

**How to use enterprise modeling and enterprise architecture to evaluate and demonstrate the value and impact of digital innovation (or other types of implementation of IT)?**

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The goal of the research was to analyze ways in which enterprise modeling and enterprise architecture (EA) can be used to evaluate and demonstrate the value and impact of digital innovations in companies. The analysis has been conducted in the area of marketing activities in a healthcare organization, but the research conclusions can be generalized for any activities in a company, that is undergoing digital innovation, of any field. The research examined business processes from the area mentioned above. In these business processes, digital innovations were introduced. Based on the considered material, the conclusions mentioned in these theses are drawn.

Nowadays, companies must be flexible, quickly respond to changes in the external environment, the market and technologies, and ensure compliance with different standards. Flexibility and adaptability are realized through continuous business transformation, which implies a change in the company's goals, key indicators, business processes, organizational structure, as well as the implementation of new IT solutions. The introduction of innovations requires the coordinated work of several functional areas of the organization: strategic, performance, business process management, organizational and information systems design. [2, 3]

The relevance of the research is the fact that in mentioned conditions companies are making efforts to transform their activities through local implementations, like digital innovations and IT implementations, and there is a problem that getting a positive effect often depends on the ability to correctly represent the company as a whole. [5]

Information technology and corporate information systems represent the foundation on which a modern enterprise should be built. For example, when introducing corporate IS in an enterprise, it is necessary to take into account its compliance with the architecture of the enterprise itself. This implementation is one of the most complex and time-consuming processes. [1, 4]

As a result of the research, we showed that a common vision of EA helps to comprehensively design a corporate information system that will thereby meet the goals of the enterprise and will be able to integrate and interact where necessary. Also, the design of EA requires the necessary infrastructure of the enterprise: a set of interconnected structures that form the basis for achieving the strategic goals and business goals of the enterprise.

By modeling the IT architecture of the enterprise and using modeling and architecture, you can pre-design what the enterprise should strive for. Thanks to such modeling, it is possible to work ahead of time.

We can conclude that EA shows how an enterprise can change with the introduction of technologies, and also how the approach to any process in an enterprise with the introduction of IT innovation can change.

For existing enterprises, the most important is the modeling of the processes “as is” and “to be”. This allows demonstrating, for example, reducing process steps or the necessary staff to complete the steps, since some of them will be performed automatically by the system. Due to the fact that in such a model, business representatives will have a clear idea of which processes will change, we can calculate the impact and cost savings.

It can be concluded that without using EA, some transformations and development of new business models using IT technologies will be extremely difficult, since enterprise processes can be very complex.

As a result of the research, we have seen that an EA team can better align the IT function’s priorities with the business’s priorities by tracking its accomplishments with respect to the business capabilities that it delivers, rather than the sheer number of technology applications that it implements.

It was obvious that business modeling provides an opportunity to create an integrated enterprise structure (according to the main layers of the EA). The introduction of IT innovation can change the business strategy of the enterprise and may absolutely change the business model later.

It follows that the introduction of IT innovation will affect not only the local area, but the enterprise as a whole. It can be considered in detail on models of EA in different languages (e. g., ArchiMate). Thanks to a clear trace of connections in practice, it will be easier to understand how departments/systems/IoT/etc. interact, what information they receive and send, for example, to an installed IT system.

In addition, any innovation introduced one day can become a “Best Practice”. So, on the example of one well-developed case, using modeling and architecture of this enterprise, it is possible to introduce the same digital innovation or IT solution in other companies. Thus, this approach can be monetized, which is important for IT vendors who can create complex IT solutions.

Moreover, from the research it can be concluded that the ability to provide a single language is the most important advantage of EA for managing the development of organizations.

### **Источники и литература**

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