

An international research on IT-projects, to leverage success of Dutch IT-projects

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Introduction

For decades Dutch IT projects are failing, the outcomes often challenged, the delivery of agreed results within time and on-budget remains elusive and the value of IT-project is considered disappointing (Algemene rekenkamer, 2008), (Bronsgest, 2016). For these reasons the Dutch parliament held parliamentary hearings in 2014 to investigate large governmental IT-projects. One of the conclusions of the committee on IT-projects, chaired by mr. Ton Elias, was that the Dutch government loses between one to five billion euro's on a yearly basis in IT-projects (Tweede Kamer der Staten-Generaal, 2014).

Literature regarding Dutch IT projects shows indeed that projects are failing. The court of auditors, in Dutch De Algemene Rekenkamer, investigated the causes for (partially) failed IT projects and concluded that the government is not in control (Algemene rekenkamer, 2008). Later in 2014 the committee, headed by mr. Elias, conducted a parliamentary enquiry and consulted experts to tackle this issue. One of the results was the founding of the Bureau IT Toetsing (BIT), this independent authority performs risk assessments on IT-projects above five million euro's. With the measures in place a reduction in failed projects is expected. But unfortunately this is not the case, as described in Meer vorm dan inhoud (Bronsgest, 2016) still only one third of projects completes successfully.

The Standish group is researching IT-projects for more than twenty-five years. Standish researchers analyzed over hundred thousand projects and are actively sharing their knowledge on project success and failure in their CHAOS Reports (The Standish Group, 2016).

With this data they defined several factors that contribute to the success in IT projects (The Standish Group, 2015). The analyzed projects are from various countries, with a focus on the United States, approximately 60%.

Recent Dutch headlines show continued relevance of the subject: Dutch Tax office led to a delay when collecting inheritance tax (RTL News, 2017), Rijk faalt bij ICT-projecten: het gaat mis op alle niveaus (Bremmer, 2018) , Mislukt ICT-project bij Nederlandse overheid kost Capgemini 21 miljoen euro (Hoeffnagel, 2018). With the projects still failing, hundreds of millions of euro's being lost in the process and various local solutions that do not seem to deliver the required results, the attention goes to other countries. Do they share our experience with failing projects, what have they learned and are there breakthroughs that can be applied to Dutch projects?

Study objective and hypothesis

The purpose of this study is, to provide a foundation for improving Dutch IT projects by leveraging international experience. With the research question; How do Dutch IT project success indicators relate to an international sample of The Standish Group? Dutch and International project samples are analyzed to find known indicators that impact a project's success. The hypothesis is that a relation between the Dutch and international projects exist and that the findings from international studies regarding project management can be applied to the Dutch projects.

Method

Based on the available information, rated projects and feedback from expert interviews the Factors of Success (The Standish Group, 2015) have been selected as metric to compare Dutch to International projects. This approach differs from the method which is used by the Standish Group to analyze projects but allowed for an increase in analyzed samples.

The study was executed in 2016-2018 using a comparative analysis with two samples, 90 small (<1 Mio.) projects and 20 (>6 Mio.) large and grand (>10 Mio.) projects. The sample of small projects is a result from a masterclass in resolution benchmark analysis (The Standish Group, 2018) at the Erasmus university. The benchmark analysis provides an overview of the organizational profile, rating of skills and projects characteristics. Information for Large and grand projects is gathered using public information from the IT Dashboard (Rijks ICT-Dashboard, 2018), BIT-reports and news articles.

One set of 30 projects in the small sample was replaced due to disbelief in the data. The set of projects had a 100% success rate, which was deemed unrealistic by the researchers.

Samples are rated for project results and success indicators defined in The Factors of Success. These indicators are subjective to interpretation, to ensure quality of the rated values, motivation and proof is supplied with each indicator. Rating of the success indicators is done on a one to five scale, which is like the method used by the Standish group. The sum of each sample is then compared with the international sample of one thousand projects from the CHAOS Report (The Standish Group, 2016). As the CHAOS Report does not consider the project size used in the samples. Additional analysis with combined samples is done for further comparison.

Results

The sample of small projects show a success rate (on time, on budget and on target) of 75%, while the large and grand projects only complete successfully 10% of the time. The average over the two researched samples

creates a success rate of 43%. In the CHAOS Report which is based on thousand projects of various sizes, an average success rate over all the project sizes is calculated at 45%.

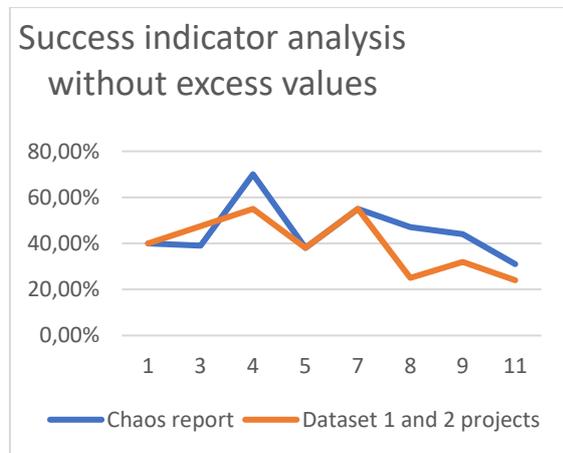
The factors of success analysis on the large and grand projects shows moderate and poor skill ratings on most of the indicators.

	Factors of success, large and grand projects			
Modern Successful	Highly	Skilled	Moderate	Poorly
Executive Sponsorship	5.3%	21.1%	42.1%	31.6%
Emotional Maturity	0.0%	7.7%	46.2%	46.2%
User Involvement	5.3%	5.3%	52.6%	36.8%
Optimization	10.0%	15.0%	45.0%	30.0%
Skilled Resources	5.0%	15.0%	65.0%	15.0%
Execution	10.0%	0.0%	25.0%	65.0%
Tools & Infrastructure	10.5%	26.3%	31.6%	31.6%
Agile Process	0.0%	11.8%	17.6%	70.6%
Project Management Expertise	5.0%	10.0%	50.0%	35.0%
Clear Business Objectives	10.0%	15.0%	35.0%	40.0%

In the successful projects from the CHAOS Report the rated success indicators shift from poorly and moderate to between moderate and highly skilled.

When comparing the success indicators of the researched samples with the CHAOS Report a similar pattern is discovered. In the researched samples three excessive values stand out; on target, project size and complexity. Only two of the projects could keep the planning and deliver the project on target. The project size was only incorporated for finished projects. Complexity was impacted by the research domain in which most projects must be delivered within the current architecture.

The graph below shows the results of the success indicator analysis for the CHAOS Report and the samples without the excess values.



Discussion

As the Standish group mentions in their research approach: “There is no absolute truth” when it comes to project analysis.

Expert interviews with distinguished researchers, professionals, and government officials provided better understanding of our findings. Videos from the hearings of Lord Freud and by the Committee Elias provided additional insight in the current research and measures to control the Dutch IT-projects.

The findings of our study support a relation between the Dutch IT Projects and the international sample from the Standish data. Our hypothesis stated that when a relation is found, the learnings from international projects can also be applied to the projects in the Netherlands. This statement is supported by expert interviews and recent studies like the article published by The Standish group in which they conclude that project resolution rates per world area are similar. As example; in North America 52% of the projects are challenged, in Europe 55%, Asia 55% and in the rest of the world combined 49% (The Standish Group, 2018). With this knowledge the success rate of Dutch IT projects can be improved by focusing on the top three international indicators that contribute to

project success and value (The Standish Group, 2015):

Executive Support: With financial and emotional support of an executive, or a group of executives. The executives will be more inclined to encourage and assist in the successful completion of the project.

Small projects: Small projects are more likely to complete on time, stay within budget and achieve the required result and thus adding value to the organization.

Optimization: Manage the scope of the project based on relative business value. Provide a structure and means to improve business effectiveness and breakdown larger projects or deliverables into smaller projects.

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