



Organizational Design: Formalisation Verses Specialisation

Amos K. Chemonges

ISSN: 2616-8421

Organizational Design: Formalisation Verses Specialisation

Amos K. Chemonges

PhD Student, Organisational Leadership, Pan African Christian University

Email Address: kiprutoamos@yahoo.com

How to cite this article: Chemonges, A. K. (2023). Organizational Design: Formalisation Verses Specialisation. *Journal of Human Resource & Leadership*, 7(3), 71-82. <https://doi.org/10.53819/81018102t3099>

Abstract

The study provides a comprehensive, literature-based review of organisational formalisation and specialisation. The objective was to provide insights into striking an optimal balance between these two critical aspects, maximising both benefits while avoiding potential pitfalls. The study was founded on thoroughly examining academic literature, industry reports, and case studies. It investigates the relationship between formalisation and specialisation and their implications and strategic utility for various organisations. The study also makes ten actionable suggestions for organisations attempting to strike a balance between the two constructs. These include everything from periodic reassessment and continuous learning to fostering communication and collaboration and utilising technology and feedback mechanisms. It emphasises the importance of leadership styles and organisational culture in striking this balance. The research findings broadly apply to organisations seeking to improve operational efficiency, employee satisfaction, and overall competitiveness. Organisations can better navigate the complex interplay between formalisation and specialisation by implementing these recommendations, fostering a flexible yet structured environment conducive to innovation and consistency.

Keywords: *Formalisation, Specialisation, Organisational, Design*

1.0 Introduction

This paper discusses two crucial aspects of organisational design, formalisation, and specialisation, offering an in-depth analysis of their roles, benefits, limitations, and application in different organisational contexts. By examining various perspectives from existing literature and drawing on practical examples, this paper aims to shed light on the significance of formalisation and specialisation in shaping organisational structures and performance. The subsequent sections present detailed discussions on formalisation and specialisation, along with the characteristics, benefits, limitations, and examples of formal and specialised organisations.

Organisational design is critical in determining an organisation's overall effectiveness and success. It encompasses aligning an organisation's structure with its mission, goals, and values (Mintzberg, 1993). Two fundamental components of organisational design that have garnered significant academic interest are formalisation and specialisation (Mintzberg, 1993; Daft, 2016). Formalisation refers to the degree to which an organisation relies on rules, procedures, and written documentation to direct the behaviour and decision-making of its employees (Adler & Borys, 1996). It clarifies roles, responsibilities, and reporting lines, reducing ambiguity, and enhancing efficiency (Ashkenas et al., 2015). On the other hand, specialisation involves dividing tasks and responsibilities among employees according to their skills and knowledge, leading to increased efficiency and expertise in specific fields (Daft, 2016). Organisational design structures and arranges an organisation's systems, resources, and processes to achieve specific goals (Daft, 2016). It determines how work is divided, allocated, and coordinated in organisational activities (Martz, 2008). Organisational design shapes the structure and functioning of an organisation (Burton et al., 2011). According to Burton et al., organisations have structural and contingent variables. An organisation's structural features include formalisation, specialisation, authority hierarchy, complexity, and centralisation. The organisation's size, technology, environment, culture, and goals are all contingent variables.

This paper examines, compares, and contrasts formalisation and specialisation in organisational design with examples. According to Fabac (2008), the relationship between formalisation and specialisation in organisational design is dynamic. By applying a formalism model from theoretical physics, Fabac presents a comprehensive analysis of these variables, highlighting their interconnectedness and mutual influence. The study suggests that the degree of formalisation and specialisation can fluctuate based on various factors, including the organisation's scale, goals, and external environment. Contrastingly, Juillerat (2010) champions formalisation over specialisation in contemporary work contexts. He argues that formalisation can lead to successful implementation when supplemented with efficient work design. In this view, formalisation provides a robust structure, ensuring accountability and consistency, while work design is complementary, enhancing job satisfaction, creativity, and productivity. Krouwel (2016) introduces a framework focusing on organisational implementation variables that provide traceability in governing enterprise and IT transformations.

In this perspective, formalisation and specialisation can be critical variables in implementing changes, especially in digital transformations. The study emphasises the significance of both dimensions in enabling a smooth transformation process. Royackers (2006), meanwhile, delves into the effects and added value of the organisational structure on involved agents. The study

suggests that organisational structures should be seen along at least three dimensions: integrality, power, and information. This argument indirectly underscores the importance of both formalisation and specialisation. Formalisation contributes to the power and information dimensions by delineating responsibilities and ensuring clear communication channels. In contrast, specialisation addresses the integrality dimension by allowing an organisation to benefit from the expertise of specialised roles.

Formalisation represents an essential dimension of organisational design, referring to how an organisation's processes, procedures, roles, and tasks are standardised and documented (Dosi et al., 2015). This design dimension involves establishing formal rules, regulations, and guidelines governing various organisational operations (Dosi et al., 2015). Such formalised structures are designed to limit the scope of employees' decision-making, ensuring that all actions align with the organisation's standards and objectives (Martz, 2008). Formalisation aims to bring clarity, consistency, and predictability to an organisation's activities. By providing a structured framework for decision-making and behaviour, formalisation can reduce ambiguity and foster a more efficient working environment (Juillerat, 2010). However, the role and implications of formalisation within an organisation are multifaceted and dependent on various factors. Jonker (2012) proposed a formal framework for organisational design, including design operators that could be combined into complex operators. These complex operators serve as patterns for larger steps in the design process, which helps maintain consistency and efficiency.

On the other hand, Xue-mei (2009) highlighted the potential limitations of formalisation. The author argued that individual characteristics and the existence of informal organisations within the larger organisation could hinder the full realisation of formalisation benefits. Thus, balancing formal and informal structures is crucial to achieving organisational efficiency and individual development. Iedema (1999) offered a unique perspective on formalisation, describing it as a process of recontextualising meaning from one discourse or practice to another. This process technologises meanings and enables the mobilisation of disembodied modes of meaning-making. In this sense, formalisation can also influence the organisation's cultural and communicative dimensions, further underscoring its significance in organisational design. Echoing this multifaceted view, Juillerat (2010) argued that the success of formalisation is contingent upon its alignment with appropriate work design. Formalisation and work design are key levers for organisations aiming to excel in their respective domains.

1.1 Characteristics of a Formal Organisation

A formal organisation is characterised by a highly structured environment where standardised processes and procedures are implemented (Daft, 2016). The hallmark of a highly formalised organisation is its detailed, well-defined, and documented protocols for different tasks and activities (Daft, 2016). These procedures set a strict order, leaving minimal room for interpretation or deviation (Daft, 2016). In such an organisation, each position has an explicit job description detailing the responsibilities, duties, and expectations (Mahadevan et al., 2016). The clarity provided by such explicitness helps employees understand their roles better and facilitates effective coordination (Dosi et al., 2015). A formalised organisation establishes clear reporting relationships and hierarchical structures (Matthews, 2011). The delineation of authority lines

clarifies decision-making processes and communication channels, reducing ambiguity and fostering consistency (Juillerat, 2010).

Moreover, decisions in such an environment are often based on predetermined rules and procedures rather than individual discretion (Juillerat, 2010). Communication within a formal organisation adheres to predetermined channels and protocols (Dosi et al., 2015). Information and messages flow through established channels such as official meetings, reports, and memos, ensuring that information reaches the appropriate parties efficiently.

A strong emphasis is placed on adherence to policies and guidelines, and employees must strictly follow the set procedures and rules (Daft, 2016). Krouwel (2016) elaborates on these characteristics and presents a framework for formalising organisational implementation variables. This framework can be utilised for modelling and designing software, thus introducing a more structured and reliable approach to managing complex organisational systems. Similarly, Dosi (2015) uses formal analysis to explore organisational capabilities and learning, employing NK models and classifier systems. This approach underscores the importance of formalisation in understanding and enhancing organisational learning and development. Guercini (2017) delves into the application of formalisation in business networks as a tool for industrial policy. The study emphasises that formalisation can have significant internal and external consequences for the network, thus influencing the organisation's interactions and relationships with its stakeholders. In another insightful study, Gebreyohannes (2018) formalises the Responsive and Formal Design (RFD) process using category theory, providing a novel method to represent and analyse the RFD process. This approach underscores the versatility of formalisation, showing how it can be applied to different organisational processes for better analysis and implementation.

1.1.1 Benefits of Formalisation

Formalisation provides a consistent framework for carrying out tasks and activities, thereby minimising variations and ensuring the efficacy of operations (Boly, 2015). According to Daft (2016), clear and well-documented procedures aid workers in comprehending their duties and responsibilities, thereby reducing confusion and ambiguity. Standardised processes and detailed job descriptions facilitate coordination between employees and departments, allowing for more efficient collaboration and workflow (Boly, 2015). Formalisation assists organisations in meeting legal and regulatory requirements, ensuring compliance with applicable laws and reducing the likelihood of errors or misconduct (Robbins, 1990). As they provide clear guidelines, formalised processes and documentation make training and onboarding new employees easier (Murphy et al., 2014).

1.1.2 Limitations of Formalisation

Due to the rigidity of their processes and rules, highly formalised organisations may require assistance to adjust to change or react swiftly to new circumstances (Draft, 2016). Excessive formalisation can suffocate creativity and innovation because employees may feel constrained by predetermined procedures and unable to investigate new approaches (Kaufmann, 2016). Formalisation can result in bureaucratic tendencies, including excessive documentation, hierarchical approvals, and decision-making delays, inhibiting organisational promptness (Kaufmann, 2016). Strict adherence to rules and limited autonomy may result in employee

dissatisfaction and decreased motivation, as individuals may feel they require more control or input in their work (Politis, 1965).

1.1.3 Examples of Formal Organisations

Government organisations are often highly formalised to ensure compliance with laws, regulations, and administrative procedures (Daft, 2016). In addition, banks, insurance companies, and other financial institutions have extensive formalisation to ensure their operations' accuracy, security, and regulatory compliance (Boly, 2015). For patient safety and drug development, organisations in the healthcare and pharmaceutical industries must strictly adhere to protocols, standards, and regulations (Robbins, 1990). Frequently, manufacturing organisations have detailed standard operating procedures and quality control measures to ensure product consistency and quality (Daft, 2016). To maintain discipline, coordination, and operational efficiency, military institutions have highly formalised structures, processes, and procedures (Hill, 2008).

1.2 Specialisation in Organisational Design

Specialisation is a key feature in organisational design, which involves dividing labour within an organisation into specific roles or duties (Marlet, 2013). This division allows employees or departments to focus on areas where they have the most expertise. Specialisation breaks down complex tasks into smaller, more manageable components and assigns them to individuals or teams based on their unique skills and knowledge (Johnson, 1985). Expanding on this concept, Dunbar (2006) argues that studying efforts to design organisations through specialisation can offer valuable insights to understand and improve them. The division of labour and the creation of specific roles help streamline operations, reduce redundancy, and improve efficiency. Knudsen (2011) further elucidates the concept of specialisation by proposing a computational model. This model examines the trade-offs between specialised and shared knowledge and how these affect joint search outcomes.

Specialisation can create silos of expertise and risks creating barriers between different areas of the organisation. Shared knowledge, on the other hand, can foster collaboration and innovation but may dilute the depth of expertise. Similarly, Halonen-Akatwijuka (2002) analyses how organisational design, specifically the specialisation of roles, interacts with the allocation of ownership in minimising the hold-up problem. Organisations can reduce potential conflicts and inefficiencies by carefully assigning roles and responsibilities based on expertise. Meanwhile, Wyner (2001) introduces the concept of defining specialisation for process models. In this context, specialisation refers to how individual organisational processes can be broken down and assigned to specialised roles or teams. This approach ensures that each process is handled by those most competent and experienced.

1.2.1 Characteristics of a Specialised Organisation

Specialisation is a key feature of organisational design. It involves dividing labour within an organisation into specific roles or duties. This division allows employees or departments to focus on areas where they have the most expertise. According to Daft (2016), specialisation enables employees to acquire extensive expertise in their specialised field. They possess specialised knowledge, skills, and experience in their respective positions. This makes them proficient in their respective disciplines and able to carry out their duties effectively. Hart and Moore (1999) argue

that specialisation also leads to the development of standardised procedures and task performance methods. This contributes to the organisation's consistency and quality. Different specialised units or individuals rely on one another to achieve organisational objectives. Effective coordination mechanisms are required to ensure seamless integration and workflow between specialised divisions. Specialisation can increase productivity by allowing individuals to concentrate on their primary competencies. This increases productivity as employees acquire specialised expertise. However, specialisation can also have some drawbacks. For example, it can lead to silos, where different departments or teams become isolated. This can make it difficult to share information and collaborate effectively. Therefore, specialisation is a double-edged sword. It can have both positive and negative effects on organisations. The key is to find a balance that maximises the benefits of specialisation while minimising the drawbacks.

1.2.2 Benefits of Specialisation

Specialisation allows people to focus on specific tasks, increasing efficiency and productivity (Chouikha, 2016). Individuals can build experience and knowledge in their specialised fields through specialisation, making them more skilled and proficient (Murphy et al., 2014). By focusing on a restricted range of tasks, individuals can quickly build knowledge and become proficient in their specialised area (Murphy et al., 2014). Butler and Rose (2011) state that specialisation can contribute to economies of scale by streamlining processes and enhancing resource allocation. It facilitates the development of best practices and the standardisation of processes, contributing to quality and consistency enhancements (Marlet, 2013)

1.2.3 Limitations of Specialisation

According to Ashkenas et al. (2015), highly specialised businesses may fail to adapt to change or perform jobs outside their specialities. Complex coordination and communication among specialist groups might cause delays (Kim & Lee, 2015). Overspecialisation may render employees unadaptable. They may struggle with non-specialist activities (Daft, 2016). Specialised companies may become overly reliant on a small number of people, posing dangers if such people quit or become unavailable (Murphy et al., 2014). They added that individuals might be less willing to explore beyond their specialised fields if they narrowly concentrate on specialisation.

1.2.4 Examples of Specialist Organisations

Specialisation is a common organisational structure in many industries. For example, manufacturing companies often have specialised divisions or departments for design, production, quality assurance, and logistics (Marlet, 2013). Healthcare organisations also have specialised departments for various medical disciplines, such as cardiology, neurology, radiology, and surgery (Murphy et al., 2014). In the technology industry, software development companies often have specialised teams for front-end development, back-end development, quality control, and project management (Lay & Tafese, 2020). Different areas of law, such as corporate, criminal, accident, and family law, are handled by lawyers specialising in their respective fields (Daft, 2016). Research organisations have specialised teams or divisions focusing on scientific disciplines, such as biology, chemistry, physics, or engineering (Burton et al., 2011). Different industries and organisations have different levels of formalisation, and some organisations may consider a balance between formalisation and specialisation based on their needs and contexts. For example,

a manufacturing company that needs to produce a high volume of products may have a more formalised structure with specialised divisions or departments. However, a research organisation focused on innovation may have a less formalised structure with more cross-functional collaboration.

1.3 Comparison of Specialisation and Formalisation

Formalisation entails clearly defined rules, procedures, and processes that govern the behaviour and decision-making of employees (Lyons, 2005). This level of standardisation can reduce flexibility and adaptability, as employees are expected to adhere to predefined procedures and may have less room for innovation or deviation. On the other hand, specialisation concentrates on dividing tasks and responsibilities among employees according to their skills and knowledge. Specialising promotes efficiency and expertise in particular fields. However, it can also limit flexibility and adaptability if employees are overly focused on their specialised tasks and unable to adapt to changes or manage broader responsibilities. Ashkenas et al. (2015) state that formalisation clarifies roles by delineating job descriptions, responsibilities, and reporting lines. This can reduce ambiguity and ensure everyone knows their roles and responsibilities. However, formalisation can also restrict employee autonomy, as individuals are expected to adhere to established procedures rigorously and may have little discretion in making decisions. Ashkenas et al. (2015) highlight that specialisation can lead to role clarity by assigning employees to specific roles and tasks based on their expertise. However, specialisation may allow for more employee autonomy within their specialised areas. Employees are often free to make decisions and exercise their expertise within their designated domains.

Typically, formalisation entails hierarchical structures and clearly defined communication channels (Martz, 2008). The author adds that information moving through predetermined channels could facilitate straightforward communication and coordination. However, formalisation can also result in sluggish communication and bureaucracy, as information must travel through multiple levels of hierarchy before reaching the appropriate individuals (Lay & Tafese, 2020). Specialisation may necessitate frequent communication and coordination between specialised roles to maintain a fluid workflow (Chouikha, 2016). However, lacking formalised communication channels specific to specialisation can lead to miscommunication or coordination issues, especially when cross-functional collaboration is necessary (Daft, 2016). Formalisation prioritises consistency, standardisation, and adherence to established procedures (Boly, 2015). Boly asserts that while this can ensure reliability and quality control, it may limit innovation and creativity since employees are expected to follow specific processes rather than explore alternative approaches or experiment with new ideas.

Specialisation can increase innovation and creativity within specialised departments if employees are given the authority and freedom to develop solutions and enhancements. Excessive specialisation may limit the cross-pollination of ideas, thereby inhibiting organisational innovation (Daft, 2016). By establishing defined procedures and guidelines that support the desired outcomes, formalisation can help align employee actions with organisational goals and strategies (Lay & Tafese, 2020). Nonetheless, rigorous formalisation may impede alignment if established processes become obsolete or fail to adapt to changing conditions. The specialisation can contribute to goal alignment as employees concentrate on specific areas that correspond with the organisation's goals

(Matthews, 2011). Organisations can improve their capabilities in critical areas by designating individuals to specialised roles. However, over-specialisation can contribute to misalignment if the specialised roles do not evolve to reflect shifting organisational priorities (Murphy et al., 2014).

1.4 Contrasts Between Formalisation and Specialisation

Formalisation necessitates the establishment of unambiguous rules and standardised procedures that leave little room for interpretation (Rohleder, 2010). On the other hand, specialisation emphasises the division of labour by assigning employees specific duties or functions based on their expertise (Daft, 2016). Although formalisation and specialisation both entail the application of rules and procedures, the nature of these rules can vary (Johnson, 1985). Johnson noted that formalisation is concerned with standardising and regulating organisational processes, whereas specialisation is concerned with assigning tasks based on employees' specialised abilities.

Formalisation emphasises tasks and the processes necessary for their completion. It focuses on establishing efficient and consistent workflows by outlining the necessary step-by-step procedures. On the other hand, specialisation emphasises individuals and their areas of expertise (Rook & Knippenberg, 2006). They noted that it entails identifying employees' strengths and assigning duties matching their abilities and knowledge. Specialisation acknowledges the value of individual capabilities and seeks to maximise productivity by allowing employees to focus on their areas of expertise. Formalisation may not necessitate a high level of employee skill development. Due to the reliance of formalisation on standardised processes and procedures, employees may be required to adhere to established guidelines rather than develop specialised expertise. Specialisation, in contrast, emphasises the development of specific abilities and knowledge. Employees are urged to concentrate on their skills in their respective specialised domains (Lyons, 2005). This entails primarily perpetual learning and professional development to remain current with industry trends.

1.5 Employee Engagement and Culture

Formalisation promotes a more structured and rule-driven organisational culture. Explicit employee expectations and guidelines can create a more controlled work environment (Thomas, 2020). However, excessive formalisation can inhibit innovation and autonomy, reducing employee engagement. On the other hand, Thomas argues that specialisation can cultivate a culture that values expertise and promotes innovation in specific fields. Specialisation can increase employee engagement and job satisfaction by allowing workers to execute tasks that match their abilities. It contributes to a more motivated and engaged workforce by offering employees opportunities to excel in their areas of expertise.

1.6 Organisational Compatibility

Formalisation and specialisation are two interdependent factors that influence organisational structures and processes. These two characteristics frequently go hand in hand. Increasing formalisation frequently results in increased levels of specialisation. For example, companies that construct formalised structures to ensure consistency and efficacy as they expand and become more complex may create precise job descriptions, standardised procedures, and hierarchical reporting structures. This formal structure allows for the specialisation of tasks, allowing employees to concentrate on their areas of expertise. However, most organisations can balance formalisation and specialisation based on their requirements and industry standards. Formalisation

is compatible with organisations that rigorously adhere to processes, such as manufacturing and healthcare sectors, where standardisation is crucial for quality control and safety. It provides explicit guidelines that promote consistency and minimise errors. On the other hand, according to Daft (2016), specialisation is advantageous in knowledge-intensive industries where expertise is essential, such as research, development, and consulting. It allows businesses to capitalise on their employees' specialised skills to produce high-quality results.

Organisations may encounter inefficiencies when formalisation is high but specialisation is low. The imposition of stringent rules and procedures could hinder the inability of employees to adapt and make independent decisions. In addition, a lack of specialisation may result in a lack of expertise and potential inefficiency if tasks are distributed among individuals with diverse skill sets who lack specialisation (Burton et al., 2011). Conversely, coordination issues may arise within an organisation when specialisation is high, but formalisation is low. Without formal structures and guidelines, inconsistencies in processes and decision-making may contribute to confusion and potential conflicts. In large organisations, a lack of formalisation can also make it difficult to maintain consistency and standardisation. The level of formalisation and specialisation optimal for an organisation will vary depending on several factors, including the industry, the size of the organisation, the external environment, and the organisation's culture and leadership style.

For example, larger organisations with complex operations often require higher formalisation and specialisation to ensure coordination and efficiency. Industries with standardised and repetitive manufacturing processes may require higher formalisation and specialisation. In contrast, industries that rely heavily on innovation and creativity, such as technology startups, may prioritise flexibility and individual autonomy over formalisation. To achieve organisational performance, it is essential to balance formalisation and specialisation. A moderate level of formalisation provides the necessary structure and control, ensuring consistency and accountability (Mackenzie, 1988). On the other hand, specialisation allows organisations to tap into their employees' diverse skills and expertise, promoting innovation and adaptability. Thus, an organisation high on one dimension may be low on the other, hence the need to carefully consider and customise an organisational design to suit specific contexts and goals.

1.7 Conclusion

In conclusion, formalisation and specialisation play significant roles in defining an organisation's structure, processes, and performance. Formalisation offers structure, predictability, and consistency, which are crucial in industries that value safety, reliability, and quality control. On the other hand, specialisation enables organisations to leverage their workforce's unique skills and expertise, which is vital in knowledge-intensive sectors that value innovation and adaptability. However, striking the right balance between formalisation and specialisation is critical. Overemphasis on formalisation can stifle creativity and inhibit flexibility, while excessive specialisation can lead to inefficiencies and coordination challenges. An optimal mix of formalisation and specialisation ensures that an organisation remains adaptable to changing conditions and fosters a culture of learning and innovation. Moreover, this dynamic balance should be reassessed and adjusted periodically to reflect shifts in market dynamics, organisational objectives, and regulatory landscape. The degree of formalisation and specialisation appropriate for an organisation will be contingent upon various factors, including its size, industry, external

environment, and culture. In the final analysis, organisations can build a resilient, innovative, and efficient work environment that drives high performance and employee engagement by effectively balancing formalisation and specialisation. A hallmark of successful and adaptable organisations is the capacity to strike this balance and adjust as necessary.

1.8 Recommendations

Based on the study findings, the study recommends that; Organizations should periodically review the balance between formalization and specialization to ensure alignment with their strategic goals and market changes. This helps maintain the optimal level of efficiency and effectiveness in operations. Encourage continuous learning and skill development among employees. This is particularly essential for specialization, as it allows employees to constantly upgrade their skills and remain competitive in their areas of expertise. To mitigate the risks associated with high specialization, promote communication and collaboration across different departments. This can be facilitated through regular cross-functional meetings, team-building activities, and collaboration tools. Clear definitions of roles and responsibilities help balance formalization and specialization. Each employee should clearly understand their role, responsibilities, and reporting lines. While having standardized procedures is critical for quality and consistency, some flexibility should allow for innovation and adaptation to changes. Leadership styles should reflect a balance between formalization and specialization. Leaders should maintain control and order while empowering employees and encouraging their special talents and skills. Identify and manage risks associated with high levels of formalization (like rigidity and resistance to change) and specialization (like over-specialization and coordination problems). Implementing appropriate risk management strategies can help maintain a balance and avoid potential pitfalls. Implement feedback mechanisms to understand how formalization and specialization affect employees' job satisfaction and performance. This feedback can be used to make necessary adjustments. Foster an organizational culture that values both structure and innovation. An open, inclusive, and supportive culture can help achieve the right balance between formalization and specialization. Use technology to facilitate both formalization and specialization. Technologies like project management tools can help standardize processes, while specialized software and platforms can enhance employees' skills.

REFERENCES

- Ashkenas, R., Ulrich, D., Jick, T., & Kerr, S. (2015). *The Boundaryless Organization: Breaking the Chains of Organizational Structure*. John Wiley & Sons.
- Boly, A. (2015). On the benefits of formalization: Panel evidence from Vietnam. In *Working Paper Series*. <https://doi.org/10.35188/unu-wider/2015/923-7>
- Burton, R. M., Obel, B., & DeSanctis, G. (2011). *Organizational Design: A Step-by-Step Approach*. Cambridge University Press.
- Wyner, G. A. (2001). The customer-value gap. *Marketing Management*, 10(1), 4.
- Butler, M., & Rose, E. (2011). *Introduction to Organisational Behaviour*. Kogan Page Publishers.
- Chouikha, M. B. (2016). *Organizational Design for Knowledge Management*. John Wiley & Sons.
- Daft, R. L. (2016). *Organization Theory & Design*. South-Western College.

<https://doi.org/10.53819/81018102t3099>

- Mintzberg, H. (1993). The pitfalls of strategic planning. *California management review*, 36, 32-32.
- Dosi, G., Faillo, M., Marengo, L., Moschella, D., & Manara, V. C. (2015). The Formalization of Organizational Capabilities and Learning. *The Oxford Handbook of Dynamic Capabilities*. <https://doi.org/10.1093/oxfordhb/9780199678914.013.022>
- Hart, O., & Moore, J. (1999). Foundations of incomplete contracts. *The Review of Economic Studies*, 66(1), 115-138.
- Hill, T. (2008). *An analysis of the organizational structures supporting PPBE within the military departments*. Acquisition Research Program.
- Johnson, S. H. (1985). Specialization with collaboration. *Dimensions of Critical Care Nursing*, 4(5), 259–260. <https://doi.org/10.1097/00003465-198509000-00001>
- Juillerat, T. L. (2010). Friends, not foes?: Work design and formalization in the modern work context. *Journal of Organizational Behavior*, 31(2–3), 216–239. <https://doi.org/10.1002/job.654>
- Kaufmann, W. (2016). “Formalization and Organizational Red Tape Revisited: Rule Design, Implementation, and Enforcement.” *Proceedings - Academy of Management*. <https://doi.org/10.5465/ambpp.2016.10693abstract>
- Kim, J., & Lee, J. (2015). The Effect of the Job Characteristics on Job Satisfaction and Organization Commitment Workers in Sports Specialized Channel. *Journal of Sport and Leisure Studies*, 61, 167–177. <https://doi.org/10.51979/kssls.2015.08.61.167>
- Lay, J., & Tafese, T. (2020). *Formalization and productivity: firm-level evidence from Viet Nam*. <https://doi.org/10.35188/unu-wider/2020/921-1>
- Lyons, P. A. (2005). A robust approach to employee skill and knowledge development. *Industrial and Commercial Training*. <https://doi.org/10.1108/00197850510576420>
- Mahadeen, B., Al-Dmour, R., Obeidat, B. Y., & Tarhini, A. (2016). Examining the Effect of the Organization’s Internal Control System on Organizational Effectiveness: A Jordanian Empirical Study. *International Journal of Business Administration*, 7(6). <https://doi.org/10.5430/ijba.v7n6p22>
- Marlet, R. (2013). Applications of Specialization. In *Program Specialization*. <https://doi.org/10.1002/9781118576984.ch5>
- Martz, W. A. (2008). *Evaluating organizational effectiveness*. Western Michigan University.
- Matthews, J. R. (2011). Assessing organizational effectiveness: the role of performance measures. *The Library Quarterly*, 81(1), 83-110
- Murphy, J., Daft, R. L., & Willmott, H. (2014). *Organization Theory and Design: An International Perspective*.
- Politis, C. (1965). Limitations of Formalization. *Philosophy of Science*, 32(3/4), 356–360. <https://doi.org/10.1086/288059>

- Robbins, S. (1990). *Organizational theory, structure, designs, and applications*. New York NY: Pearson.
- Rohleder, E. (2010). Management. *Is there an Ideal Structure for all Organisations?* GRIN Verlag.
- Rook, L., & Van Knippenberg, D. (2006). Imitation in creative tasks: The role of task difficulty, performance of others, comparison orientation for abilities, and individuals vs. groups [Dataset]. In *PsycEXTRA Dataset*. <https://doi.org/10.1037/e633962013-243>
- Thomas, R. (2020). Formal Organizational Initiatives and its Impact on Employee Engagement. *International Journal of Psychosocial Rehabilitation*, 24(3), 2336–2344. <https://doi.org/10.37200/ijpr/v24i3/pr200981>