EXPLORING DATA MESH ADOPTION IN LARGE ORGANIZATIONS

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ABSTRACT

Aim/Purpose	This paper explores how large incumbent organizations adopt the newly proposed data management approach "Data Mesh". Particularly, this paper explores to which extent data ownership and data governance are shifting from a centralized to a decentralized approach and whether companies take different paths in this transition.
Background	Large incumbent organizations suffer from high complexity and often centralized infrastructure of data management that lead not only to high operating costs but also slow down innovation projects and make them more expensive. As a managerial complement of decentralized data management technology such as Data Fabric, Data Mesh was introduced as a management approach to address the organizational challenges of centralization and complexity.
Methodology	We studied how ten large Swiss incumbent organizations adapted Data Mesh. We interviewed positions such as chief information officers, chief data officers, head of information management, head of group IT. We developed a conceptual framework to position their data management approaches and how much they decentralized data governance and data ownership.
Findings and Contribution	All large incumbent companies adopt Data Mesh principles, but in different ways and to a different extent. While data governance continues to be increasingly centralized, the degree of data ownership centralization mostly remains unchanged, according to the degree of regulation and other contextual factors.

Recommendations for Practitioners	Data Mesh is regarded as beneficial by many organizations and thus a relevant option for corporate data management. But there is no "silver bullet" adoption process – instead the degree and way of adoption depends on a certain number of contextual factors, and several reference adoption models exist.
Recommendations for Researchers and Future Research	The study proposes several hypotheses on Data Mesh adoption that need to be validated in other geographies, other types of organizations (non-incumbents, government, small companies) to better understand adoption paths, adoption barriers, and adoption economies.
Keywords	data management, data mesh, data governance, data ownership, data architecture

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