

An Agile Approach for IS/IT Benefits Management

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Presentation plan



- Problems with IS/IT projects
- Measuring success in IS/IT projects
- Benefits Management
- The actual use of Benefits Management formal processes
- Next Steps and Final Considerations

A lot of references to IS/IT failures



- Information systems implementation failure is a yet unsolved problem, as the implementations have been persistently unsuccessful with failure rates not declining over the years (Sauer et al. 1997).
- A significant number of companies still suffer from the so-called productivity paradox, i.e., although IT has led to increased productivity, it has not brought significant business profitability (Farbey et al. 1999).
- About half of all the companies in the world are increasing the spending to try to get competitive advantage, but there is no clear understanding about how IT can influence the company's strategy (Tippins & Sohi 2003).
- In most organizations, IT departments tend to be viewed as having poor performance and not delivering real value-for-money (Peppard et al. 2007).
- Most IT projects fail to deliver in one or more of the following components: schedule, budget or requirements (Caldeira et al. 2012).
- Nowadays, in the knowledge economy, although many companies have spent a lot of money in IS/IT, they do not perceive real benefits from that spending (Hesselmann et al. 2015)

Problems with IS/IT projects



- In spite of increased investments
 - It is unclear the investments bring sustainable competitive advantage
- The productivity paradox is frequently observed:
 - IS/IT generates increased productivity but not increased profits
- In today's knowledge society
 - Organizations don't see real benefits arising from huge I/IT investments

Problems with IS/IT projects (cont)



- Most IT projects fail to deliver in one or more of the following components:
 - Schedule
 - Budget
 - Requirements
- Failure in IS/IT projects
 - Is still an unsolved problem
 - There is no evidence that the failure rate tends to decrease

IS/IT projects fail!



Jean-Sébastien Vachon published a white-paper in October 2016 with data from the Standish Group CHAOS Report, that analized over 50K projects:

	2011	2012	2013	2014	2015
Successful:	29%	27%	31%	28%	29%
Chalanged:	49%	56%	50%	55%	52%
Failed:	22%	17%	19%	17%	19%

For this study, Successful projects are the ones that delivered the <u>required</u> <u>functionality</u> on the <u>planned date</u> and at the <u>expected cost</u>.

Is this the best measure for IS/IT success?

Source: Vachon, 2016

Success in IS/IT projects



- What does it mean to have success in IS/IT projects?
- Normally, success is measured in terms of:
 - Delivery time
 - Money spent
 - Adherence to specifications
 - ➤Other organizational benefits are overlooked
 - There is the common assumption that business benefits will just appear

Project evaluation



- Tendency to inflate the benefits to secure project approval
- Projects decided over "acts of faith" or "got to do it" or "strategic", without formal evaluations
- Failures covered up by management to protect corporate image

Project evaluation



- Even when there is a formal project evaluation, it tends to be merely financial (ROI)
- Practical result:



To increase ROI, one acts on the denominator, forgetting the numerator, which is the reason for the project.

New ways to measure IS/IT project success



- Success in IS/IT is not immediately attained after project implementation. Some benefits only appear later on (Caldeira et al. 2012)
- The benefits of IS/IT go beyond the financial ones, although these are easier to evaluate (Farbey et al. 1999, Serrano & Caldeira 2002)
- If a project is measured only on it's ROI, there will be a tendency to reduce the denominator, forgetting that the numerator is the reason for the project to begin with (Peppard et al. 2007)
- It is essential to find processes to measure and evaluate the benefits, mainly the intangible ones (Serrano & Caldeira 2002)

Thus, the need for an effective Benefits Management Process

Definition



- Benefits Management:
 - "the process of organizing and managing so that the potential benefits from using IT are actually realized" (Peppard et al. 2007, p.3)
- Tightly connected to change management:
 - "benefits arise only from changes made by individual users or groups of users, and these changes must be identified and managed successfully" (Peppard et al. 2007, p.3)

Different approaches



- Several researchers have proposed different project evaluation processes: (Yates et al. 2009)
 - Active Benefits Management (Leyton, 1995)
 - The Cranfield process model of Benefits Management (Ward et al., 1996)
 - The Benefits Realisation Approach (BRA) (Thorp, 1998)
 - Active Benefit Realisation (ABR) (Remenyi and Sherwood-Smith, 1998)
 - Towards best practice to Benefits Management (Ashurst and Doherty, 2003)
 - Managing Successful programmes (MSP) (OGC 2007)
 - The Gatewaytm Process
 - Benefits Management in the Handbook of Programme Management (Reiss et al., 2006)

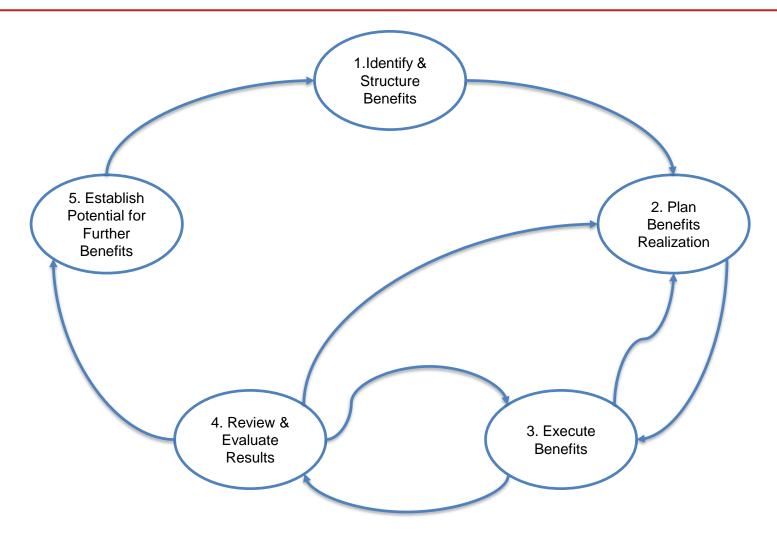
The Cranfield University model for IS/IT Benefits Management



- Initially presented by (Ward et al. 1996), later further developed by (Peppard et al. 2007)
- Based on 5 principles:
 - IT Has No Inherent Value
 - 2. Benefits Arise When IT Enables People to Do Things Differently
 - Only Business Managers and Users Can Release Business Benefits
 - All IT Projects Have Outcomes, But Not All Outcomes Are Benefits
 - 5. Benefits Must Be Actively Managed to Be Obtained

The Cranfield BM process model

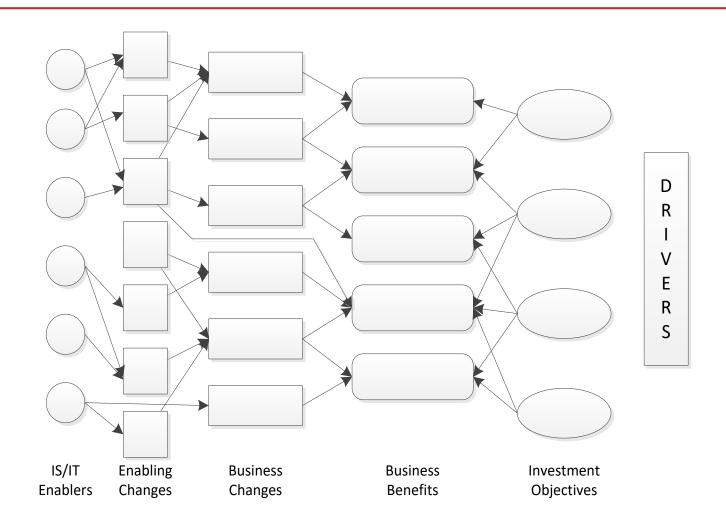




Source: (Ward & Daniel, 2012)

Benefits Dependency Network





Source: (Ward & Daniel, 2012)

Actual usage of a Benefits Management formal process



- There are several technics to choose from
- Every year, millions of dollars are spent in training and consulting
- There is little evidence that organizations are going from academic knowledge to real practiss

The problema is not "knowing how to", it is "doing"

Actual usage of a Benefits Management formal process



- Two different independent studies:
 - 500 biggest Australian companies

(Lin & Pervan, 2003)

427 organizations in 3 European coutries
Sweden, Norway, Finland

(Hallikainen et al., 2006)

- In both studies:
 - Only one third of the projects follow any formal benefits management process

Some reasons pointed out:

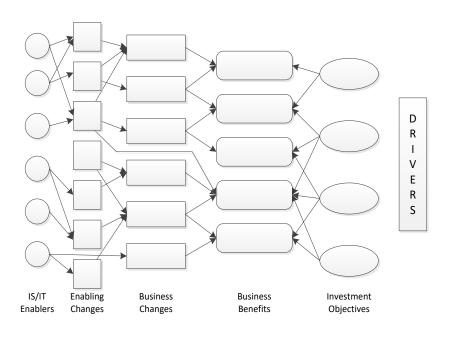


- It is difficult to assess benefits after a project has been implemented.
- It is not necessary as the project was implemented according to plan.
- It is too costly to undertake the proper postimplementation reviews on benefits.
- Many organizations tend to give very little attention to the intangible benefits when decisions are made
- Many organizations have poor IS/IT adoption practices
- It is against many organizations' culture to act as both the watchdog and implementer for benefits delivery

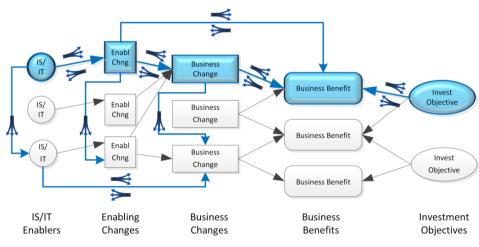
(Lin & Pervan, 2003, p. 14)

The BDN sw tool





Benefits Dependency Network

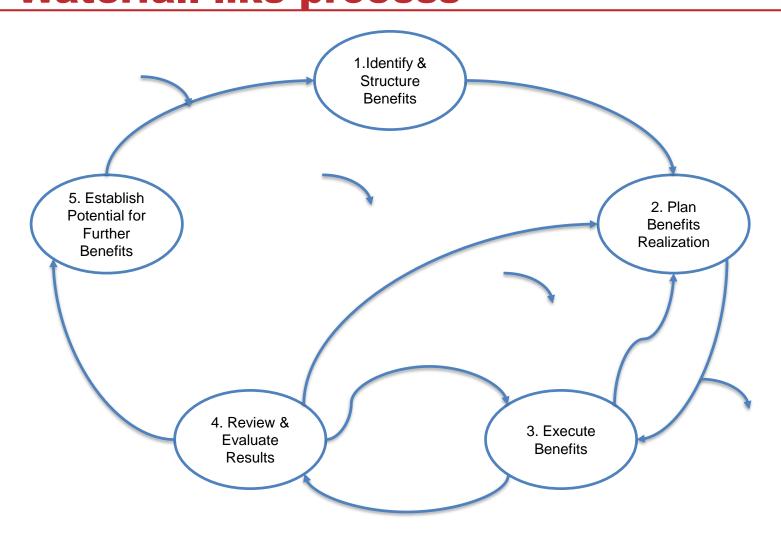


Stakeholders Benefit Types

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The Cranfield BM process model – Waterfall-like process





Source: (Ward & Daniel, 2012)

Known problems with the Waterfall model



- Designed based on the industrial process
- Very inflexible model
- Everything is planned before starting
- The whole system has to be known in advance
- Barely reflects the real IS/IT world

The "Relay Race" approach



 The... 'relay race' approach to product development...may conflict with the goals of maximum speed and flexibility. Instead a holistic or 'rugby' approach - where a team tries to go the distance as a unit, passing the ball back and forth – may better serve today's competitive requirements(*)

Agile Framework



Agile is an iterative and incremental (evolutionary) approach to software development

which is performed in a highly collaborative manner

by self-organizing teams

with "just enough" ceremony

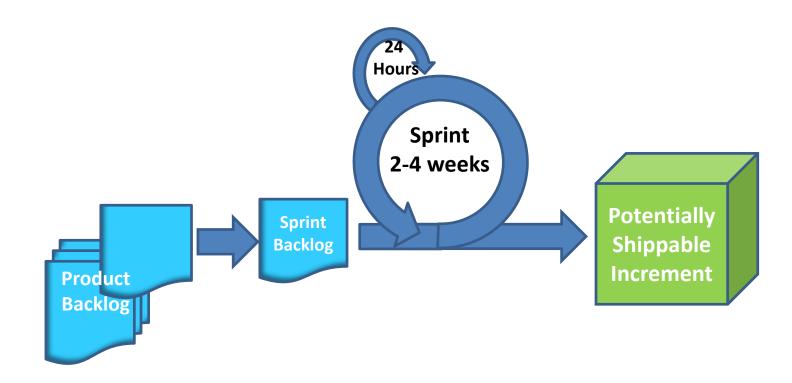
that produces high quality software

in a cost effective and timely manner

which meets the changing needs of its stakeholders

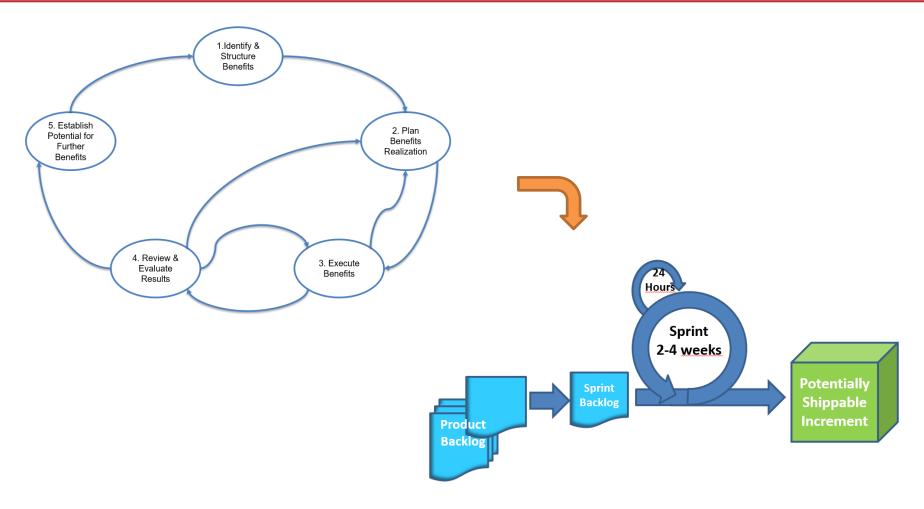
The Agile Process





The Challenge





In conclusion



- 1. The problem with realizing benefits in IS/IT implementation is real
- Several solutions have been proposed to solve or attenuate this problem, in some situations actually tested
- There is little evidence of actual use of formal benefits management processes in IS/IT implementation

Next Steps in this research project



 Get a deeper knowledge about the reasons for the low rate of usage of formal benefits management processes and test the applicability of the agile framework applied to this process

(Focus Groups)

 Enhance the (already created) tool to support the usage of the Cranfield Model for Benefits Management, using the insights obtained in the Focus Group meetings

(Design Science Research in Information Systems)

 Test the use of the tool and the agile framework approach in two real cases

(Design Science Research in Information Systems)



Thank You

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