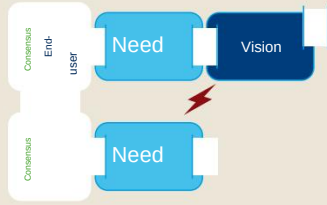
theALIGNMENT PUZZLE WHITEPAPER

Why do IT projects fail so often?



1 Introduction

Implementing new software is a change project. We prefer this to be a controlled and successful change. Nevertheless, IT projects have a bad reputation.

The government, in particular, regularly makes the news. IT projects there seem to fail continuously. A few examples:

- The Justice Department's digital litigation system (planned 8 million euros, actual 29 million)
- The INSPECT project of the Netherlands Food and Consumer Product Safety Authority (budgeted 36 million euros, actual 95 million, without usable result)
- The Finance Ministry's tax allowance system (planned 60 million euros, actual 240 million)
- The Speer Project for Defence (planned 200 million euros, actual 1 billion1)

The government is apparently an environment in which projects easily slip through management's fingers. Projects are too large and take too long. Requirements and wishes are adjusted along the way under pressure from various stakeholders. There is a lack of knowledge, measurable objectives, and a clear long-term vision.

But it is not only in the government that many IT projects fail. We cite the failed SAP implementation at German supermarket chain Lidl as an example. At first glance, that major project looked like a good match between two top German companies, but it was ultimately called off in 2018 after half a billion euros (a five with eight zeros, for clarity) had been spent.

Excessive lead times and too many involved parties are undoubtedly two of the main reasons for failure. But there is another very important reason: failing to meet the five basic ingredients for successful change. To illustrate this, we use the 'Knoster model'2.

1 Note that the aforementioned factor ÿ is still conservatively chosen in this list.

2 T. Knoster (June 1991). Factors in managing complex change. Material presentation at TASH conference, Washington DC, The Association for People with Severe Disabilities.

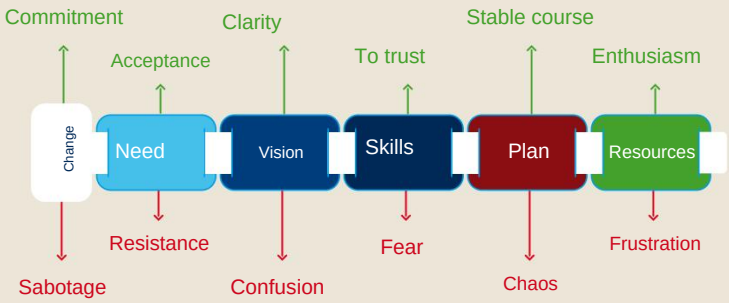
2 Knoster's model

This model describes five basic ingredients needed to bring about successful change: need, vision, skills, plan, and resources. The model describes the positive effects when the ingredients are present in the right quantity and form, but also the negative effects that occur when one or more of the ingredients are missing. And those are a threat to the project.

- If the need or necessity is not clear, people assume that the new situation might be a setback, and this can evoke **resistance .**
- If there is a lack of vision, it is unclear to people where things are going and what is going to happen. That creates **confusion.**
- When people think they do not possess the necessary skills to act in the new environment, **fear** arises .
- Without a plan, people might get the idea that it will turn into **chaos .**
- And when people notice that there are no or insufficient resources to get things done, **frustration** starts to prevail.

If one or more of the five principles are unclear, it can lead to people resisting or even sabotaging the change.

Knoster model Loosely based on Knoster (TASH Conference 1991)



The interesting thing about this analysis is that it goes a step further than merely observing that people have something like a built-in 'resistance to change'. There are various possible negative reactions, each with a cause that therefore needs to be addressed.

You can recognize confusion, fear, chaos, and frustration when talking to people. If you notice these situations in the context of a change process, you can determine early in the process where

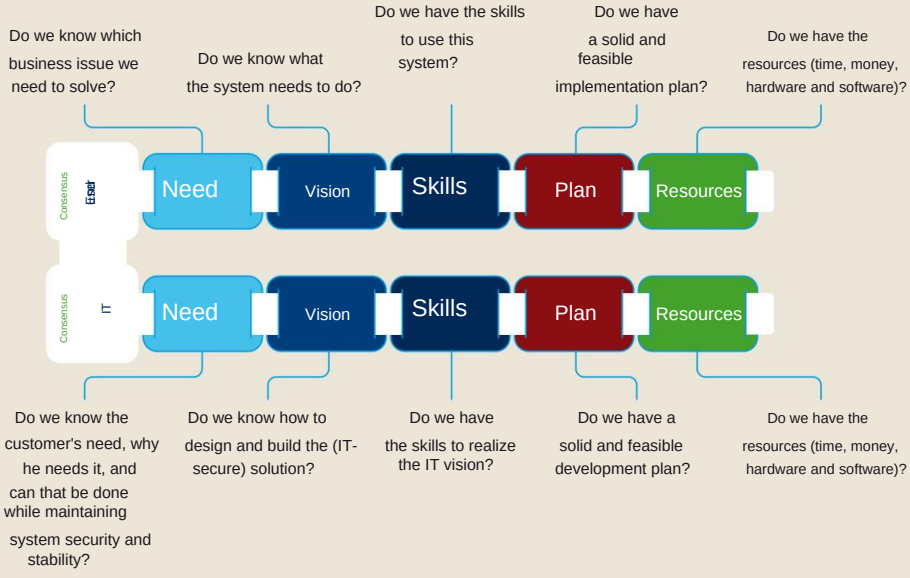
whether or not sufficient attention has been paid to one or more of the five mentioned principles. If it is solely about perception, then you take the necessary steps to adjust that perception. If it turns out that the principle being questioned has not been sufficiently elaborated and substantiated, then (re)defining and (re)communicating is the next step.

3 The Knoster model for IT projects

Knoster's framework applies to changes that must be brought about by individuals. However, individuals are always part of stakeholder groups, such as sales, production, accounting, and IT. Suppose the change we want to bring about is 'designing, building, and implementing a correctly functioning software system that fully meets the needs of the users'. It immediately becomes apparent that you are dealing with various stakeholder groups for this issue. The question then is how to apply Knoster to this.

In the simple case of an end user requesting new or modified software functionality, we have two stakeholder groups (the end user and one or more 'IT professionals'). Each of the participating individuals must then have a clear understanding of the five principles for their own area of application. Additionally, the participants from the two areas of application must reach a consensus on exactly what needs to be delivered. Therefore, you must pose and answer the Needs-Vision-Skills-Plan-Resources questions for both the end user and IT.

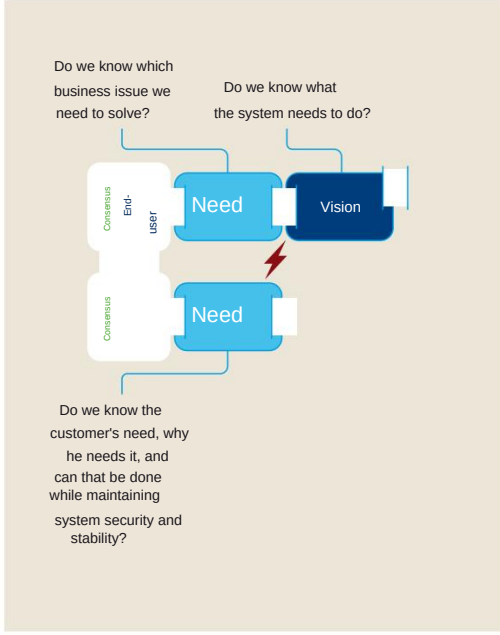
Knoster model business and IT



Let's take a look at 'Business-IT misalignment' through this lens, in terms of Needs and Vision.

4 The needs and visions of Business and IT

In general, business users require new or modified functionality because they are convinced that it will assist them in their daily work. Since the world and the environment are constantly changing, they prefer a flexible software system that can be easily adapted to new needs. And because that environment is constantly changing, they also expect fast response times from IT.



Naturally, IT wants to serve the business, but they too must take IT-specific main priorities into account. In many companies, the performance of IT departments is primarily assessed on security, stability, and expense control.

That is one of the main reasons why IT is averse to 'new software'. In IT, they are more likely to look at you critically out of fear of security breaches or reduced stability than to dance on the tables because they get to make or buy that new software for you, which then gets to be installed on yet another new server.

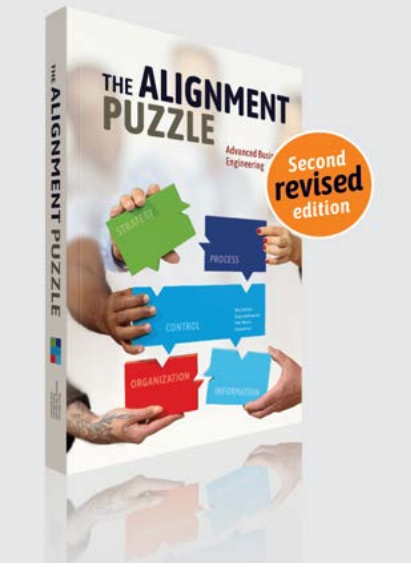
We have previously argued that the mantra 'The business specifies and IT realizes' does not work. In the Business-IT Knoster diagram, this problem lies in the end user's Vision block and the IT Needs block. In most cases, end users know which business problem they want to solve, ranging from simple things like performing transactions faster or with a lower risk of error, to more complex matters such as introducing a new support service for customers. The issue here lies more in whether they can clearly visualize what the system is actually supposed to do for them and how it should do it. For example, we have noticed that people fall back on techniques they know when asking questions, partly because they are relatively unfamiliar with new developments within IT.

If the end user does not sufficiently know or cannot articulate what the system needs to do (= filling in the Vision block), then it is difficult for IT to answer the question 'Do we know the customer's needs?' (= the first part of IT's Needs block). If Business and IT are not aware of this, it is not surprising that what is delivered does not match expectations.

One of the ways to deal with this problem is the aforementioned Rapid Prototyping.

Once IT has a clear picture of the end user's Needs and Vision, they can proceed with defining the IT Vision, assessing and potentially adjusting the necessary skills, the implementation plan, and making the necessary resources available.

As soon as IT has a working system (or at least a version that can be used to compile user training), the Business can get to work with their part of the skills, plan, and resources.



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