## Chief Digital Officers and Their Roles, Agendas, and Competencies

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## INTRODUCTION

In 2012, Gartner, a research company, conceptualized digital transformation as the nexus of four forces: social, mobile, cloud technologies, and big data (Gartner, 2012a). The same year the company brought into the global spotlight the question, "Do you Need a Chief Digital Officer?" (Gartner, 2012b). The article stated that "The Chief Digital Officer will prove to be the most exciting strategic role in the decade ahead, and IT leaders have the opportunity to be the leaders who will define it. The Chief Digital Officer plays in the place where the enterprise meets the customer, where the revenue is generated and the mission accomplished. They're in charge of the digital business strategy. That's a long way from running back office IT, and it's full of opportunity." Unlike the position of Chief Information Officer, the position of CDO was not determined by infrastructure or hardware, but by a shift in performance and innovation.

By the time the paper was published, the CDO position had already been in place for a few years. In 2005, at least one company had introduced this role (Riccio, 2016), and in 2012 there were hundreds of CDOs. Nevertheless, it was still relatively rare, and there was a great deal of debate around it. Where do CDOs come from, what is their role in the company, what problems do they solve, and what results should they achieve? Throughout the six years since the Gartner's publication, these issues gained in media prominence, yet the range of opinions is still disconcertingly broad.

## BACKGROUND

Managing complex information systems became a pressing business issue in the mid-1980s. Around this time the first literature emerged analyzing the organizational approaches to IT management, including the role of a person in charge (Benjamin, Dickinson & Rockart, 1985; Applegate & Elam, 1992). Soon the term "Chief Information Officer" emerged to describe this role, with the view that the position implies not only functional technical knowledge but also certain executive powers (Stephens et al, 1992). Much of the literature from the 1990s and 2000s analyzed the amount of executive power required for CIO to effectively perform his/her functional tasks (Johnson, Lederer, 2010), the issue remains important till the present day (Chou, Wang & Yang, 2015; Hütter & Riedl, 2017).

In the mid-1990s a new class of information systems emerged, those linked to the Internet, by mid-2000s they became a game-changer even in most conservative industries. Those systems brought significant disruption to processes of corporate IT management, creating the agenda of e-business that was different from the traditional agenda of a CIO. The significant impact of e-business on organizational IT systems was noted in the early 2000s (Reich & Nelson, 2003), however, this impact was initially seen as limited to the complexity of information systems (integration on external and internal systems

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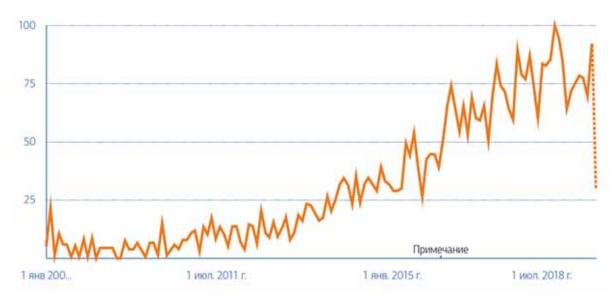


Figure 1. Google search trend for the search term "Chief Digital Officer" (100 is the maximum number of searches for this term)

in web-sites) rather than in massive organizational change. Further market developments showed that to effectively compete in the e-business world a traditional corporation requires not just a different stack of technologies but a different organization and culture. This expanded the agenda of developing e-business competencies into the agenda of digital transformation. As noted by Matt et al (Matt, Hess, & Benlian, 2015), "IT strategies present system-centric roadmaps on the future uses of technologies in a firm, but they do not necessarily account for the transformation of products, processes, and structural aspects that go along with the integration of technologies. Digital transformation strategies take on a different perspective and pursue different goals. Coming from a business-centric perspective, they focus on the transformation of products, processes, and organizational aspects owing to new technologies". Such a view called for a new executive role, the Chief Digital Officer<sup>1</sup>.

Horlacher and Hess (Horlacher & Hess, 2016) introduced an important distinction between supply-side and demand-side tasks in information systems, which generally delineates the domains of responsibility of CIO and CDO. The supply-side tasks are aimed at "IT operational efficiency and performance through the sourcing and deployment of IT. Supply-side managers exploit IT resources to support business functions and engage in routine operational support." In contrast, IS demand-side tasks are "aimed at business innovation, business growth and the creation of new business value through IT. Demand-side managers explore IT-enabled innovations and corresponding strategic opportunities for the company in the face of constantly changing market environments". In the study of four corporate cases, they found out that CDOs concentrate on the demand-side tasks, while CIOs or CTOs (Chief Technical Officers) are responsible for supply-side tasks. The results of Korovkin (2019) show that some CDOs have also responsibility for certain supply-side tasks, especially in the context of heavy industry B2B operations. 10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/chief-digital-officers-and-their-roles-agendasand-competencies/263664

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