



Risico's van Technologisch Succes in digitale transformatie

2e Risk Event 2019

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 University of Antwerp

The autonomous management school of the University of Antwerp

antwerp management school

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“There is no reason for any individual to have a computer in his home.”





IT-Falen

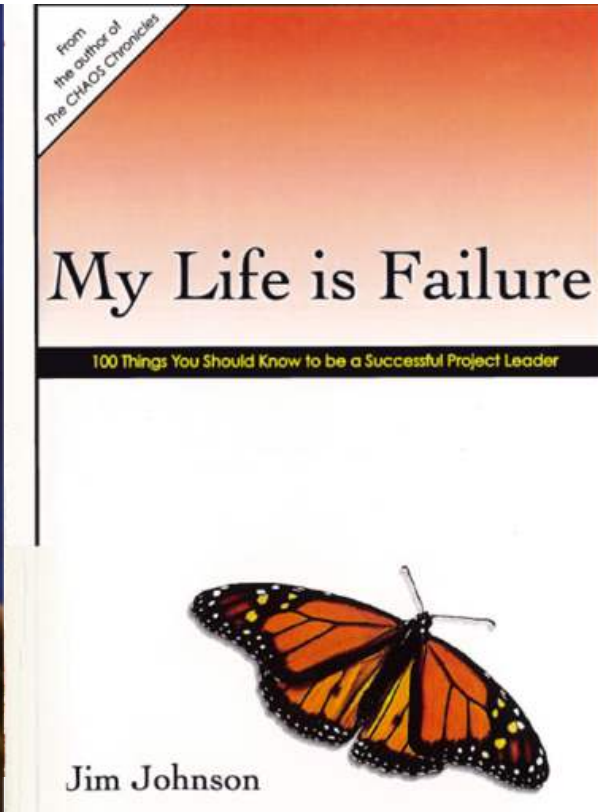


Mijn eerste 'ervaring' in 1989 ...



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	Successful	Challenged	Failed	
Over \$10M	7%	49%	44%	100%
\$6M to \$10M	16%	50%	34%	100%
\$3M to \$6M	15%	49%	36%	100%
\$1M to \$3M	34%	52%	14%	100%
UNDER \$1M	73%	24%	3%	100%



Succes versus Waarde?



- On-Budget
- On-Time
- On-Target (Requirements)
- On-Goal (Strategy)
- Satisfied (Customers, Employees)
- Valuable (ROI, Evolvable Systems)
- All of the Above



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Frequentie succes- & faalfactoren

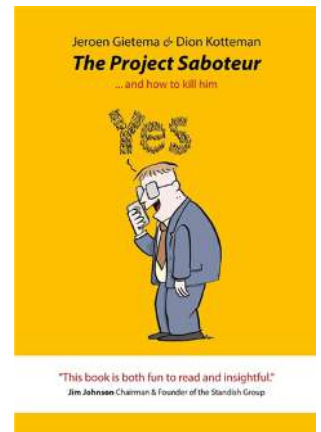


standaard faalfactoren	standaard frequentie
1. betrokkenheid gebruiker	20%
2. ondersteuning door management	15%
3. duidelijke doelstellingen	15%
4. volwassen gedrag / mismanagement	12%
5. scope optimalisering	11%
6. eenvoud in complexiteit	11%
7. projectmanagement	6%
8. vaardigheden team	5%
9. aanpak en uitvoering	3%
10. tools en infrastructuur	2%
	100%

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Complexiteitsonderdelen



Figuur 1

Digitale transformatie



- ▣ Digital transformation means re-designing and re-constructing an organizational process in the same way an engineer would build a automobile, airplane, or computer.
- ▣ A digital transformation project (DTP) is one that completely automates a business workflow, including integration of third-party resources.
- ▣ What distinguishes DTPs from traditional IT projects that support businesses process is the elimination of all manual processes as part of the workflow, thus truly transforming the business. An example would be online voting.
- ▣ The Standish Group selected **5,140 projects** within the CHAOS database that fit the DTP definition. We then compiled the results of these projects to present a special DTP report.



Resolution by Traditional Measurement



Resolution by Traditional Measurement			
Resolution	All	DTP	Delta
Successful	37%	34%	-3%
Challenged	44%	45%	1%
Failed	19%	21%	2%

The Traditional resolution of all projects and DTP projects from FY2007–2016 within CHAOS database. Traditional resolution is OnTime, OnBudget, and OnTarget.

DTP Size by Resolution



DTP Size by Resolution				
Resolution/Size	Successful	Challenged	Failed	Total
Grand	5%	52%	43%	100%
Large	12%	58%	30%	100%
Medium	17%	57%	26%	100%
Moderate	58%	35%	7%	100%
Small	57%	35%	8%	100%

The resolution of DTPs by size from FY2007–2016 within the CHAOS database.

Size-Complexity Matrix



Size-Complexity Matrix						
		COMPLEXITY				
		Very Simple	Simple	Average Complexity	Complex	Very Complex
SIZE	Small	100	250	400	550	625
	Moderate	175	325	475	625	775
	Medium	250	400	550	700	850
	Large	325	475	625	775	925
	Grand	400	550	700	850	1000

The Size-Complexity Matrix provides guidelines for categorizing a project in order to assess the risk and effort. The Size-Complexity Matrix uses a 5-point scale for both size and complexity. The lowest-point project is a simple, small project and has 100 points. The largest and most complex project has 1,000 points. Green means low risk and effort, yellow means medium risk and effort, and red means high risk and effort.



The Good Sponsor



DTP Resolution by Project Sponsor				
	Highly Skilled	Skilled	Moderately Skilled	Poorly Skilled
Successful	36%	33%	20%	11%
Challenged	11%	43%	29%	17%
Failed	10%	23%	40%	27%

The resolution of DTPs by the skill level of the project sponsor from FY2007-2016 within the CHAOS database.



The Deadly Sins



DTP Resolution by Emotional Maturity				
	Highly Skilled	Skilled	Moderately Skilled	Poorly Skilled
Successful	34%	39%	19%	8%
Challenged	15%	27%	41%	17%
Failed	15%	14%	47%	24%

The resolution of DTPs by the emotional maturity skill level of the project team from FY2007–2016 within the CHAOS database.

Agile Process



Growth of Agile Projects			
Method	2008-2010	2011-2013	2014-2016
Agile	6%	8%	23%
Waterfall	40%	33%	21%
Other	54%	59%	56%

DTP Resolution by Method			
Method	Successful	Challenged	Failed
Agile	36%	54%	10%
Waterfall	10%	60%	30%
Other	33%	48%	19%

The resolution of DTPs by agile versus waterfall from FY2007–2016 within the CHAOS database.

Evolveerbare systemen



- ☞ Mevrouw **Bruins Slot** (CDA): Er is bijvoorbeeld sprake van **uitdijing** als de minister met een voorstel komt om door middel van ICT een bepaalde doelstelling te bereiken, waarna er in de loop van zo'n project extra eisen worden gesteld. Dat is ook gebeurd in de projecten die de commissie heeft onderzocht. Leidt het stellen van extra eisen ertoe dat ICT-projecten complexer worden, waardoor het ook lastiger wordt om het project te realiseren binnen de gestelde tijd en binnen het budget dat ter beschikking is gesteld?
- ☞ De heer **Mulder**: Ja. Het gaat dus niet alleen maar om de omvang, maar ook om de veranderingen. Daarom zijn we bij de Universiteit Antwerpen heel hard aan het werk om niet alleen maar grote systemen te bouwen, maar die ook te testen op de mate waarin ze heel snel kunnen veranderen. We hopen binnen afzienbare termijn te kunnen laten zien en wetenschappelijk aan te kunnen tonen dat die veranderingen onder controle kunnen worden gebracht. Dat zou het systeem al heel veel helpen, maar dat zegt helemaal niets aan de veranderingen van de zijde van de organisatie. Dit zal niet voldoende zijn als projecten te groot blijven en als we blijven werken met veel partijen die tegenwerken. Op allerlei vlakken moeten we dus tot verbeteringen komen.



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Het voorbeeld van de raket



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Strategie voor succes:



nano-projects zonder



Technische Schuld



Hans Mulder
Viegroep nv

Volgen

Small Projects: Like Riding a Bicycle, by Hans Mulder & Jim Johnson

blijven evolueren



Hans Mulder
Viegroep nv

Volgen

Small Projects: Like Riding a Bicycle, by Hans Mulder & Jim Johnson

Fail, but fail fast and repair digital transformation



- ▣ The combination of Scrum and Normalized Systems creates a pipeline of nanoprojects.
- ▣ The pipeline works by creating output in a rapid process.
- ▣ Nanoprojects or services come into the pipeline, they get completed in a day to a week, then go into a rapid QA process, and are then sent to a user test group.
 - If the project works it is implemented and absorbed by the user community.
 - Nanoprojects that fail in either QA or user acceptance are reevaluated and may or may not be reintroduced to the pipeline.
- ▣ One of the most important benefits is the organization can take more risk since the failures are also very small, or nanofailures, that have little impact and cost for the organization.



Project Type	Successful	Challenged	Failed
Developed from scratch using traditional languages and methods	20%	61%	19%
Developed from scratch using modern methodologies	23%	54%	23%
Developed some components & purchased others	21%	59%	20%
Purchased components & assembled the application	24%	54%	22%
Purchased application & extensively modified	32%	45%	23%
Purchased application & modified	53%	27%	20%
Purchased application & performed no modifications	46%	40%	14%
Modernization	55%	35%	10%



The resolution of DTPs by type from FY2007-2016 within the CHAOS database.

Find the delta's compared to traditional projects



Factors of Success/Value	Points	Investment
Small Agile Projects	25	25%
Executive Sponsorship	15	20%
Emotional Maturity	15	20%
Talented Staff	10	15%
User Involvement	9	4%
Optimization	8	4%
SAME (Standard Architectural Management Environment)	6	3%
Modest Execution	5	3%
PM/Process Expertise	4	3%
Clear Business Objectives	3	3%
Total Points & Yearly Investment	100	100%

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Bedankt

Voor meer informatie kun je contact opnemen met:

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