# ERP Implementation Report at Walmart

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## Introduction

Enterprise Resource Planning (ERP) systems are transformative tools for companies aiming to streamline their operations across various functions. By integrating all crucial facets of operations, including inventory management, human resources, customer relations, and financials into one coherent system, ERPs eliminate redundancies and standardize data across the enterprise. This unification helps in enhancing operational efficiency and providing a single source of truth.

## Company Background

Walmart holds the title of the world's largest retailer, a status it has maintained due to its vast network of over 10,500 stores operating under 46 different banners across 24 countries. This extensive presence is bolstered by its robust eCommerce platforms, which serve nearly 230 million customers weekly. Walmart’s ability to cater to a diverse customer base is supported by its wide range of products, which includes everything from groceries and apparel to electronics and home goods. The company’s core focus remains on affordability and convenience, ensuring that all consumer demographics can find what they need at Walmart, whether shopping in-store or online.

## Sergio Esquivel's Role at Walmart

Sergio Esquivel serves as the IBP Senior Manager at Walmart, where he plays a pivotal role in enhancing the company's Integrated Business Planning (IBP). He oversees the development of the IBP model tailored for self-service formats within Walmart's Center of Excellence (CoE). His responsibilities extend to coordinating the strategic alignment of omnichannel sales projections, covering significant aspects of national sales and involving numerous stakeholders. Sergio leads the project management for the implementation of SAP IBP software, concentrating on demand and sales operations planning modules. His leadership facilitates collaboration across various teams, integrating different efforts and priorities using the innovative SAP Activate and Agile Data Analytics methodologies, thereby driving efficiency and cohesion in Walmart's planning processes.

## Project Objectives

## The objective of implementing SAP Integrated Business Planning (IBP) at Walmart is to establish a holistic planning framework that enhances business growth at all levels of the organization by leveraging cutting-edge technology for strategic and tactical alignment. This solution fosters real-time collaboration with both internal and external stakeholders, ensuring that tactical plans are not only developed but also seamlessly aligned with overarching business strategies. Additionally, SAP IBP aids in consolidating diverse product categories across multiple locations, thereby establishing new hierarchies that enhance efficiency and clarity in category management. By supporting flexible planning horizons, from short-term to long-term, SAP IBP empowers Walmart with the necessary tools to conduct detailed analysis and gain insights, facilitating informed decision-making processes crucial for long-term sustainable success.

## Implementation Strategy

## The launch of SAP Integrated Business Planning (IBP) at Walmart represents a significant milestone in the company's strategic technology initiatives, achieving a sophisticated level of planning and operational efficiency. The implementation strategy capitalized on SAP's advanced analytics and forecasting tools which provide Walmart with predictive insights, essential for proactive demand planning. Strategic integration was vital, with SAP Preferred Success ensuring that SAP IBP was tailored to meet Walmart’s unique retail needs, facilitating a seamless integration across various business processes. This comprehensive approach included leveraging the SAP Business Technology Platform (BTP) to extend capabilities in application development, data analytics, and artificial intelligence, creating a robust planning ecosystem.

## The implementation also emphasized user engagement and data integration, which were critical for the smooth transition to the new system. Walmart successfully integrated 35 SAP Cloud data inputs with existing manual processes, managing over 2 million product intersections weekly. This large-scale data handling capability was complemented by the immediate adoption of the system by 373 end users, indicating effective training and seamless transition strategies. The go-live success on March 23, 2023, marked a strategic achievement, positioning Walmart Mexico as a leader in retail planning technology. This multi-faceted implementation strategy not only enhanced operational efficiencies but also set a new standard in the integration of technology and retail management.

## Impact of SAP Integrated Business Planning on Walmart's Operations

The adoption of SAP Integrated Business Planning (SAP IBP) at Walmart has significantly transformed various business areas by enhancing operational efficiencies and integrating processes across platforms. In category strategy and financial planning, SAP IBP facilitated a notable 42% reduction in hours spent, primarily through real-time collaboration and enhanced data traceability which minimized human errors. Furthermore, the system improved forecasting accuracy by reducing the weighted mean absolute percentage error (wMAPE) by 3.6%, supporting more precise adjustments in the product-customer matrix. Walmart also achieved substantial omnichannel integration, with 90% of retail volume now processed through a unified system that seamlessly incorporates e-commerce, enhancing customer experience across all channels. Operational efficiency was markedly improved by replacing isolated Excel spreadsheets with a consolidated SAP platform, streamlining workflows and reducing processing times. Additionally, rigorous data integration and monitoring initiatives have been implemented to mitigate discrepancies and enhance data reliability, ensuring that Walmart remains at the forefront of retail technology and operational excellence.

## Analysis of Implementation Challenges

The implementation of SAP IBP at Walmart has encountered several ongoing data management challenges that necessitate continuous strategic attention and adaptation. Expanding IoT integration is crucial for enhancing real-time inventory and asset tracking across Walmart's vast network of stores and distribution centers in Central America and Mexico. The adoption of blockchain technology aims to secure and transparently track cross-border transactions and supply chain activities, thus enhancing trust and compliance. Additionally, Walmart is working to foster better data synchronization across e-commerce platforms, brick-and-mortar stores, and mobile interfaces to maintain a consistent and seamless customer experience. Developing targeted training programs for Walmart Mexico employees is also essential to increase proficiency with the advanced features of SAP IBP, particularly to overcome cultural nuances and resistance to change. Leveraging machine learning within SAP IBP to refine demand forecasting models is another significant challenge, especially given the fluctuating market conditions and consumer behaviors specific to the Latin American market. These challenges highlight the complex, multifaceted nature of large-scale system implementations within a global retail environment.

## Future Plans and Strategic Directions

Walmart Mexico has outlined a strategic vision for the continued enhancement and expansion of its SAP Integrated Business Planning (IBP) capabilities to further refine its supply chain and operations management. Key future plans include implementing advanced functionalities for demand planning and Sales & Operations Planning (S&OP) to address more dynamic market conditions and customer needs. The development of a Supply Chain Control Tower is also planned to boost visibility and control over logistics and distribution processes, ensuring more responsive supply chain management. Furthermore, Walmart Mexico intends to extend SAP IBP integration beyond current categories to incorporate additional business segments, enhancing planning coherence and operational efficiency across the board. There's also a focus on developing tailored analytics and dashboard tools that are specifically designed to address deviations and adapt to shifting market trends. Additionally, the replacement of in-house R-based forecasting models with more sophisticated multi-regression analysis tools within SAP IBP is aimed at refining forecasting accuracy in line with strategic business decisions and external market factors. Lastly, initiating a new vendor collaboration process will improve communication and coordination between Walmart and its suppliers, fostering a more integrated and efficient supply chain. These initiatives underscore Walmart's commitment to leveraging advanced technologies to drive business intelligence, enhance operational efficiency, and maintain its competitive edge in the retail sector.

## Conclusion

Walmart's implementation of SAP Integrated Business Planning (IBP) exemplifies a transformative approach to retail operations and supply chain management, strategically leveraging advanced technology to meet the complexities of modern retail challenges. Through the successful integration of SAP IBP, Walmart has enhanced its planning capabilities, improved data accuracy, and increased operational efficiencies, demonstrating a commitment to innovation and continuous improvement. The ongoing and future enhancements, such as expanding IoT integration, implementing blockchain for transparency, and advancing analytics capabilities, indicate Walmart's proactive stance in adapting to dynamic market conditions. As the company continues to evolve with these sophisticated tools, it is well-positioned to maintain its leadership in the retail sector, ensuring sustained growth and resilience in a rapidly changing global market. This journey not only sets a benchmark for others in the industry but also highlights the critical role of integrated business planning systems in achieving scalable success and operational excellence.