to community-based innovation. Digitalization is one of the most prominent forms of innovation because it is considered able to provide simpler, faster, and more transparent services. The application of online-based applications in the management of population administration, business licensing, and public complaint mechanisms has been proven to speed up the bureaucratic process while reducing the potential for maladministration practices. This shows that digital

⁹ Arif Budy Pratama. "The landscape of public service innovation in Indonesia: A comprehensive analysis of its characteristic and trend." *Innovation & Management Review* 17, no. 1 (2020): 25-40.

innovation is not only related to efficiency, but also to build public trust in the performance of local governments.

In addition to digitalization, innovation also includes a participatory governance dimension. Wiryanto¹⁰ explained that the provision of incentives in the form of public innovation awards by the central government has encouraged regions to compete to present innovative programs. This competition not only improves the quality of public services, but also fosters an innovative culture among bureaucratic apparatus that previously tended to maintain conventional work patterns. Furthermore, public innovation in Indonesia is often triggered by the urgent need to address basic service problems, such as health, education, and population administration. For example, a number of regions have designed digital-based health services to expand public access to health facilities amid limited infrastructure.

However, meta-analysis research by Supranoto and Novita¹¹ found that there is a large variation between regions in implementing innovation. Some regions with sufficient resources are able to produce sustainable innovation models, while other regions still face obstacles in the form of budget limitations, bureaucratic resistance, and weak coordination between stakeholders. These results confirm that innovation is not a uniform process, but is greatly influenced by the social, political, and economic conditions of each region. The factor of visionary leadership and

¹⁰ Wisber Wiryanto. "Initiative and implementation of the public service innovation by regional government in indonesia." *Journal of Governance and Local Politics (JGLP)* 2, no. 2 (2020): 201-215.

¹¹ Moeroe Supranoto and Dila Novita. "A Qualitative Meta-analysis on Studies of Local Level Public Services Innovation in Indonesia." In *Proceedings International Conference on Innovations in the Social Sciences and Humanities (ISSH)*. Universitas Jember. 2019.

regulatory support has proven to be very instrumental in determining the success of innovation.

The trend of innovation in local government shows an increase in the capacity of bureaucratic adaptation to the needs of the community. However, the success of innovation is not only determined by local creativity, but also by clear regulatory support, cross-sector collaboration, and sustainability of implementation. Without strong institutional mechanisms, innovation has the potential to cease as a short-term program. Therefore, the challenge ahead is how to make innovation a permanent part of local governance that is oriented towards responsive, inclusive, and sustainable public services.

4.2. The Impact of Innovation on Governance and Quality of Public Services

The results of the study also show that innovation has a significant impact on governance and the quality of public services at the regional level. Lewis¹² through the analysis of district/city data found that the accumulation of the number of innovations produced by local governments was positively related to the increase in development indicators. This means that the more innovations are developed, the greater their contribution will be to improving basic services such as health, education, and infrastructure. Innovation does not only stop as an administrative program, but plays a role as a useful development instrument in improving people's welfare.

¹² Blane D. Lewis "Does local government proliferation improve public service delivery? Evidence from Indonesia." *Journal of Urban Affairs* 39, no. 8 (2017): 1047-1065.

The implementation of e-government is one of the most prominent forms of innovation. Ida and Annisa¹³ emphasized that the implementation of digital systems in public services has a major impact on bureaucratic efficiency. This system speeds up previously slow and convoluted administrative processes, while increasing transparency. With procedures that can be monitored online, the chances of corruption and maladministration practices are reduced. This transparency is in line with the demands of modern society that requires a bureaucracy that is open, accountable, and responsive to public needs.

In the health sector, Sufianti et al.¹⁴ showed real evidence through a study in the city B. The city's E-Health program is a concrete example of how digital-based innovations can expand people's access to health services. The public gets convenience in consulting, registering, and accessing health information through online platforms. The positive impact can be seen from increasing public satisfaction with health services, as well as better efficiency in service providers. However, the study also emphasizes the importance of sustainability of innovation. Many digital health programs have the potential to stall when there is a change in regional leadership or when budget support weakens.

In addition to having a positive impact, innovation also presents challenges that need to be considered. Public service innovation competitions at the national level, although successful in generating creative ideas, often encourage regions to

¹³ Farida Ida and Lestari Annisa. "Implementation of E-government as a Public Service Innovation in Indonesia." *Bulletin of Peoples' Friendship University of Russia. Series: Public and Municipal Administration* 8, no. 1 (2021): 72-79.

¹⁴ Ely Sufianti, Edah Jubaedah, and Sait Abdullah. "Building sustainability of public service innovation in Bandung city, West Java, Indonesia." In *2nd International Conference on Administration Science 2020 (ICAS 2020)*, pp. 19-24. Atlantis Press, 2021.

pursue short-term goals.¹⁵ The orientation on the achievement of awards makes some innovations less concerned with long-term sustainability. This phenomenon shows that the impact of innovation must be viewed critically, not only from instant results, but from the extent to which innovation contributes to more adaptive bureaucratic and governance transformation. Innovation has been proven to have a real impact on the quality of public services and regional governance. However, the success of innovation is not only determined by creativity, but also by the commitment of local governments in ensuring sustainability, accountability, and integration of innovation into a permanent bureaucratic system.

4.3. Case Studies and Regional Innovation Models

Case studies in various regions in Indonesia provide a concrete picture of how public service innovations are implemented and the challenges faced. One prominent example is the development of a Public Service Mall in the city A. Joshi and Islam¹⁶ show that this model successfully integrates various public services ranging from population administration, business licensing, to tax services in one integrated location. This approach provides significant efficiency for the community, both in terms of time and cost, while fostering a positive image of the local government as a modern and professional service provider. The physical integration

¹⁵ Marzenna Cichosz, Carl Marcus Wallenburg, and A. Michael Knemeyer. "Digital transformation at logistics service providers: barriers, success factors and leading practices." *The International Journal of Logistics Management* 31, no. 2 (2020): 209-238.

¹⁶ Pusp Raj Joshi and Shareeful Islam. "E-government maturity model for sustainable E-government services from the perspective of developing countries." *Sustainability* 10, no. 6 (2018): 1882.

of this public service is then combined with digital platforms so that it is able to reach a wider community.

In addition, innovation practices are also seen in the form of inclusive innovations that involve community participation. Muluk and Pratama¹⁷ highlight that a number of local governments have developed community-based service models to answer the needs of vulnerable groups, for example digital education services in disadvantaged areas. This innovation shows that local governments are not only pursuing efficiency, but also social justice. Community involvement in planning and implementation makes innovation more relevant to the real needs of citizens, while increasing a sense of ownership of the programs being carried out.

Widya-Hastuti¹⁸ emphasized the sustainability aspect as a major challenge in the regional innovation model. Their study shows that many innovations stop operating when there is a change of leadership or when budgets are no longer available. This shows that although many innovative ideas have emerged, sustainability is still weak due to the lack of integration of innovation in local regulations. Therefore, innovation requires a legal basis and institutional support so that it is not only a short-term program.

¹⁷ Mujibur Rahman Khairul Muluk and Muhammad Rizki Pratama. "Public Sector Innovation In a Developing Country: Progress And Challenges Of Public Service Innovation Competition In Indonesian Government." *Public Policy and Administration* 20, no. 4 (2021): 452-465.

¹⁸ Afris Widya-Hasuti, Abbas Mardani, Dalia Streimikiene, Ali Sharifara, and Fausto Cavallaro. "The role of process innovation between firm-specific capabilities and sustainable innovation in SMEs: Empirical evidence from Indonesia." *Sustainability* 10, no. 7 (2018): 2244.

Another challenge stems from bureaucratic resistance. Sudrajat and Andhika¹⁹ found that regional apparatus are often reluctant to adopt new work models that are considered to interfere with the comfort of the old work pattern. For this reason, intensive training and effective communication are needed so that innovations can be accepted more widely. Meanwhile, Yuana et al.²⁰ underlined the digital infrastructure gap that makes online service innovations easier to implement in urban areas than rural areas. This creates inequality in access to public services that need to be overcome with an equity strategy. Case studies in various regions show that public innovation in Indonesia not only emphasizes efficiency, but also strengthens the dimensions of inclusivity, sustainability, and equity. The success of regional innovation is highly dependent on a combination of regulations, bureaucratic readiness, and active participation of the community in every stage.

5. Discussion

The results show that innovation in Indonesia's local government has grown rapidly, but its success is largely determined by a combination of regulations, bureaucratic capacity, community participation, and leadership support. This discussion highlights three main points: the sustainability of innovation, the key factors of success, and the relevance of innovation to the challenges of modern governance.

¹⁹ Arip Sudrajat and Lesmana Andhika. "Empirical evidence governance innovation in public service." *Jurnal Bina Praja* 13, no. 3 (2021): 407-417.

²⁰ Rivira Yuana, Eko Agus Prasetyo, Rizal Syarif, Yandra Arkeman, and Arif Imam Suroso. "System dynamic and simulation of business model innovation in digital companies: an open innovation approach." *Journal of Open Innovation: Technology, Market, and Complexity* 7, no. 4 (2021): 219.

First, the issue of innovation sustainability is a crucial issue. Many regions are able to produce innovative programs, but few survive in the long term. This is often the case because innovation is seen more as a pilot project or even a short-term political strategy than as an integral part of bureaucratic reform. Muluk and Pratama²¹ emphasized that public innovation competitions do encourage the emergence of new ideas, but some innovations stop after awards are given. To answer this problem, innovation needs to be institutionalized through regional regulations, a sustainable budget system, and strengthening organizational structures so that innovative programs can continue to run despite leadership changes.

Second, the success of innovation is greatly influenced by visionary leadership and community participation. Innovations that focus only on technical aspects, such as the use of digital applications, often do not have an optimal impact if they are not accompanied by community involvement in planning and evaluation. Sufianti et al.²² show that the E-Health program in A city is able to increase public access to health services precisely because it is designed by directly involving users. Community involvement not only strengthens the legitimacy of innovation, but also ensures that the resulting programs are in line with the real needs of citizens. This is also a reminder that the social dimension and inclusivity should not be ignored in designing innovation strategies.

²¹ Mujibur Rahman Khairul Muluk and Muhammad Rizki Pratama. "Public Sector Innovation In a Developing Country: Progress And Challenges Of Public Service Innovation Competition In Indonesian Government." *Public Policy and Administration* 20, no. 4 (2021): 452-465.

²² Ely Sufianti, Edah Jubaedah, and Sait Abdullah. "Building sustainability of public service innovation in Bandung city, West Java, Indonesia." In *2nd International Conference on Administration Science 2020 (ICAS 2020)*, pp. 19-24. Atlantis Press, 2021.

Third, innovation must be relevant to the increasingly complex challenges of regional governance. The implementation of e-government in various regions proves that the digitization of services is able to encourage transparency, efficiency, and accountability. Ida and Annisa²³ emphasized that the online system in public service not only speeds up bureaucratic processes, but also becomes an instrument to prevent maladministration practices. However, digitalization cannot be separated from the readiness of human resources. Without adequate training, the bureaucracy has the potential to face capacity gaps so that the goal of digitalization is not achieved. Therefore, the digital innovation strategy must go hand in hand with the apparatus competency improvement program.

This discussion emphasized that innovation in local government is not the end goal, but rather a means to build adaptive and responsive governance. Program sustainability, community involvement, visionary leadership, and bureaucratic readiness are the four main pillars that determine the success of innovation. If these four aspects are strengthened, innovation will not only result in more efficient public services, but also create structural changes in the regional bureaucracy that are able to withstand social, political, and economic dynamics.

6. Conclusion

This research emphasizes that innovation is a key element in driving the transformation of local governance in Indonesia. Innovation is not only a technical

²³ Farida Ida and Lestari Annisa. "Implementation of E-government as a Public Service Innovation in Indonesia." *Bulletin of Peoples' Friendship University of Russia. Series: Public and Municipal Administration* 8, no. 1 (2021): 72-79.

breakthrough, but also an important instrument to improve the efficiency, effectiveness, transparency, and accountability of public services. In the context of local government, innovation is present as an answer to complex bureaucratic challenges, increasingly high societal demands, and the need for sustainable development. Nevertheless, the implementation of innovation is inseparable from various obstacles. Limited resources, bureaucratic resistance, and program sustainability issues are still the main obstacles that must be overcome. On the other hand, the support of national regulations, visionary leadership, the development of digital technology, and community participation are important factors that can strengthen the success of innovation. Therefore, the strategy to strengthen innovation in local government needs to be directed at the establishment of an institutional mechanism that ensures sustainability, increasing the capacity of bureaucratic human resources, and community involvement in a more inclusive manner. With this approach, innovation will not only produce better quality public services, but also be able to realize local governance that is adaptive, responsive, and oriented towards community welfare.

References

- Christensen, Robert K., Laurie Paarlberg, and James L. Perry. "Public service motivation research: Lessons for practice." *Public Administration Review* 77, no. 4 (2017): 529-542.
- Cichosz, Marzenna, Carl Marcus Wallenburg, and A. Michael Knemeyer. "Digital transformation at logistics service providers: barriers, success factors and

- leading practices." *The International Journal of Logistics Management* 31, no. 2 (2020): 209-238.
- Ida, Farida, and Lestari Annisa. "Implementation of E-government as a Public Service Innovation in Indonesia." *Bulletin of Peoples' Friendship University of Russia. Series: Public and Municipal Administration* 8, no. 1 (2021): 72-79.
- Joshi, Pusp Raj, and Shareeful Islam. "E-government maturity model for sustainable E-government services from the perspective of developing countries." *Sustainability* 10, no. 6 (2018): 1882.
- Lewis, Blane D. "Does local government proliferation improve public service delivery? Evidence from Indonesia." *Journal of Urban Affairs* 39, no. 8 (2017): 1047-1065.
- Muluk, Mujibur Rahman Khairul, and Muhammad Rizki Pratama. "Public Sector Innovation In a Developing Country: Progress And Challenges Of Public Service Innovation Competition In Indonesian Government." *Public Policy and Administration* 20, no. 4 (2021): 452-465.
- Pratama, Arif Budy. "The landscape of public service innovation in Indonesia: A comprehensive analysis of its characteristic and trend." *Innovation & Management Review* 17, no. 1 (2020): 25-40.
- Sudrajat, Arip, and Lesmana Andhika. "Empirical evidence governance innovation in public service." *Jurnal Bina Praja* 13, no. 3 (2021): 407-417.
- Sufianti, Ely, Edah Jubaedah, and Sait Abdullah. "Building sustainability of public service innovation in Bandung city, West Java, Indonesia." In *2nd International*

Conference on Administration Science 2020 (ICAS 2020), pp. 19-24. Atlantis Press, 2021.

Supranoto, Moeroe, and Dila Novita. "A Qualitative Meta-analysis on Studies of Local Level Public Services Innovation in Indonesia." In *Proceedings International Conference on Innovations in the Social Sciences and Humanities (ISSH) Universitas Jember*. (2019).

Widya-Hasuti, Afris, Abbas Mardani, Dalia Streimikiene, Ali Sharifara, and Fausto Cavallaro. "The role of process innovation between firm-specific capabilities and sustainable innovation in SMEs: Empirical evidence from Indonesia." *Sustainability* 10, no. 7 (2018): 2244.

Wiryanto, Wisber. "Initiative and implementation of the public service innovation by regional government in indonesia." *Journal of Governance and Local Politics (JGLP)* 2, no. 2 (2020): 201-215.

Yuana, Rivira, Eko Agus Prasetyo, Rizal Syarif, Yandra Arkeman, and Arif Imam Suroso. "System dynamic and simulation of business model innovation in digital companies: an open innovation approach." *Journal of Open Innovation: Technology, Market, and Complexity* 7, no. 4 (2021): 219.