

PROCUREMENT AS ENABLER FOR A DIGITAL FUTURE

Why do so many IT projects fail in the digital age?

The role of procurement as an enabler for innovation and a digital future

As soon as it comes to developing and integrating new digital solutions, hair-raising stories of failed IT projects come to the minds of most managers. The high possibility of failure and the associated waste of resources cause the reluctant behavior of decision makers to tackle the inescapable challenge of leading a company into the digital age. A good example for such a spine-chiller is the current system failure of Lidl, a large German retail company. In 2011 Lidl kicked off a project to customize and integrate a new ERP system. In July 2018 they cancelled the project after it devoured €500m as the software was underperforming the existing inhouse developed legacy system. Another dissuasive example is the Ariane 5 accident back in 1996. The explosion of the rocket, worth about \$350m, was caused by a systematic software design error. A variable exceeded the representable range of a 16-bit integer, what was leading to the self-destruction of the rocket. Not only this integer overflow, but also the specification of the exception-handling mechanism contributed to the critical failure.

Scientific research proves failure rates of 50-80% for all kinds of IT system projects, with a clear positive correlation between a project's size and its tendency to fail - large projects fail three to five times more often than small projects. This reduces the engagement for potentially crucial projects even further and fosters a behavior which is best explained by the phrase "never touch a running system"!

Nonetheless it is key for corporations to innovate and to find new ways to boost the competitiveness of their products and processes. Fortunately, it is possible for most IT projects not only to predict but also to avoid failure!

Succeeding in an IT project means to meet the expectations of stakeholders

Most commonly these expectations are associated with functionality and constraints like budget and timeline. It is vital for a successful IT project to find a realistic balance between these interdependent factors. If this is not done properly, the IT project is doomed to fail even before the first line of code is written.

Beside the lack of capabilities which are needed in the planning phase of an IT project, there is a recurring set of common reasons for IT project failure in scientific, as well as non-scientific, publications. These include:

1. Unclear project objectives

Most organizations are unable to handle all the many opportunities and running projects just because of their sheer quantity, resulting in new projects without distinct goals. It is not

realistic to predict every possible outcome of a project, but a clear definition of objectives boosts the chance for success of a project radically.

2. Lack of knowledge

A common problem within most organizations is people being in charge of competences they don't have. Usually such a constellation results in projects being poorly defined or not properly managed because people just don't understand critical aspects.

3. Poor project requirements

Poor or even invalid project requirements are a major problem for everyone involved in IT projects. Especially solution providers often struggle to come up with proper solutions if technical requirements are contradictory, incomplete or imprecise. Such insufficient project requirements may result from unclear project objectives or lacking knowledge, but they are often also attributable to an abundance of "requirement engineers", each with its very own focus point.

4. Communication gaps

Once you want to kick off a project all involved parties need to actively communicate. Especially the right people need to match at the right time. In reality, people don't find their counterparts, and they also lose an overview on topics that have or haven't been discussed yet. The whole communication gets even worse when new resources join which don't have adequate access to a project history.

5. Feature creep

Feature creep (sometimes also scope creep) is a critical issue in IT projects. Feature creep refers to increasing deliverables (mostly further functionalities) during a project without proper adjustment of resources and/or timeline. This is not only leading to a work overload for the participating developers or exceedance of deadlines, but also a possible reason for a decline in usability.

6. Lack of management

Many IT projects fail because senior management is not actively involved in projects and decision making is not happening.

7. Insufficient risk-management

Risk-management is still not formalized. Organizations often try to predict major problems and determine mitigation actions, which is like a drop in the ocean. Significant is mitigating the sum of all little issues during a project, as they can blast everything. The example of the Ariane 5 accident demonstrates the potential aftermath of such little issues.

8. Lack of visibility

A frequent issue in project management is related to inaccessible information. All participants involved in a project must have access to the right level of information at the right time. Organizations tend to have information gaps, as information is not stored, lost or inaccessible for the right parties.

9. User centered development approach and feedback

A lot of projects fail because they constitute some kind of black box development. Such a development is characterized by acceptance of the requirements in the beginning and then spitting out a product at the end. There is no further interaction between principal and developer in between those endpoints of the project timeline. This happens in a lot of outsourced projects. However, good development requires continuous feedback to build a product that really fits to the user.

We must learn how to handle innovation and circumvent avoidable failures

Of course, only in the rarest cases one or two of these reasons lead to the failure of IT projects. In reality, most projects fail due to a combination of the mentioned reasons above. In fact, failures result from erroneous business and project management, as well as, wrong technical decision making.

At this point I would like to refer to Robert Charette who came up with a very simple and yet sublime metaphor getting to the heart of this topic: project failures often equal airplane crashes. Such as software developers don't aim to fail a project, pilots never plan to crash their plane, it is a combination of multiple factors that lead to a crash not a single pilot. He concludes that an IT project failure resembles "the worst conceivable airplane crash, where the pilot was inexperienced but exceedingly rash, flew into an ice storm in an untested aircraft, and worked for an airline that gave lip service to safety while cutting back on training and maintenance". Transferring this metaphor back to a software project a typical project would feature: An illiterate project manager throwing its weight around, who came up with an AI and Blockchain project built on quantum computing, while working for an organization that never even used personal computers and which had never heard of risk management. I am aware that this example is well exaggerated, however, if we contemplate the metaphor in the abstract we can derive that IT projects fail because they most often constitute something new and unknown to organizations, something that is not covered by their competences – something we call "innovation" – they are not capable to handle.

Recognizing procurement as a hub for innovation

In order to properly manage innovation, organizations have to establish the right foundations. Those can be set at various places within an organization - by training employees, creating innovation departments and so forth. However, one organizational core competence is always left out - procurement. Innovation in the foremost cases does not happen at innovation departments or by hosting a design thinking workshop for the nth time just to develop another super-duper blockchain idea which will sink straight into obscurity. Most corporate innovations arise by acquiring other companies or, particularly, by refining processes and products around an organizations existing lineup. Especially the second part requires strong collaboration with existing and/or new suppliers, thus procurement plays a crucial role as a driver for innovation. Partnering with suppliers which have complementary capabilities often adds more value than simply choosing the alternatives with the lowest costs.

In order to transform procurement departments into innovation hubs, we have to radically rethink their functioning. In the past, procurement departments primarily have been perceived as the maverick cost cutter of an organization being dependent on other departments regarding technical knowledge. This thinking has to change, we have to invest and not economize on procurement departments. Train professionals regarding project management and technical knowledge. Provide them with the right tools, processes and spirit, and cherish their value-add for the whole company. Procurement also has to be further integrated in the organizational context in order to foster collaboration between experts. By doing so, procurement departments will turn into the primary venue for innovation, and we will be able to envisage, evaluate and manage IT projects better, identify risks and circumvent avoidable failures and ultimately push an organization forward by applying innovation to the very beginning of an organizational process chain. Procurement departments shall become strategic decision makers shaping the future of a company, not only operation centers cutting costs.

Doing IT projects well isn't too complicated. It's about providing a proper project environment with suitable processes, where motivated stakeholders are brought together with the right people and organizations. Maybe it's time to make procurement a primary tool for facing the challenges arising in the digital age.

That sounds like hard work to achieve? – No worries Prospeum is here to help!

Finding the right partners for IT projects can be very frustrating if you have to compare many options but you are lacking the technical know how to recognize every little aspect which is

important for a successful project. But don't blame the procurement professionals! You can't be an expert in every field.

Prospeum efficiently supports procurement professionals to make their job as easy as possible while enabling them to acquire the best possible suppliers for your IT projects. Beneath an easy to understand and appealing user interface, Prospeum provides best practices in sourcing IT projects. Our setup wizard provides information on every relevant section of a project and ensures that nothing of importance is left out. Furthermore, Prospeum helps to structure projects and to identify grey areas in a project. Partner with us to partner with the best!



Prospeum rethinks the way companies manage B2B relationships. We're creating a core piece of enterprise software for corporations and SMEs, to collaborate across departments to create project and innovation solicitations and auctions. Our solution empowers our customers to easily establish more streamlined procurement processes, perform advanced sourcing evaluations and ultimately take better business decisions.