

ACHIEVING COST REDUCTION THROUGH IMPLEMENTATION OF ELECTRONIC INVOICING

Ubon Asuquo OBONGUKO ¹, & Mfreke UMOH, Ph.D. ²

Department of Computer Science, Akwa Ibom State Polytechnic, Ikot Osurua, Ikot
Ekpene, Akwa Ibom State.

Corresponding Author's Email: ubonobonguko@yahoo.com

ARTICLE INFORMATION

Received: 09th May, 2024
Accepted: 28th July, 2024
Published: 12th August, 2024

KEYWORDS: E-invoicing, cost
reduction and multinational
corporations

JOURNAL URL:
<https://ijois.com/index.php/jobpef>

Editor-in-chief: Assist. Prof. Dr (C) Ari
Riswanto

PUBLISHER: Empirical Studies and
Communication - (A Research Center)
Website: www.cescd.com.ng

ABSTRACT

Electronic invoicing (e-invoicing) has emerged as a game changer for multinational companies (MNCs) looking to optimise their financial operations and save operating expenses. This case study digs into the experiences of many top multinational corporations that have deployed e-invoicing systems and the cost savings that have resulted. E-invoicing has transformed the traditional invoicing process by digitizing invoice preparation, distribution, and processing. MNCs have witnessed significant cost reductions across several dimensions. Furthermore, e-invoicing has improved cash flow management by shortening the payment cycle via faster invoice approval and payment processes. This not only optimizes working capital but also allows MNCs to take advantage of early payment reductions, which contributes to cost savings. E-invoicing has also boosted compliance by ensuring tax compliance and reducing the possibility of invoice fraud. This has resulted in savings in fines and penalties that MNCs may have faced if they had not complied. Finally, e-invoicing improves efficiency, transparency, and sustainability in addition to financial gains. As organisations increasingly recognise the benefits of e-invoicing, its adoption is anticipated to increase, resulting in more cost savings and process improvements in the corporate sector.

INTRODUCTION

In an era characterized by the pervasive influence of digital transformation and the relentless progression of technology, multinational corporations (MNCs) are perpetually in pursuit of novel methodologies to augment operational efficiency, rationalize financial procedures, and curtail expenditures. The concept of e-invoicing pertains to the digital transmission of invoices between purchasers and vendors. In contrast to conventional paper-based invoicing systems, E-invoicing harnesses digital technologies to generate, transmit, receive, and process invoices with enhanced efficiency and automation. The aforementioned metamorphosis has been propelled by the incessant digitization of business operations, coupled with the imperative for organizations to augment their financial dexterity and curtail operational expenditures. Within this particular framework, the implementation of E-invoicing signifies a strategic maneuver aimed at enhancing the efficiency of financial procedures and attaining noteworthy reductions in costs (Hugos, 2018).

Multinational corporations (MNCs) engage in operations of considerable magnitude, encompassing intricate financial transactions and administrative procedures. One of the pivotal facets of their operational framework pertains to the process of invoicing, which encompasses the intricate exchange of bills, receipts, and various financial documents. The conventional practice of utilizing paper-based invoicing systems has prevailed over an extended period. However, the rapid progression of technology has given rise to Electronic Invoicing (E-invoicing), which has emerged as a revolutionary instrument that bestows a multitude of benefits upon multinational corporations (Nasiri et al., 2020).

E-invoicing represents a modernized methodology for the administration of financial transactions through the digitization of the invoicing process. E-invoicing, in contrast to traditional reliance on physical documentation, utilizes digital technology as a means to generate, transmit, receive, and handle invoices in an electronic format. (Alnsour et al., 2023). The utilization of this novel approach represents a notable deviation from traditional methodologies, namely the utilization of paper invoices and manual data entry. This innovative method possesses the capacity to fundamentally transform the financial operations of multinational corporations, as indicated by Zion market research in 2019.

The pursuit of cost reduction is an inherent and essential objective for all entities, including multinational corporations (MNCs). The organization's operational scope encompasses various nations, currencies, and regulatory landscapes, necessitating the imperative to streamline procedures and enhance cost efficiency. E-invoicing presents a potential avenue for realizing substantial cost reductions through the elimination of various inefficiencies inherent in traditional paper-based invoicing processes. These inefficiencies encompass expenses related to printing, postage, data entry, and storage. Furthermore, the implementation of this technology has the potential to augment precision, velocity, and visibility in the realm of financial transactions, as evidenced by the research conducted by Martínez-Román et al. (2020).

The advantages of electronic invoicing are manifold and extend well beyond the mere mitigation of dependence on traditional paper-based documentation. While it is commendable to prioritize environmental sustainability and paper reduction, the true significance lies in the profound influence that E-invoicing exerts on an organization's cost structure. Multinational corporations, owing to their expansive global operations, intricate supply chains, and substantial transaction volumes, are inherently poised to realize substantial cost-saving advantages through the implementation of electronic invoicing (Hugos, 2018).

Within the vast array of digital solutions that have materialized, electronic invoicing (commonly referred to as e-invoicing) has emerged as a prominent catalyst for change within the domain of corporate finance. The implementation of electronic invoicing systems by multinational corporations signifies a significant paradigm shift in the manner in which enterprises oversee their monetary transactions and engage with both suppliers and clients.

E-invoicing, being an integral part of e-procurement and digital financial management, has been the subject of growing interest due to its potential to drive cost reduction within multinational corporations (MNCs). The potential of this innovation lies in its ability to fundamentally transform conventional invoicing procedures, resulting in enhanced efficiency, precision, and cost-efficiency. In an era characterized by the utmost importance placed on agility and cost-consciousness, the strategic incorporation of electronic invoicing possesses the capacity to generate profound and far-reaching effects. Nevertheless, it is imperative to conduct a thorough analysis of the effects of e-invoicing on cost reduction specifically within the distinctive framework of multinational corporations (MNCs).

The Emergence of E-Invoicing

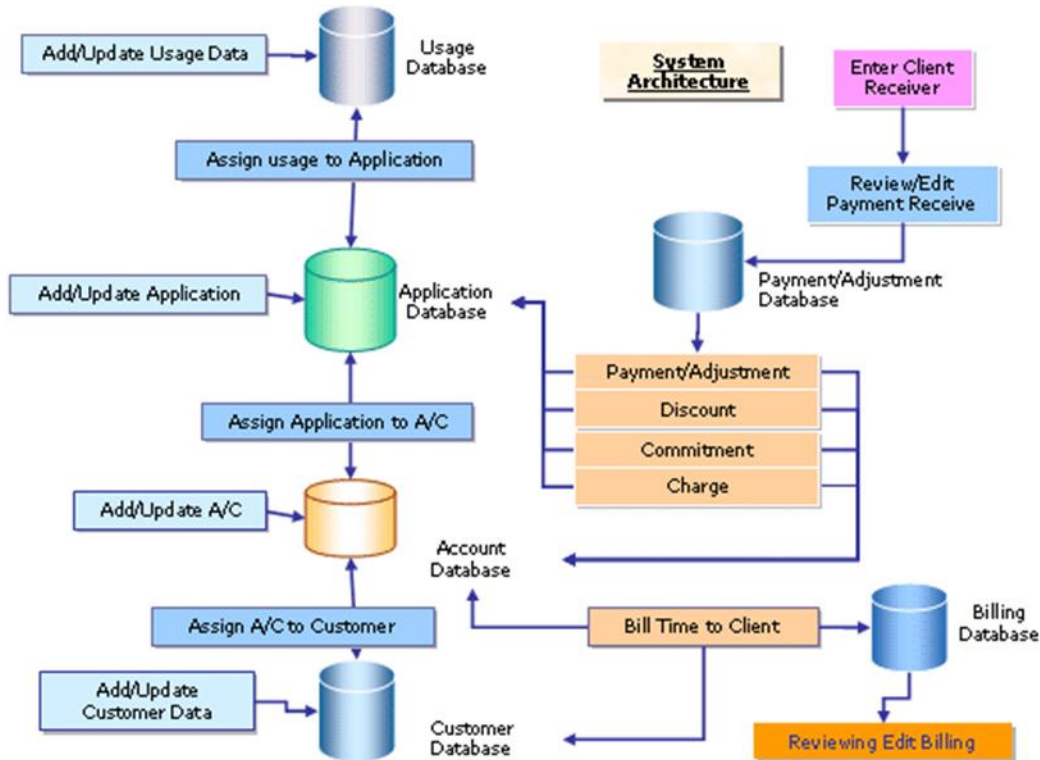
In the context of an ever more digitized global landscape, wherein traditional paper-based procedures are swiftly losing relevance, the advent of electronic invoicing represents a momentous turning point in the domain of financial transactions. E-invoicing, or electronic invoicing, signifies a paradigmatic transition from conventional paper-based invoicing to a more streamlined, efficient, and ecologically conscious approach to financial document management (Hill, 2020). In recent decades, there has been a notable surge in the adoption of technology-driven innovation on a global scale. This phenomenon has significantly transformed the manner in which businesses engage with one another, conduct trade, and oversee their financial operations (GXS 2018). The genesis of e-invoicing can be attributed to the expeditious advancement of computing technology and the internet. During the latter half of the 20th century, with the rise of personal computers and the advent of the World Wide Web, enterprises commenced their endeavors to exploit digital platforms as a means to enhance operational efficiency. The conventional method of invoicing, characterized by its reliance on physical documents, postal services, and manual input of data, has been found to be a laborious and susceptible-to-errors procedure (IFO, 2017).

The pivotal moment transpired upon the emergence of electronic data interchange (EDI) standards during the 1970s and 1980s. The advent of Electronic Data Interchange (EDI) has facilitated the seamless transmission of structured data among businesses. This includes the electronic exchange of essential documents such as invoices, purchase orders, and shipping notices. The advent of Electronic Data Interchange (EDI) brought about a significant transformation in the realm of business-to-business (B2B) transactions. However, it is worth noting that this technological innovation was accompanied by a set of intricate and financially burdensome processes, thereby constraining its widespread implementation to predominantly encompass large-scale enterprises. The authentic genesis of electronic invoicing, as comprehended in contemporary times, experienced a surge in impetus during the latter part of the 1990s and the initial years of the 2000s. The progression of email, PDF technologies, and secure online platforms has facilitated the development of an invoicing process that is characterized by enhanced accessibility and user-friendliness. Governments and regulatory entities across the globe have duly acknowledged the prospective advantages of electronic invoicing and have consequently initiated diverse endeavors and mandates to foster its widespread adoption (Koch, 2018).

E-invoicing

Electronic invoicing, commonly referred to as e-invoicing, entails the conversion of the conventional paper-based invoicing procedure into a digital format, thereby facilitating a technological advancement in this domain. The process encompasses the generation, propagation, reception, and manipulation of invoices through electronic modalities, commonly facilitated by dedicated software or platforms. The European Commission in 2019 provided a definition for E-invoicing, which entails the digital transmission of invoicing data encompassing billing and payment information between collaborating entities. Henceforth, it is imperative to acknowledge that invoices which are conveyed as attachments, such as Portable Document Format (PDF) files, within electronic mail correspondences do not meet the criteria to be classified as authentic electronic invoices. The rationale behind this limitation stems from the inherent inability of e-mail attachments to facilitate the seamless automation of invoice data processing within the payment system, as elucidated by Koch (2019) and Innopay (2019). The fulfillment of tax regulations in relation to the buyer or supplier's geographical location may necessitate the provision of a government-issued identification number, the utilization of qualified electronic signatures, adherence to specific content fields, and the implementation of long-term archiving measures for the invoice (Keifer, 2021). The legislative framework in the Czech Republic lacks a precise definition of an invoice, regardless of its format, be it electronic or paper-based. The Tax Document has the potential to exist in either physical or digital manifestation. A Tax Document is deemed to be in electronic format when it is both issued and received through electronic means. In order to proceed with the reception of an electronic Tax Document, it is imperative for the recipient to provide explicit consent to the utilization of said document in its electronic format. According to the research conducted by Schmandt and Engel-Flechsih in 2018, it was emphasized that the invoice should possess certain attributes in order to maintain its credibility, content integrity, and readability. According to the Chamber of Commerce in 2012, it was asserted that the assurance of the veracity of the source of the tax document in its electronic manifestation, as well as the preservation of the integrity of its substance, can be effectively ensured through the utilization of a duly recognized electronic signature or the facilitation of electronic information exchange. The inclusion of an advanced digital signature within an e-invoicing system serves to enhance the validation of the invoice (Foryszewski, 2016; Rombel, 2017). According to Kaliontzoglou (2016), for e-invoicing to be integrated into a firm's financial practices, it is imperative that it adheres to stringent security standards. Notwithstanding the prevalent utilization of electronic means for invoice preparation, it is noteworthy that a significant proportion of invoices undergo manual data entry, wherein information from a physical invoice is transcribed into a financial management system for subsequent processing and disbursement. This phenomenon exemplifies a substantial expenditure of time and exertion, particularly in light of the fact that the act of replication may give rise to the incorporation of errors. The implementation of automation in this particular function not only serves to mitigate the aforementioned risks, but also facilitates the utilization of digitized content in a manner that is characterized by enhanced efficiency (Hayward, 2018). The effective administration of inbound monetary inflows resulting from finalized transactions is of utmost importance for the sustainability of an enterprise (Hanif, 2018).

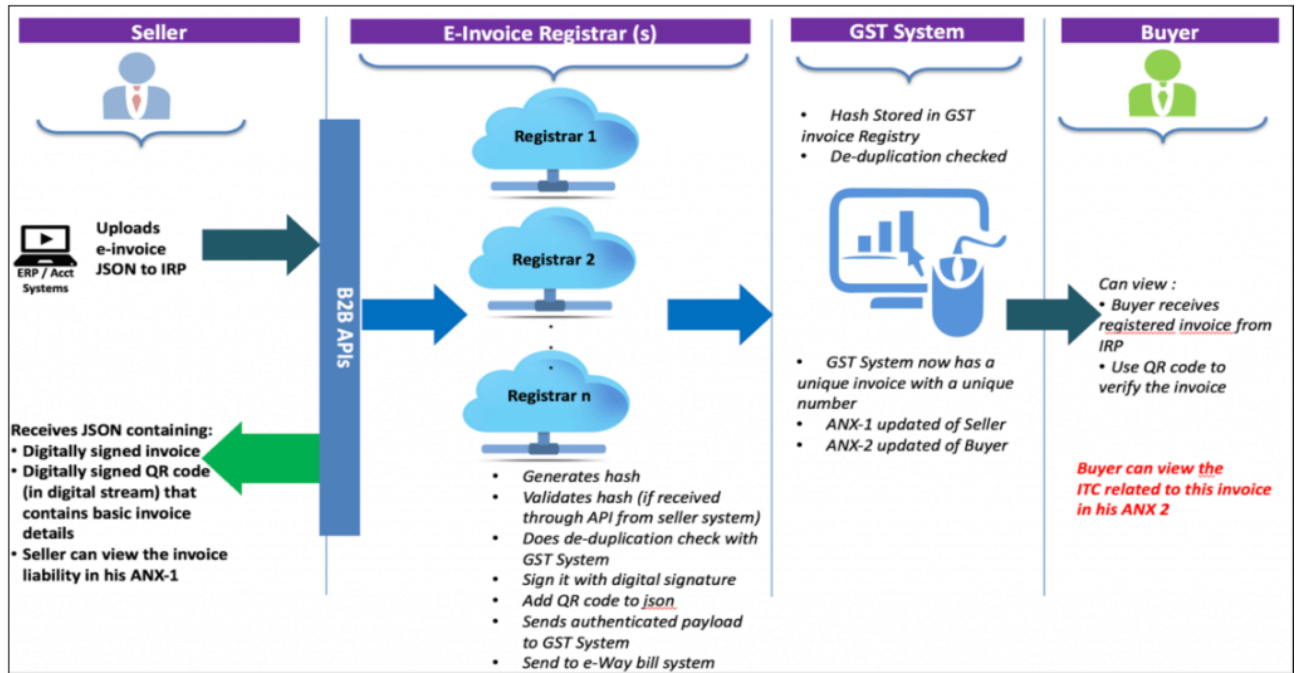
System Architecture of E-Invoicing



Source: Swastik Infotech Services (2018).

The primary function of this module entails the meticulous conversion of the biller data file, preserving the integrity of each individual byte, into the requisite data fields that align with the database specifications. The information parser component establishes an interface with the pre-existing billing system utilized by the biller. The parser effectively retrieves the pertinent billing information from the data formats of the legacy billing systems, encompassing fixed length, data tagged, Xerox Line Mode, or alternative file formats. The salient aspect pertains to the extraction of billing information for electronic bill presentment, wherein said information is derived directly from the biller's extant format, thereby obviating the necessity for any upgrades or modifications on the part of the biller. The fundamental technological framework employed in this context is a bespoke middleware, meticulously crafted utilizing the Visual Studio development environment (Swastik Infotech Services, 2018).

E-Invoicing Process Flow



Source: MASK Business Consultancy Pvt Ltd (2020)

The process of e-invoice generation, registration, and confirmation receipt can be conceptually delineated into two primary components.

- The initial component involves the interaction between the commercial entity (referred to as the supplier in the context of an invoice) and the Invoice Registration Portal (commonly abbreviated as IRP).
- The subsequent component entails the intricate interplay between the Integrated Resource Planning (IRP) framework and the Goods and Services Tax (GST)/Electronic Way (E-Way) Bill Systems, as well as the purchaser.

E-invoicing



Source: MessageXchange (2022)

The vendor locates the purchase order (PO) within their software system and proceeds to generate an invoice. The information is conveyed from the primary source. The vendor transmits the invoice electronically via their proprietary software platform. The invoice is transmitted via the Peppol network, exhibiting a near-miraculous quality, as it seamlessly interfaces with the recipient's software system.

The operational efficiency of both the seller and buyer is enhanced through the implementation of automated processes. The elimination of issues associated with traditional invoicing is achieved through a substantial reduction in redundant manual processing. The utilization of electronic invoicing (e-invoicing) has been empirically demonstrated to exhibit a notable increase in operational efficiency, ranging from 60% to 80%, when compared to the traditional paper-based processing method. This substantial enhancement in efficiency consequently leads to a significant reduction in payment durations. According to a particular source, the mean duration for the processing of e-Invoices is estimated to be merely five days. Through the implementation of e-Invoicing, sellers are able to expedite the processing times associated with invoice management, resulting in accelerated payment cycles. This not only enables sellers to receive their payments in a timelier manner but also facilitates the optimization of buyers' operational workflows and business processes.

Types of E-Invoicing

Electronic invoicing, or e-invoicing, refers to the digital exchange of invoices between businesses or individuals, typically in a standardized electronic format. E-invoicing offers several advantages over traditional paper-based invoices, including cost savings, efficiency, and reduced errors.

Structured E-Invoicing: Structured e-invoicing is a method of electronic invoicing that involves the exchange of invoices in a highly organized and standardized format, making it easily processable by both computers and humans. This type of e-invoicing is characterized by the use of structured data, typically adhering to specific data standards or schemas, it includes EDI (Electronic Data Interchange) one of the earliest forms of e-invoicing and involves the structured exchange of data between computer systems using standardized formats. It's commonly used for B2B transactions and XML (Extensible Markup Language) is used to create structured invoices that can be easily processed by computers. It allows for flexible customization while maintaining a standard format (Hsu et al., 2016; Kovačič et al. 2019).

PDF E-Invoicing: Businesses can create digital invoices in PDF format, which can be emailed or shared electronically. PDF invoices are widely used for B2C transactions and are easy to generate and view (Hansen et al. 2017; Sundh and Sundh, 2018).

Web-based E-Invoicing: Many businesses provide web-based portals where suppliers can log in and submit electronic invoices. This method is commonly used for large enterprises with multiple suppliers and it includes cloud-based platforms offer e-invoicing solutions that enable businesses to create, send, and receive invoices online. These platforms often include features for automation, integration, and compliance (González-Fernández et al. 2020).

Email E-Invoicing: Invoices are created in digital formats and sent directly to recipients via email as attachments. While this is a simple method, it may lack automation and tracking features (Yongchareon et al. 2016).

Blockchain E-Invoicing: Blockchain technology has been investigated for secure and tamper-proof e-invoicing. Researchers have explored how blockchain can enhance the trustworthiness and transparency of invoices and transactions are recorded on a distributed ledger, providing transparency and security (Pournajaf et al., 2019; Petychakis et al., 2020).

Mobile E-Invoicing: Researchers have examined the role of mobile apps in enhancing invoicing convenience and accessibility. Some e-invoicing solutions offer mobile apps that allow businesses to create and send invoices from smartphones or tablets. This is useful for on-the-go invoicing (Laine et al. 2017; Adeleye et al. 2020).

Implementation of E-Invoicing and Cost Reduction

E-invoicing has emerged as a pivotal strategy for attaining cost reduction amidst the concerted efforts of companies to optimize their financial supply chain. This assertion holds particular significance for entities that engage in the transmission of a substantial volume of documents, as they are presently compelled to scrutinize their internal procedures in order to liberate immobilized financial resources within the organization, owing to the dearth and elevated cost of credit (Hugos, 2018). One of the fundamental components for enhancing the efficiency of the financial supply chain entails the provision of electronic data, which necessitates the adoption of electronic invoicing, commonly referred to as e-invoicing. According to Alhawamdeh et al., (2023), firms perceive the advantages associated with cost reduction to surpass any potential costs or inconveniences incurred in the process of altering their operational procedures. E-invoicing serves as an automated solution that encompasses the complete cycle of invoice processing, commencing from the inception of the invoice to its ultimate settlement.

The implementation of this automated system effectively mitigates the necessity for human involvement, encompassing activities such as data input and harmonization, thereby yielding considerable financial benefits through the elimination of labor-intensive responsibilities. The implementation of e-invoicing obviates the necessity for traditional paper invoices, thereby mitigating the accompanying expenditures encompassing printing, postage, envelopes, physical storage, and transitioning to a paperless system effectively curtails both direct and indirect costs.

Consequently, this adoption not only aligns with ecological principles but also presents a financially prudent alternative (Bruno, 2019). The manual input and processing of data exhibit a susceptibility to errors, thereby engendering the potential for consequential discrepancies, disputes, and the necessity for subsequent remedial actions. E-invoicing systems have been purposefully developed to mitigate errors by means of automated validation checks, thereby guaranteeing the precision of financial data (Marak & Pillai, 2021).

The utilization of e-invoicing frequently encompasses the implementation of automated approval workflows, thereby expediting the process of approval and subsequent payment. The enhanced efficiency described herein serves to mitigate the administrative burden and resource allocation associated with the approval of invoices, thereby resulting in expedited payment cycles and ameliorated cash flow. E-invoicing systems facilitate instantaneous access to pertinent information regarding the current state of invoices and financial transactions. The enhanced visibility afforded by this system facilitates more effective decision-making, diminishes the duration dedicated to status inquiries, and augments reporting capabilities, thereby optimizing administrative operations (Marak & Pillai, 2021; Moretto & Caniato, 2021).

The implementation of e-invoicing enables the expeditious and precise processing of payments, thereby augmenting the rapport between suppliers and their counterparts. The mitigation of payment delays and disputes results in enhanced supplier interactions, thereby diminishing the administrative burden associated with issue resolution. E-invoicing systems frequently incorporate inherent compliance verification mechanisms and uphold meticulous records of audit trails. The aforementioned process enhances adherence to tax regulations and streamlines the readiness for audits, thereby potentially mitigating expenses associated with audits. Fairchild (2016) is a scholarly source that can be referenced for further exploration and analysis. The implementation of e-invoicing systems facilitates the automation of mundane administrative tasks, thereby enabling organizations to redirect their administrative resources towards endeavors that are more strategic and yield added value. These endeavors may include

but are not limited to financial analysis, supplier negotiations, and process enhancements (Olaleye et al., 2023).

E-invoicing solutions commonly present pricing structures that exhibit predictability, thereby facilitating the process of budgeting and forecasting invoicing-related expenditures for organizations. The heightened predictability engenders a more robust financial planning framework, thereby mitigating the necessity for unforeseen cost allocation. The implementation of electronic invoicing (e-invoicing) offers the potential for organizations to effectively accommodate their growth and transaction volume while minimizing the corresponding rise in administrative costs. The inherent scalability of the system guarantees the preservation of cost efficiencies in tandem with the expansion of the enterprise. Furthermore, the implementation of e-invoicing enables organizations to achieve enhanced efficiency and precision in payment processing, thereby mitigating the risk of incurring penalties and associated expenses due to delayed payments. Additionally, the adoption of this digital invoicing system facilitates a reduction in the utilization of paper and eliminates the need for physical transportation of invoices, thereby making a significant contribution towards environmental sustainability. This aligns perfectly with the objectives of corporate social responsibility, as highlighted by Fairchild (2016).

Factors Militating Against Effective E-Invoicing System Implementation

Despite the numerous advantages offered by electronic invoicing, the rate of adoption has been characterized by a sluggish pace, primarily attributable to the various obstacles encountered by those who choose to adopt this technology. While larger corporations may encounter minimal challenges in the implementation of an electronic invoicing system, smaller businesses often encounter obstacles in adopting such a system due to the substantial investment and integration costs associated with it (Sandberg et al., 2019). Fairchild (2016) identified two primary obstacles impeding the adoption of e-invoicing: restricted capital allocation and insufficient internal sponsorship. Edelman and Sintonen (2016) elucidated a multitude of rationales pertaining to the lack of embracement of electronic invoicing within the small and medium-sized enterprise (SME) sector. The aforementioned rationales encompassed a dearth of demand within the surrounding milieu, a perception of uncertainty, and a limited degree of cognizance. The presence of buyer fragmentation may potentially contribute to the challenges encountered in the adoption of said technology. The challenges may also arise from the perspective of the service provider, for instance, the fragmentation of service providers can pose a substantial obstacle to the successful implementation among the various partners within the supply chain (Ahmad, 2019).

The task of achieving a smooth and cohesive integration between the recently implemented electronic invoicing system and pre-existing enterprise resource planning (ERP) or financial systems presents a notable challenge. The integration process may be complicated due to challenges related to data compatibility, system customization, and the requisite for APIs (Application Programming Interfaces). As per the findings elucidated by Kimberly (2020), multinational corporations (MNCs) frequently engage in operations across various nations, necessitating their adherence to disparate invoicing standards, tax regulations, and languages. The task of reconciling these heterogeneous demands in order to establish a uniform electronic invoicing procedure presents a significant obstacle. It is imperative to ascertain that the electronic invoicing system adheres to the tax legislations, legal prerequisites, and reporting norms specific to each jurisdiction in which the multinational corporation conducts its operations. This undertaking can prove intricate and laborious (Kyove et al., 2021). The process of e-invoicing encompasses the transmission of confidential financial information, with a primary focus on safeguarding data security and privacy. This entails adhering to data

protection regulations, notably the General Data Protection Regulation (GDPR), and addressing the substantial apprehensions surrounding cybersecurity threats and potential breaches (Basil et al., 2022). As posited by Hernandez-Ortega (2012), the successful adoption of e-invoicing is contingent upon the willingness and capacity of both suppliers and customers to implement compatible systems. Consequently, the task of fostering and facilitating the transition to e-invoicing for external partners can prove to be a formidable undertaking.

The Prospect of E-Invoicing

E-invoicing, at its core, refers to the transformation of the invoicing procedure into a digital format, which involves the generation, transmission, receipt, and handling of invoices via electronic methods. Instead of relying on conventional paper-based invoicing methods, multinational corporations (MNCs) that adopt e-invoicing leverage technological advancements to enable smooth and automated invoicing workflows. The aforementioned workflows encompass the process of creating invoices in digital formats, transmitting them electronically to recipients, and integrating them with financial systems to facilitate efficient processing and payment (Matthieu et al., 2019). The appeal of electronic invoicing resides in its capacity to enhance multiple aspects of financial operations within multinational corporations (MNCs).

One of the primary advantages is the potential for significant cost reduction by bypassing the inherent inefficiencies of manual, paper-based invoicing. E-invoicing has the ability to drastically reduce processing times, minimize human errors, and eliminate the expenses associated with physical mail and storage (Peng, Yixuan, 2023). Moreover, the implementation of e-invoicing serves to augment transparency in financial transactions, fortify adherence to tax regulations, and cultivate enhanced cooperation between multinational corporations (MNCs) and their respective business associates. According to Oliveira et al. (2014) and Wang et al. (2016), the implementation of e-invoicing holds the potential to optimize invoicing procedures, resulting in enhanced efficiency and reduced time consumption. The utilization of this technology obviates the necessity for manual data input and the handling of paper-based documents, thereby enabling organizations to expedite and enhance the accuracy of their invoice processing procedures.

E-invoicing systems frequently incorporate automated validation checks, thereby mitigating the likelihood of errors and discrepancies. The implementation of a robust invoicing data verification system serves to enhance the precision of invoicing data, thereby mitigating the probability of invoice disputes and the subsequent need for resource-intensive reconciliation endeavors. This heightened level of accuracy engenders a climate of trust and transparency in the realm of financial transactions. The implementation of timely and precise invoicing and payment processing procedures serves to fortify and cultivate mutually beneficial relationships with both suppliers and customers. The implementation of this approach has the potential to yield favorable outcomes such as improved contractual conditions, reduced pricing, and enhanced interpersonal exchanges, thereby alleviating the administrative complexities associated with the process of resolving conflicts (Yahiya, 2023). The adoption of e-invoicing is in congruence with sustainability endeavors as it effectively mitigates paper consumption, diminishes the carbon footprint attributed to the physical conveyance of paper invoices, and advocates for a more environmentally conscious *modus operandi* within business operations (Tung and Trimi, 2019).

Conclusion

Based on the study, the researcher concluded that:

E-invoicing significantly streamlines the invoicing process by automating data entry, validation, and approval workflows, it reduces the likelihood of errors and accelerates the payment cycle. This streamlined process can lead to substantial cost savings in terms of time and resources.

E-invoicing eliminates the need for paper invoices, envelopes, and postage, resulting in direct cost reductions. Multinational corporations dealing with a high volume of invoices can realize substantial savings by reducing their paper-based processes.

Manual invoice processing involves labor-intensive tasks such as data entry, document handling, and reconciliation. E-invoicing systems can significantly lower these processing costs by automating these tasks, allowing staff to focus on more value-added activities.

E-invoicing systems often provide better visibility into invoice status and discrepancies. This facilitates faster dispute resolution and reduces the administrative costs associated with resolving billing disputes and discrepancies.

Recommendation

Based on the study, the researcher wishes to recommend that:

Before implementing e-invoicing, conduct a thorough assessment of your existing invoicing processes. Identify pain points, bottlenecks, and areas where automation can bring the most significant cost savings.

Choose an e-invoicing solution that aligns with your organization's needs and goals. Consider factors such as scalability, integration capabilities, compliance with local regulations, and the ability to handle your transaction volume.

Invest in training and change management programs to ensure that your staff is comfortable with the new e-invoicing system. Resistance to change can hinder the realization of cost-saving benefits.

Make use of the data generated by e-invoicing systems to gain insights into your spending patterns, supplier performance, and potential areas for cost reduction. Regularly analyze this data to inform your cost-saving strategies.

Collaborate with your suppliers to encourage them to adopt e-invoicing as well. When both parties use e-invoicing, the benefits of automation and cost reduction are mutual.

REFERENCES

- Ahmad, A., Abusaimh, H., Rababah, A., Alqsass, M., Al-Olima, N., & Hamdan, M. (2024). Assessment of effects in advances of accounting technologies on quality financial reports in Jordanian public sector. *Uncertain Supply Chain Management*, 12(1), 133-142.
- Ahmad, A. (2024). Ethical implications of artificial intelligence in accounting: A framework for responsible ai adoption in multinational corporations in Jordan. *International Journal of Data and Network Science*, 8(1), 401-414.

- Ahmad, A. Y. Bani Ahmad, (2019). Empirical Analysis on Accounting Information System Usage in Banking Sector in Jordan. *Academy of Accounting and Financial Studies Journal*, 23(5), 1-9.
- Ahmad Y. A. Bani Ahmad, (2024)"Firm Determinants that Influences Implementation of Accounting Technologies in Business Organizations," *WSEAS Transactions on Business and Economics*, vol. 21, pp. 1-11,
- Agarwal, R. & Prasad, J. (2018). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information systems research*, 9 (2) 204-215.
- Alhawamdeh, H., Al-Saad, S. A., Almasarweh, M. S., Al-Hamad, A. A.-S. A., Bani Ahmad, A. Y. A. B., & Ayasrah, F. T. M. (2023). The Role of Energy Management Practices in Sustainable Tourism Development: A Case Study of Jerash, Jordan. *International Journal of Energy Economics and Policy*, 13(6), 321–333. <https://doi.org/10.32479/ijeep.14724>
- Alibraheem, M., Siam, I., Al-Daoud, K., Alkhazaali, A., Freihat, B., Ahmad, A., ... & Zoubi, M. (2024). The moderating role of internal control system on the relationship between service quality of accounting information system and customer satisfaction: a study of some selected customers from commercial banks in Jordan. *Uncertain Supply Chain Management*, 12(1), 567-572.
- Al-Jabri, I & Sohail, M. (2022). Mobile banking adoption: Application of diffusion of innovation theory. *Journal of Electronic Commerce Research*, 13 (4) (2012), pp. 379-391.
- Alnsour, I., Alghadi, M., Ahmad, A., Alibraheem, M., Altahat, S., Al-Smadi, R., & Alshboul, K. (2023). Islamic financial technology acceptance: An empirical study in Jordan. *International Journal of Data and Network Science*, 7(4), 1659-1668
- Ashish, T., Zericho, Z., Marak, R., Justin, P. & Abhijit, P. (2023). Determinants of electronic invoicing technology adoption: Toward managing business information system transformation. *Journal of Innovation & Knowledge*, 8(3)212.
- Association for Finance Professionals (2022). AFP Digital Payments Survey.
- Basil, N., Ambe. S., Ekhaton, C. & Fonkem, E. (2022). Health Records Database and Inherent Security Concerns: A Review of the Literature. *Cureus*. 2022 Oct 11;14(10).
- Caniato, F., Gelsomino, L., Perego, A. & Ronchi, S. (2016). Does finance solve the supply chain financing problem? *Supply Chain Management*, 21 (5) 534-549.
- Capstone Report (2015). Implementing a Paperless System for Small and Medium-Sized Businesses (SMBs). University of Oregon Applied Information Management Program.
- Cheng, Congbin, Sayed Fayaz Ahmad, Muhammad Irshad, Ghadeer Alsanie, Yasser Khan, Ahmad Y. A. Bani Ahmad (Ayassrah), and Abdu Rahman Aleemi. 2023. "Impact of Green Process Innovation and Productivity on Sustainability: The Moderating Role of Environmental Awareness" *Sustainability* 15, no. 17: 12945. <https://doi.org/10.3390/su151712945>

- Chen, Z., Jiang, X., Liu, Z., Carlos, S. & Xu, D. (2020). Tax Policy and Lumpy Investment Behavior: Evidence from China's VAT Reform. Working Paper 26336, National Bureau of Economic Research.
- Edelmann, J. & Sintonen, S. (2016). Adoption of electronic invoicing in Finnish SMEs: Two complementary perspectives. *International Journal of Enterprise Network Management*, 1 (1) 79-98.
- Fairchild, (2016). Using electronic invoicing to manage cash forecasting and working capital in the financial supply chain. *ECIS 2016 Proceedings*, 29 (2016).
- Gamaralalage H. (2020). Identifying barriers in e-invoicing process to increase efficiency and raise the level of automatization of workflows.
- GXS (2018). A brief history retrieved from e-invoicing basics: <http://www.einvoicingbasics.co.uk/what-is-e-invoicing/a-brief-history>.
- Hernandez-Ortega, B. (2012). Key factors for the adoption and subsequent use of e-invoicing. *Academia. Revista Latinoamericana de Administración* (50), 15-30.
- Hill, M. (2020). A brief history of Electronic Data Interchange, pg 6. Retrieved from BizTalk Server 2020: A beginner's Guide.
- Huang, C., Koppel, R., McGreevey, J., Craven, C. & Schreiber, R. (2020). Transitions from One Electronic Health Record to Another: Challenges, Pitfalls, and Recommendations. *Appl Clin Inform.* 2020 Oct;11(5):742-754.
- Hugos, M. (2018). Essentials of supply chain management.
- Institute of Financial Operations (2012). A shift toward e-invoicing ecosystems, pg. 6. Retrieved from base ware: <http://www.basware.com/sites/default/files/restricted/2012-global-e-invoicing-study.pdf?rrt=21>.
- [Keifer, S. \(2021\)](#). *Journal of Payments Strategy & Systems*, 5 (1) 38-51.
- Koch, B. (2017). E-invoicing/E-billing. Significant market transaction lies ahead.
- Krysovaty, A., Kurylo, O., Synyutka, N. & Pozniakova, O. (2021). VAT Electronic Invoicing System: The Case of Ukraine 2021 11th International Conference on Advanced Computer Information Technologies (ACIT), IEEE 238-241.
- Kyove, J., Katerina, S., Ufuoma, O. & Giuseppe, T. (2021). Globalization Impact on Multinational Enterprises. *World* 2(2) 216-230.
- Marak, Z. & Pillai, D. (2018). Factors, outcome, and the solutions of supply chain finance: Review and the future directions. *Journal of Risk and Financial Management*, 12 (1) (3).
- Martínez-Román, J., Gamero, J., Tamayo, J. & Delgado-González, L. (2020). Empirical analysis of organisational archetypes based on generation and adoption of knowledge and technologies. *Technovation*, 96 (2020), Article 102145.
- MASK Business Consultancy Pvt (2020). E-Invoicing Concept, Process Flow and Benefits.

- Matthieu, B., Dabla-Norris, E., Khalid, S. & Lima, F. (2022). Digitalization to improve tax compliance: Evidence from VAT e-Invoicing in Peru. *Journal of Public Economics, Volume 210*, 2022.
- Message exchange (2022). Traditional invoicing and e-Invoicing: A comparison. E-Invoicing Concept, Process Flow and Benefits
- Moore, G. & Benbasat, I. (2021). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information systems research*, 2 (3) 192-222.
- Moretto, A. & Caniato, F. (2021). Can Supply Chain Finance help mitigate the financial disruption brought by Covid-19? *Journal of Purchasing and Supply Management*, 27 (4) (2021), Article 100713.
- Nasiri, M., Ukko, J., Saunila, M. & Rantala, T. (2020). Managing the digital supply chain: The role of smart technologies. *Technovation*, 96 (2020), Article 102121.
- Ni, L., Ahmad, S. F., Alshammari, T. O., Liang, H., Alsanie, G., Irshad, M., ... & Ayassrah, A. Y. B. A. (2023). The role of environmental regulation and green human capital towards sustainable development: The mediating role of green innovation and industry upgradation. *Journal of Cleaner Production*, 421, 138497.
- Lin, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Irshad, M., Telba, A. A., Awwad, E. M., & Majid, M. I. (2023). Green production and green technology for sustainability: The mediating role of waste reduction and energy use. *Heliyon*, e22496.
- Olaleye, S., Sanusi, I., Dada, O. & Agbo, F. (3023). A bibliometric review of global visibility, impact and adoption of electronic invoicing: The past and the future. *Heliyon* (2023).
- Penttinen, E. & Tuunainen, V. (2019). Assessing the effect of external pressure in inter-organizational is adoption–Case electronic invoicing. *Workshop on E-business, Springer, Heidelberg, Berlin (2019)*.
- Peng, Yixuan, Sayed Fayaz Ahmad, Ahmad Y. A. Bani Ahmad, Mustafa S. Al Shaikh, Mohammad Khalaf Daoud, and Fuad Mohammed Hussein Alhamdi. 2023. "Riding the Waves of Artificial Intelligence in Advancing Accounting and Its Implications for Sustainable Development Goals" *Sustainability* 15, no. 19: 14165. <https://doi.org/10.3390/su151914165>
- Poel, K., Marneffe, W. & Vanlaer, W. (2016). Assessing the electronic invoicing potential for private sector firms in Belgium. *The International Journal of Digital Accounting Research*, 16 (20) 1-34.
- Rogers, E. (2020). Diffusion of innovations.
- Sandberg, K., Wahlberg, O. & Pan, Y. (2019). Acceptance of e-invoicing in SMEs. *International Conference on Engineering Psychology and Cognitive Ergonomics, Springer, Heidelberg, Berlin (2009)*.
- Skare, M., De-Obesso, M. & Ribeiro-Navarrete, S. (2023). Digital transformation and European small and medium enterprises (SMEs): A comparative study using digital economy and society index data. *International Journal of Information Management*, 68 (2023), Article 102594.

- Swastik Infotech Services (2018). Technology & System Architecture.
- Töytäri, P., Turunen, T., Klein, M., Eloranta, V., Biehl, S. & Rajala, R. (2018). Aligning the mindset and capabilities within a business network for successful adoption of smart services. *Journal of Product Innovation Management*, 35 (5) 763-779.
- Waarts, E., Everdingen, Y. & Hillegersberg, J. (2022). The dynamics of factors affecting the adoption of innovation. *Journal of Product Innovation Management*, 19 (6) 412-423.
- Wang, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Awwad, E. M., Irshad, M., Ali, Y. A., ... & Han, H. (2023). An empirical evaluation of technology acceptance model for Artificial Intelligence in E-commerce. *Heliyon*, 9(8).
- William, P., Ahmad, A. Y. B., Deepak, A., Gupta, R., Bajaj, K. K., & Deshmukh, R. (2024). Sustainable Implementation of Artificial Intelligence Based Decision Support System for Irrigation Projects in the Development of Rural Settlements. *International Journal of Intelligent Systems and Applications in Engineering*, 12(3s), 48-56.
- Yahiya Ahmad Bani Ahmad (Ayassrah), Ahmad; Ahmad Mahmoud Bani Atta, Anas; Ali Alawawdeh, Hanan; Abdallah Aljundi, Nawaf; Morshed, Amer; and Amin Dahbour, Saleh (2023) "The Effect of System Quality and User Quality of Information Technology on Internal Audit Effectiveness in Jordan, And the Moderating Effect of Management Support," *Applied Mathematics & Information Sciences*: Vol. 17: Iss. 5, Article 12.
DOI: <https://dx.doi.org/10.18576/amis/170512>
- Zion Market Research (2019). Global E-Invoicing Market Is Expected to Reach Around USD 20,529 Million by 2026(2019)