

Business Process Automation as an Innovative Strategy in Modernizing Corporate Business Administration

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Submitted : 02-01-2023, Accepted : 03-02-2023, Published : 03-03-2023

Abstrak

This study aims to analyze the role of business process automation as an innovative strategy in driving the modernization of business administration. Amid the rapid development of digital technology, organizations are required to enhance efficiency, accuracy, and speed in administrative management. Automation serves as a strategic solution to replace manual processes that tend to be slow and prone to errors. The research method used is a descriptive approach with qualitative analysis of the implementation of automation across various business sectors. Data were collected through interviews, literature studies, and observations of digital system-based administrative practices. The findings show that business process automation significantly contributes to the modernization of business administration by positively impacting operational efficiency, data accuracy, information-based decision-making, and customer service quality. Through the integration of Business Process Automation (BPA), companies are able to streamline various processes such as employee onboarding, purchase order management, contract management, marketing, and sales, thereby reducing reliance on manual processes that are susceptible to errors and delays. These findings reinforce that automation not only boosts productivity and reduces costs but also accelerates business responsiveness to market dynamics, enhances competitiveness, and strengthens the organizational foundation for long-term growth in a technology-driven business environment.

Keywords : Business Process Automation, Innovation, Modernization, Business Administration, Operational Efficiency.

Introuction

In the rapidly evolving era of digital transformation, the business world is required to continuously adapt to advancements in information technology. One crucial aspect of this adaptation is the modernization of business administration, which has long been associated with manual processes that are slow and prone to errors (Jamaludin et al., 2022). Administration serves as the main foundation for efficient organizational management, and thus must be managed through more innovative and technology-based approaches (Putri & Haryanti, 2022).

Business process automation (BPA) emerges as a strategic solution to address these challenges. By implementing automation technologies, various administrative activities—such as data management, document archiving, and internal approval processes—can be executed more quickly, accurately, and systematically (Suryadi, 2020). Automation not only enhances

work efficiency but also minimizes human errors that frequently occur in conventional administrative management (Silvanie, 2020).

This phenomenon has prompted many organizations, both in the public and private sectors, to integrate automation systems into their operational structures. This transformation reflects a paradigm shift from traditional administration to a more modern and adaptive digital administration (Nugrahanti et al., 2023). In this context, business process automation is not merely a supportive tool, but an innovative strategy that strengthens organizational competitiveness amid dynamic market conditions (Maulana, 2023).

However, the implementation of automation in administrative processes does not come without challenges. It requires readiness in terms of human resources, technological infrastructure, and a work culture that supports digitalization (Ainiyah & Puspasari, 2015). Therefore, it is important to conduct an in-depth analysis of how automation is implemented as an integrated strategy for administrative modernization, and what its impacts are on organizational performance and structure (Carissa et al., 2014).

The modernization of administration through automation also implies a more open, transparent, and data-driven organizational governance. The ability to access and analyze data in real-time enables faster and more accurate decision-making (Djani, 2022). In addition, digitalized systems facilitate audits, document tracking, and interdepartmental coordination, which have long been challenges in manual administrative systems.

Based on this background, this study aims to explore the role of business process automation as an innovative strategy in the modernization of business administration. This research is expected to contribute both theoretically and practically to the development of digital organizational strategies, particularly in the context of more effective and efficient administrative management.

Therefore, the research problem addressed in this study is: How can business process automation be applied as an innovative strategy in the modernization of business

administration, and what is its impact on the effectiveness and efficiency of organizational management? Through this study, it is expected that a relevant model or strategic approach can be identified to sustainably drive the digitalization of administration.

Literature Review

Theory of Business Administration

Business administration is the process of managing all business activities, including planning, organizing, directing, and controlling, in order to achieve organizational goals effectively and efficiently. According to Stoner, Freeman, and Gilbert (1996), business administration involves the coordination of all organizational resources through managerial functions to achieve predetermined objectives. In a modern context, business administration is not limited to office activities, but extends to information system management, strategic decision-making, and cross-division process integration.

As technology and market dynamics evolve, business administration must be adjusted to meet the demands of digitalization and efficiency. This aligns with Terry's (2007) view that the effectiveness of administration is largely determined by an organization's ability to adapt to environmental and technological changes. Therefore, the role of administration today is not only technical but also strategic, serving as a key foundation in the decision-making process and organizational innovation.

Theory of Business Innovation

Business innovation is defined as the process of applying new ideas in products, services, processes, or business models to create added value and competitive advantage. According to Schumpeter, as cited in Andersen & Wolfe (2011), innovation is a core element in economic growth and market dynamics, encompassing the introduction of new products, new production methods, the opening of new markets, and new organizational structures. In the context of modern business, innovation becomes a key driving force amid globalization and digitalization pressures.

Furthermore, Davila, Epstein, and Shelton (2006) emphasize that successful business innovation depends on an organization's ability to integrate creativity with structured managerial processes. This includes the use of technology, the creation of an innovative culture, and the implementation of systems that support change. Therefore, innovation is not merely a creative activity, but a vital part of organizational strategy to survive and grow amid rapid change.

Theory of Business Process Automation (BPA)

Business Process Automation (BPA) is a systematic approach to using technology to automate business processes, aiming to enhance efficiency, reduce costs, and minimize errors. According to Dumas et al. (2018), BPA involves the identification, modeling, and execution of business processes through digital systems that can significantly replace manual intervention. Automation includes the use of software, artificial intelligence, and enterprise resource planning (ERP) systems to support organizational operations.

BPA also plays a crucial role in organizational digital transformation, as it enables interdepartmental integration, increased transparency, and real-time data access. Harmon (2019) states that the success of process automation largely depends on understanding workflow, redesigning processes efficiently, and the organization's readiness to embrace change. Thus, automation is not only a technical tool but also a strategic one, as it supports the achievement of organizational goals in a more optimal and sustainable manner.

Method

This study employs a descriptive qualitative approach with the aim of providing an in-depth depiction of how business process automation is implemented as an innovative strategy in the modernization of business administration. This approach was chosen because it enables the researcher to explore phenomena holistically and contextually, particularly in understanding the dynamics of automation implementation within organizational settings. Data were collected using both primary and secondary data collection techniques, including in-depth interviews

with key informants, direct observation of the implemented digital administrative systems, and review of internal documents and relevant literature (Sugiyono, 2007).

The data analysis technique used is thematic analysis, where data are analyzed by identifying patterns, themes, and relationships among relevant information. The researcher employed source and method triangulation to enhance the validity of the data obtained. The research subjects consisted of unit leaders, administrative staff, and IT teams directly involved in the automation process. The research location was purposively selected from organizations or institutions that have significantly implemented automated administrative systems. The results of this study are expected to provide both conceptual and practical insights into innovative strategies relevant to modernizing business administration through automation.

Results and Discussion

The Role of Business Process Automation in Business Administration

Business processes are a series of structured and interconnected activities designed to achieve specific goals within an organization, such as product or service production, financial management, employee recruitment and onboarding, as well as customer acquisition and retention. These processes do not operate in isolation; rather, they often involve cross-departmental collaboration between production, marketing, finance, and human resources, requiring efficient and systematic coordination. Each activity within a business process has defined inputs, outputs, and workflows to ensure that organizational goals are optimally achieved.

In today's digital era, these processes are no longer handled manually alone, but have started to transform through automation—either fully or partially—using information technologies such as ERP (Enterprise Resource Planning) systems, RPA (Robotic Process Automation), and artificial intelligence. This automation not only accelerates task execution but also improves accuracy, reduces operational costs, and provides greater transparency and control over the organization's entire workflow. Therefore, efficient and innovative business

process management becomes a key element in enhancing competitiveness and organizational resilience in a constantly changing business environment.

There are several key roles of business process automation as an innovative strategy in business administration. These roles include:

1. Improving Efficiency and Productivity

One of the main roles of business process automation in modern administration is the improvement of work efficiency and productivity. Automation allows organizations to streamline workflows by eliminating time-consuming manual steps that are prone to human error. For instance, in financial data processing or inventory management, automated systems like ERP can accelerate data input, integrate interdepartmental information, and deliver more accurate results in a shorter time. Tasks that previously took hours can now be completed in minutes, directly increasing output and operational efficiency.

Moreover, automation frees human resources from repetitive administrative tasks such as data entry, scheduling, or document filing, enabling employees to focus on more strategic and creative responsibilities. This adds value to employee roles and allows organizations to be more adaptive in responding to market changes and customer demands. According to Davenport and Short (1990), structured process automation speeds up decision-making, improves customer service, and fosters a more productive work environment. Thus, automation is not merely about replacing manual labor, but optimizing work potential through smart use of technology.

2. Cost Reduction

Business process automation significantly contributes to reducing operational costs. By replacing labor-intensive manual processes with more efficient digital systems, companies can cut back on repetitive administrative tasks that consume time and resources. For example, in payroll processing or inventory management, automation reduces the need for manual input,

speeds up task completion, and lowers the administrative workload previously requiring multiple staff. This directly reduces labor costs, especially for roles that can be automated.

Furthermore, automation reduces the potential for human error, which often leads to financial losses due to miscalculations, data duplication, or process delays. Errors that once required extra time and costs to fix can now be minimized through well-programmed, standardized systems. Additionally, less time wasted on manual processes speeds up work cycles and allows the organization to accomplish more in the same amount of time. According to a McKinsey (2020) report, companies that successfully implement automation can save 20–30% of their total operational costs. Thus, automation is an efficient strategy for budget optimization without compromising service quality or business output.

3. Increased Accuracy and Reliability

One of the most prominent benefits of business process automation is the increased accuracy and reliability of operational data. In manual systems, activities such as data entry, financial calculations, and document processing are highly susceptible to human error, whether from fatigue, lack of focus, or negligence. Automation reduces these risks by providing programmed systems that operate based on consistent algorithms and logic. This not only produces more accurate outputs but also preserves the integrity and consistency of data across processes.

Moreover, the reliability of automated systems supports data-driven decision-making, as the information presented is real-time, complete, and free from subjective bias. For example, in supply chain management, automation enables organizations to monitor stock and product movement accurately, allowing for more timely purchasing and distribution decisions. Automation also supports neat audit trails, enabling companies to track all activities transparently and accountably. With accurate and reliable data, organizations can not only minimize errors but also enhance credibility and service quality for customers and business partners.

4. Enhancing Customer Service Quality

The application of automation in business processes directly impacts the improvement of customer service quality, particularly in speed, accuracy, and consistency. With automated systems, companies can respond to customer requests, complaints, or inquiries in real-time without the delays of manual processes. For instance, in customer service systems using chatbots or automated ticketing, customers can receive instant responses or basic solutions without waiting for a human agent. Processes such as order tracking, payment confirmation, or returns can also be handled instantly and transparently. Fast and efficient service is a key factor in building customer loyalty, and automation plays an important role in achieving that.

Beyond speed, automation improves the accuracy and consistency of information delivered to customers. Each customer receives uniform treatment and information according to data and procedures predefined in the system. This reduces the risk of miscommunication, customer data entry errors, or unfair handling. For example, an automated CRM (Customer Relationship Management) system allows companies to systematically store and manage customer data, making future interactions more personalized and relevant. This consistency builds customer trust in the brand and creates a superior and sustainable service experience. Thus, automation is not just a technical tool but also a key strategy for creating competitive advantage in the eyes of consumers.

5. Better Decision-Making

Business process automation greatly supports more accurate, faster, and data-driven decision-making. With automated systems, companies can collect data from various sources in real-time and store it in an integrated platform. This data can then be analyzed using sophisticated algorithms and analytical tools to identify patterns, trends, and anomalies that might not be visible through manual observation. Automated information systems support decision-making by providing more complete, accurate, and relevant information in a short

time. This helps management formulate strategic policies based on facts rather than assumptions.

Beyond efficiency, automation enables deeper data interpretation through features like visualizations, interactive dashboards, and analytical reports designed to support tactical and strategic decisions. For example, in supply chain management or customer behavior analytics, automated systems can provide early warnings of potential risks or business opportunities. This leads to more proactive and adaptive decisions in response to changes in the external environment. In other words, automation transforms data into a strategic asset that supports organizational agility in facing modern business challenges. The ability to make smart and quick decisions is a competitive advantage that is increasingly critical in today's digital era.

6. Increasing Competitive Advantage

Boosting competitive advantage is one of the strategic outcomes of automation in business administration. Automation allows companies to enhance operational efficiency, lower costs, accelerate service delivery, and maintain accuracy and consistency in business processes. All of these factors directly contribute to the organization's ability to respond to market needs more swiftly and effectively. In the context of global competition, speed and efficiency are significant value-added factors. Competitive advantage can be achieved through cost leadership and differentiation—two aspects that are highly attainable through integrated and effective business process automation.

Moreover, companies that have adopted automation tend to be more adaptive to technological changes and shifting consumer preferences. They can optimally leverage data to innovate products, personalize services, and enhance the overall customer experience. This makes them more competitive compared to others still relying on manual or conventional processes. Additionally, automation provides flexibility in scaling production and services without significantly increasing operational costs. With this combination of efficiency, speed, and precision, automation becomes not just a technical support tool but also a strategic

foundation for creating and maintaining long-term competitiveness in a dynamic and disruptive market.

Implementation of Business Process Automation in Business Administration

Furthermore, the application of Business Process Automation (BPA) in business administration can be carried out in several areas. The author has summarized some examples of such implementations:

1. New Employee Orientation

One significant benefit of business process automation is its ability to simplify and accelerate the onboarding process for new employees. Instead of relying on time-consuming manual procedures prone to administrative oversights, automation enables the Human Resources (HR) department to manage onboarding activities more efficiently. BPA systems can automatically send welcome emails to new hires, grant access to relevant digital platforms, and schedule training or orientation sessions without requiring intensive manual intervention. This not only reduces the administrative burden on HR staff but also creates a more professional, structured, and consistent onboarding experience.

Moreover, automating the orientation process allows companies to document the entire procedure effectively, facilitating evaluation and continuous improvement. For instance, digital forms for personal data, employment contracts, or compliance with company policies can be processed quickly and securely through an integrated system. New employees will also feel more valued as they receive necessary information and work facilities promptly from day one. A well-structured onboarding process positively affects early job satisfaction, employee loyalty, and faster adaptation to organizational culture. Therefore, automation not only improves internal efficiency but also supports long-term talent management strategies.

2. Purchase Orders and Accounts Payable

In the context of finance and procurement, automation plays a vital role in enhancing the efficiency and accuracy of managing purchase orders and accounts payable. Previously manual tasks such as invoice recording, document matching, and payment authorization can now be handled automatically by BPA systems. With automation, time-sensitive invoices can be immediately routed to the authorized parties for approval, avoiding administrative delays. In addition, the system can automatically match purchase orders with invoices and goods receipts, minimizing data entry errors or manipulation. Automated integration within financial systems enables companies to manage transactions transparently, quickly, and efficiently.

Furthermore, automation in managing purchase orders and accounts payable supports compliance with internal policies and external regulatory standards. By using pre-programmed standard workflows, companies can ensure that every process adheres to established procedures, including internal controls and audit requirements. Faster processing also allows businesses to take advantage of early payment discounts and avoid late penalties. On the other hand, real-time transaction data facilitates financial reporting and data-driven decision-making. Thus, automation is not just a tool for operational efficiency but also a critical pillar in building a secure, accountable, and competitive financial system.

3. Contract Management

Contract management is a crucial aspect of business administration that requires high accuracy—from drafting and negotiation to signing, renewal, and compliance monitoring. With the help of BPA, the entire contract lifecycle can be handled more efficiently and systematically. BPA systems enable the automatic creation of contract templates based on company standards, streamline approval workflows across departments, and facilitate legally valid digital signing. Moreover, automatic reminders can notify stakeholders about contract renewal dates or payment milestones. Companies that implement automation in contract management can reduce the contract cycle time by up to 50% and significantly decrease the risk of administrative negligence.

Automation also enhances compliance and reduces legal risks commonly associated with manual contract handling. With all data digitally recorded, companies can easily access contract change histories, approval trails, and applicable legal terms. Systems can also be configured to automatically ensure that contracts comply with both local and international regulations. This makes audits more straightforward, as all documents and activities are logged completely and in real time. Therefore, BPA in contract management not only improves administrative efficiency but also provides stronger legal safeguards and better governance in managing business relationships.

4. Marketing Automation

Automation in marketing has become an increasingly important strategy in today's digital era. With the help of BPA software, various routine and repetitive marketing tasks can be automated, such as mass email delivery, social media scheduling, and customer interaction tracking. This allows marketing teams to focus on strategic aspects such as creative content development, brand building, and market analysis. One of the main functions of marketing automation is its ability to identify and segment potential prospects based on customer behavior data, enabling companies to deliver more relevant and personalized promotional messages. As Chaffey & Ellis-Chadwick (2019) note, marketing automation facilitates a data-driven approach that enhances market targeting accuracy while saving time and costs.

Beyond efficiency, marketing automation also supports more effective conversion of prospects into customers. By integrating BPA systems with Customer Relationship Management (CRM) platforms, all customer information can be updated in real time and coordinated well across departments. This process includes prospect data collection, customer interaction tracking, and lead nurturing through personalized marketing campaigns. Additionally, the system can generate analytical reports on campaign effectiveness, conversion rates, and user behavior, serving as a foundation for data-driven marketing decisions. Thus,

marketing automation not only boosts team productivity but also strengthens customer relationships and drives sustainable business growth.

5. Sales Automation

The integration of BPA with CRM systems is essential for streamlining the sales process and optimizing customer experience. By automating various customer-related tasks such as data verification, account creation, and purchase information processing, organizations can reduce reliance on time-consuming manual processes. BPA systems help align and eliminate data silos between departments, enabling sales teams to access more detailed and up-to-date customer information in real time. In addition, this automation improves sales pipeline management by prioritizing more profitable leads, ultimately accelerating deal closures. As noted by Buttle & Maklan (2015), CRM integrated with automation not only increases efficiency but also enables companies to deliver more responsive and customer-oriented services.

Furthermore, the use of low-code development platforms offers flexibility in creating more customized sales automation solutions, especially when existing CRM systems fall short. These platforms allow non-coders to build automation applications that can be integrated directly with APIs, speeding up implementation and reducing dependence on software developers. A key advantage of low-code platforms is their ability to avoid the complexity often found in traditional Robotic Process Automation (RPA), which typically requires user interfaces to mimic human interaction. With direct API access, sales automation via low-code platforms enables companies to achieve faster and more efficient performance while lowering system development and maintenance costs.

Conclusion

Business process automation through Business Process Automation (BPA) has a significant impact on increasing efficiency and productivity in various aspects of business administration. By automating routine tasks such as order processing, contract management, marketing, and sales, organizations can reduce administrative burdens, reduce operational

costs, and minimize the risk of human error. In addition, automation allows companies to focus on more strategic, value-added activities, such as product development, innovation, and improving customer relationships. Integrating BPA with systems such as CRM also allows companies to be more responsive and adaptive to customer needs, accelerate decision-making, and optimize team performance. Furthermore, implementing BPA in business processes not only provides operational benefits but also strengthens the company's competitiveness in an increasingly competitive market. By utilizing automation technologies such as low-code development platforms, organizations can design more flexible and tailored solutions to specific needs, without the need for in-depth coding skills. This allows companies to overcome challenges arising from the limitations of existing systems and utilize data more effectively to drive long-term growth. Overall, business process automation is an innovative strategy that supports the modernization of business administration, creates competitive advantages, and makes a positive contribution to the sustainability and efficiency of organizations in the digital era.

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