Data Centralization: The Essential First Step for SME's Cloud Analytics Adoption in EU

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Abstract

Recent Eurostat data reveal a significant digitalisation paradox within the European Union. Large enterprises are rapidly adopting sophisticated cloud services. In contrast, small and medium-sized enterprises (SMEs) lag considerably [4]. This paper argues that the primary cause of this gap is not just a lack of resources. Instead, SMEs face a more fundamental challenge: data fragmentation within aging, siloed legacy systems. We synthesize official EU statistics with academic literature to identify the core analytics needs of SMEs. These needs mostly focus on improving operational efficiency and gaining customer insights [11]. The central thesis of this work is that SMEs must first undertake the foundational step of data centralization before pursuing advanced analytics. Accordingly, this paper evaluates practical, cost-effective cloud-based data warehousing and database hosting solutions as the essential first investment for SMEs. We conduct a comparative analysis of leading platforms. Our focus is on criteria critical for SMEs: cost-effectiveness, ease of use, scalability, and integration capabilities. The findings provide a clear roadmap for SME managers. We demonstrate how to begin their data analytics journey by building a scalable, centralized data foundation in the cloud.

Keywords: SME, cloud analytics, data centralization, legacy systems, data warehouse, database, business intelligence, European Union

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