REVOLUTIONIZING OPERATIONAL ACCOUNTING WITH LOW-CODE PLATFORMS: THE IMPACT OF N8N

REVOLUCIONANDO A CONTABILIDADE OPERACIONAL COM PLATAFORMAS DE BAIXO CÓDIGO: O IMPACTO DA N8N

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ABSTRACT
The rise of low-code platforms is significantly transforming the field of operational accounting by enabling process automation without the need for extensive programming knowledge. This article explores the application of the low-code tool n8n in automating accounting workflows, including tasks such as invoice generation, data reconciliation, and financial reporting. Through real-world case studies, such as those of Goomer and Augusto Digital, the paper illustrates how automation improves data accuracy, operational efficiency, and strategic decision-making. Additionally, it highlights how n8n promotes compliance and traceability, supporting a broader shift toward digital transformation in the accounting profession.

Keywords: Low-code automation. Accounting workflows. n8n. Financial process automation. Digital transformation in accounting.

RESUMO
O surgimento das plataformas low-code está transformando significativamente o campo da contabilidade operacional, permitindo a automação de processos sem a necessidade de amplo conhecimento em programação. Este artigo explora a aplicação da ferramenta low-code n8n na automação de fluxos de trabalho contábeis, incluindo tarefas como geração de faturas, reconciliação de dados e relatórios financeiros. Por meio de estudos de caso reais, como os da Goomer e da Augusto Digital, o artigo ilustra como a automação melhora a precisão dos dados, a eficiência operacional e a tomada de decisões estratégicas. Além disso, destaca como a n8n promove a conformidade e a rastreabilidade, apoiando uma mudança mais ampla em direção à transformação digital na profissão contábil.

Palavras-chave: Automação low-code. Fluxos de trabalho contábeis. n8n. Automação de processos financeiros. Transformação digital na contabilidade.

RESUMEN
El auge de las plataformas low-code está transformando significativamente el campo de la contabilidad operativa al permitir la automatización de procesos sin necesidad de amplios conocimientos de programación. Este artículo explora la aplicación de la herramienta low-code n8n en la automatización de los flujos de trabajo contables, incluyendo tareas como la

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generación de facturas, la conciliación de datos y la elaboración de informes financieros. A través de casos prácticos reales, como los de Goomer y Augusto Digital, el artículo ilustra cómo la automatización mejora la precisión de los datos, la eficiencia operativa y la toma de decisiones estratégicas. Además, destaca cómo n8n promueve el cumplimiento normativo y la trazabilidad, lo que favorece un cambio más amplio hacia la transformación digital en la profesión contable.

Palabras clave: Automatización low-code. Flujos de trabajo contables. n8n. Automatización de procesos financieros. Transformación digital en contabilidad.

INTRODUCTION

The integration of low-code platforms like n8n into operational accounting workflows is rapidly transforming how accounting departments function. These platforms empower professionals to automate repetitive, rule-based tasks, reducing the need for manual intervention and enhancing data reliability. Among the most versatile tools in this category is n8n, an open-source, node-based automation platform that enables the construction of workflows through a visual editor, requiring minimal coding skills.

n8n's capacity to integrate with over 400 applications—including tools commonly used in financial management such as QuickBooks, Xero, and Google Sheets—makes it especially relevant for accounting professionals. These integrations facilitate the automation of processes like invoice creation, data reconciliation, and financial reporting. As noted by Goomer, a Brazilian technology firm that implemented over 200 n8n workflows, the platform enabled them to unify internal systems and reduce manual workload during a critical business model transformation (n8n, 2020). By automating data migration and customer onboarding across platforms, the company significantly enhanced efficiency and internal coordination.

Similarly, Augusto Digital, a software consulting firm, adopted n8n to automate a wide array of financial operations. By integrating tools such as Harvest, Forecast, QuickBooks, and HubSpot, they eliminated manual spreadsheet-based processes and gained real-time access to financial metrics, such as revenue recognition and project forecasting. This automation allowed for more agile decision-making and enhanced visibility across departments (Augusto Digital, 2023).

These implementations underscore the value of automation in minimizing human error—a critical concern in accounting. Automated workflows reduce inconsistencies in financial records, which are often the result of manual data entry and fragmented system architecture. As automation becomes more sophisticated, accountants are increasingly able to focus on analytical and strategic tasks rather than transactional processing. According to Pondhouse Data (2025), the growing use of low-code tools like n8n contributes to a shift from reactive financial reporting to proactive financial strategy, a transition aligned with the broader trend of digital transformation in accounting.

Additionally, the transparent structure of n8n workflows promotes compliance and auditability. Every workflow step is documented and version-controlled, which aligns with regulatory requirements and internal control standards. This feature is particularly useful in industries where accountability and traceability are legally mandated.

Beyond improving internal operations, low-code automation tools like n8n also foster greater scalability and adaptability in financial processes. As small and medium enterprises (SMEs) grow, so too does the complexity of their financial transactions and reporting requirements. Traditional manual systems often cannot keep pace with this growth. According to van der Aalst (2016), process automation technologies enhance scalability by standardizing workflows and reducing processing time, enabling accounting systems to handle increased volumes without a proportional rise in headcount. n8n's modular architecture supports this by allowing businesses to rapidly develop, test, and deploy automated accounting sequences that evolve alongside business needs.

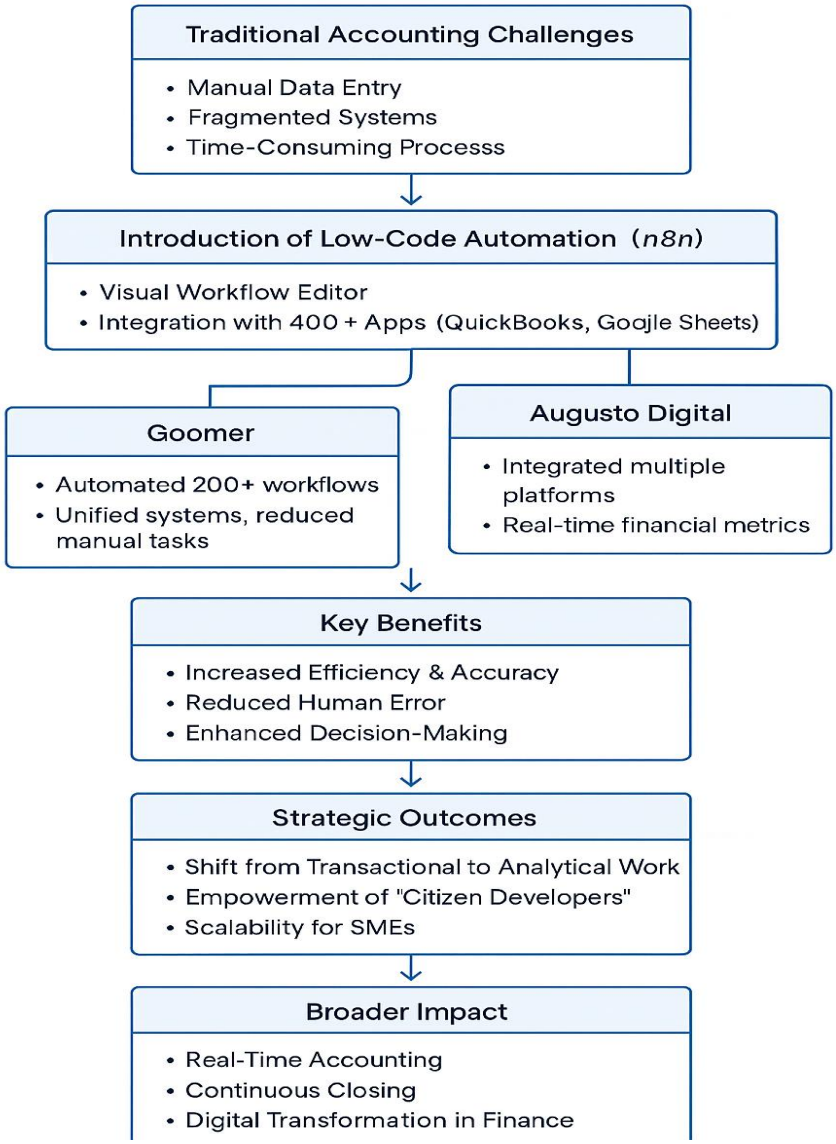
Another significant impact of low-code platforms on operational accounting is the democratization of process development. Unlike traditional software development environments that require specialized programming knowledge, n8n empowers accountants themselves to build or adapt workflows. This shift aligns with the concept of "citizen development" in enterprise environments, where domain experts drive innovation through accessible tools (Simon, 2022). By bringing workflow creation closer to accounting professionals, companies benefit from more precise and timely automation solutions that directly reflect operational realities. Furthermore, this approach encourages cross-functional collaboration between IT and finance teams, enhancing the alignment of technological capabilities with financial objectives.

Finally, the adoption of n8n and similar tools reflects a broader paradigm shift toward real-time accounting and continuous closing processes. Traditional periodic financial closing practices are increasingly seen as inefficient in a fast-paced business environment. As noted by Hämäläinen (2019) real-time financial systems powered by automation enable organizations to maintain up-to-date ledgers, improve responsiveness, and support dynamic performance monitoring. n8n facilitates this transformation by connecting data flows across systems and automating routine reconciliations, journal entries, and alerts. This capability not only reduces closing time but also contributes to more transparent and agile financial governance.

The flowchart illustrates the transformation of operational accounting through the adoption of the low-code platform n8n. It begins by identifying traditional challenges such as manual data entry and fragmented systems, then introduces n8n as a solution offering visual workflow automation and seamless integration with popular financial tools. Real-world examples from Goomer and Augusto Digital demonstrate how automation enhances efficiency, reduces errors, and supports strategic decision-making. The chart highlights

benefits like compliance, scalability, and empowerment of non-technical users (citizen developers). Ultimately, it shows how such tools drive a broader shift toward real-time accounting and digital transformation in finance.

Figure 1. Transformation of Operational Accounting Using the n8n Low-Code Platform.



Source: Created by author.

In conclusion, low-code platforms like n8n are playing a pivotal role in revolutionizing operational accounting routines. By enabling automation, system integration, and greater accuracy, they not only streamline day-to-day accounting processes but also free up professionals to focus on higher-value activities. As organizations continue to seek scalable, cost-effective solutions to improve financial operations, platforms like n8n are likely to become integral components of the modern accounting toolkit.

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