TDT4900

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Contents

1	Introduction					
	1.1 Research Questions		1			
Ι	Literature		2			
2	Electronic Health		3			
	2.1 In General		3			
	2.2 Updated Information		3			
	2.3 Time and space barriers		3			
	2.4 What is the demand?		3			
	2.5 The technology is there, why is it not used?		3			
	2.6 How can ICT's help us in the health sector?		3			
	2.7 Doctor and health personell interviews		3			
	2.8 Mobile		3			
3	Information and Communication Technologies for Deve	lop-				
	ing Countries	1	4			
	3.1 In General		4			
	3.2 Updated Information		5			
	3.3 The design and actuality gap		5			
	3.4 Success or Failure		5			
	3.5 Success stories		6			
	3.5.1 short examples		6			
	3.6 Failure stories		6			
	3.6.1 short examples		6			
	3.7 Evidence base		6			
	3.8 Digital Divide		7			
	3.9 The illusion of a computer being something else than a calcul	ator	7			
	3.10 Implicit and explicit components of Design		7			

4.2 Updated Information 4.3 Changing Processes 4.4 Facilitate the transition 4.5 Over complicating 5 Testing 5.1 In General 5.2 Updated Information 5.3 Defining success and failure 5.3.1 Categories 6 Use 6.1 In General 6.2 Updated Information II Empirical 7 Case 7.1 Stakeholders 8 Method 8.1 Action Research 8.2 Data Generation 8.2.1 Interview	,	Imp	lementation					
4.3 Changing Processes 4.4 Facilitate the transition 4.5 Over complicating 5 Testing 5.1 In General 5.2 Updated Information 5.3 Defining success and failure 5.3.1 Categories 6 Use 6.1 In General 6.2 Updated Information II Empirical 7 Case 7.1 Stakeholders 8 Method 8.1 Action Research 8.2 Data Generation 8.2.1 Interview	2	4.1	In General					
4.4 Facilitate the transition 4.5 Over complicating 5 Testing 5.1 In General 5.2 Updated Information 5.3 Defining success and failure 5.3.1 Categories 6 Use 6.1 In General 6.2 Updated Information II Empirical 7 Case 7.1 Stakeholders 8 Method 8.1 Action Research 8.2 Data Generation 8.2.1 Interview			Updated Information					
4.5 Over complicating		_	Changing Processes					
 5 Testing 5.1 In General 5.2 Updated Information 5.3 Defining success and failure								
5.1 In General	4	4.5	Over complicating					
5.2 Updated Information 5.3 Defining success and failure 5.3.1 Categories 6 Use 6.1 In General 6.2 Updated Information II Empirical 7 Case 7.1 Stakeholders 8 Method 8.1 Action Research 8.2 Data Generation 8.2.1 Interview	, '	Test	ing					
5.3 Defining success and failure	!	5.1	In General					
5.3.1 Categories 6 Use 6.1 In General	,	5.2	Updated Information					
 6 Use 6.1 In General 6.2 Updated Information II Empirical 7 Case 7.1 Stakeholders 8 Method 8.1 Action Research 8.2 Data Generation 8.2.1 Interview 	!	5.3	Defining success and failure					
6.1 In General			5.3.1 Categories					
6.2 Updated Information	, 1	Use						
II Empirical 7 Case 7.1 Stakeholders	(6.1	In General					
7 Case 7.1 Stakeholders	(6.2	Updated Information					
8 Method 8.1 Action Research 8.2 Data Generation 8.2.1 Interview	' (Case	9					
8.1 Action Research	,	7.1	Stakeholders					
8.2 Data Generation	;]	Method						
8.2.1 Interview		8.1	Action Research					
	ć	2 2	Data Generation					
8.2.2 Observation		5.4						
		0.2						
III Discussion		0.2						
IV Conclusion		~· -	8.2.2 Observation					
	II	Ι	8.2.2 Observation					
A Journal		I	8.2.2 Observation					

List of Figures

3.1	If it works for us it will work for you!	5
3.2	IS projects in Industrialized Countries. Year: 1995-2000 [2]	6
8.1	Overview of the research process	15
8.2	Overview of Method	16

List of Tables



Introduction

1.1 Research Questions

Suggestions

- 1. Hva karakteriserer hinderet mellom sykepersonell og IKT verktøy?
- 2. Hva gjør det vanskelig for en bruker å ta ibruk IKT som verktøy?
- 3. Hva er grunnen til at en bruker, i ett land med begrensede ressurser, ikke får utnyttet IKT verktøy maksimalt?
- 4. Hvilke hinder er det som står imellom bruker og IKT som verktøy i et land med begrensede ressurser og i en helsesetting?
- 5. Hva karakteriserer utfordringen, "å ta ibruk IKT-verktøy" i helse-sektoren i et land med begrensede ressurser (min favoritt)?

Part I Literature

Electronic Health

- 2.1 In General
- 2.2 Updated Information
- 2.3 Time and space barriers
- 2.4 What is the demand?
- 2.5 The technology is there, why is it not used?
- 2.6 How can ICT's help us in the health sector?
- 2.7 Doctor and health personell interviews
- 2.8 Mobile

Information and Communication Technologies for Developing Countries

3.1 In General

No correlation with productivity [2]

Lack of literature in general: Until very recently, the entire literature on IS and developing countries would struggle to ll a single bookshelf. The attention of writers—from researchers to consultants to journal-ists—has been focused elsewhere.[2]

Lack of evaluation: Those who have the will to evaluate—such as academics—often lack the resources and capacity. Those who have the resources—such as aid donor agencies—often lack the will to evaluate.[2]

Focus on case studies: The literature on IS in DCs has grown, but it is a literature dominated by case studies of individua l IS projects. Taken alone, these provide no basis for estimation of overall failure/success rates.[2]

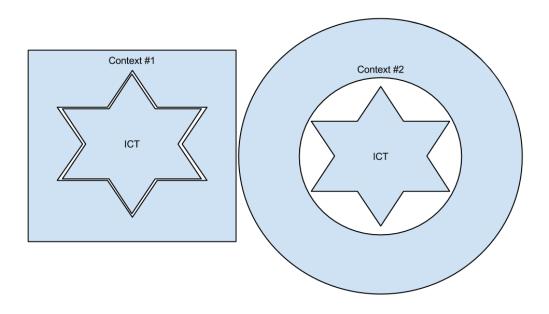


Figure 3.1: If it works for us it will work for you!

3.2 Updated Information

3.3 The design and actuality gap

3.4 Success or Failure

Find the common thread in both.

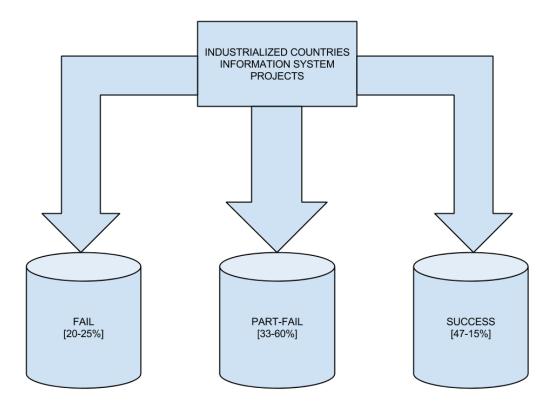


Figure 3.2: IS projects in Industrialized Countries. Year: 1995-2000 [2]

3.5 Success stories

- 3.5.1 short examples
- 3.6 Failure stories
- 3.6.1 short examples

3.7 Evidence base

Health information systems in South Africa: Braa and Hedberg (2002) reported widespread partial failure of high cost systems with little use of data.[2]

IS in the Thai public sector: Kitiyadisai (2000) reported "failure cases seem to be the norm in Thailand at all governmental levels." [2]

Donor-funded IT projects in China: Baark and Heeks (1999) reported that all were found to be partial failures.[2]

World Bank-funded IT projects in Africa: Moussa and Schware (1992) reported almost all as partial—often sustainability—failures.[2]

3.8 Digital Divide

3.9 The illusion of a computer being something else than a calculator

3.10 Implicit and explicit components of Design

The explicit components of a computer application is the physical components the user would need in order to use the application. Examples include cost, computer hardware, operating system, monitor and such. The implicit ones are a little harder to quantify. These include knowledge, expectations and skill. When addressing the implicit, how would one go about evaluating if the user is qualified to use the application as intended and ensure that it is used for the proper intentions?

Implementation

- 4.1 In General
- 4.2 Updated Information

4.3 Changing Processes

With information technology comes the great advantage of cutting processes to more effective ones. In Michael Hammers article [1] he discusses how information technology can change how people execute their work. The idea is that computers should not automate existing processes, but rather make room for new and more effective ones to rise. Hammer's ideas are of some age, but it still highly relevant. **Some examples here**. Information passed by paper has the disadvantage of being bound by geography making an organization or system slower due to delivery. Information technology can bring an organization together and simulate being on the same place, but still being spread out. This allows for old work processes to be replaced by new ones making the turn-around for each task possibly much faster.

In big organizations the process of swap out old processes can be of very high risk. Change in work processes takes the personnel out of their comfort zones and they have to readjust to the new environment. The new way of doing things may in a short term perspective seem unproductive.

This calls for leadership with strong vision and determination in order to implement the new processes and reap of the benefits.

4.4 Facilitate the transition

4.5 Over complicating

Testing

- 5.1 In General
- 5.2 Updated Information
- 5.3 Defining success and failure

5.3.1 Categories

As mentioned by Richard Heeks [2], there are some ways of categorizing success and failure of information systems that I will use.

Total Failure These system is either not implemented at all or implemented and abandoned shortly after.

Partial Failure • Significant undesirable outcomes.

- Major objectives unattained.
- Sustainability failure.
- Subjective goals unattained.

Success Obtains objectives and no significant undesirable outcomes.

\mathbf{Use}

- 6.1 In General
- 6.2 Updated Information

Part II Empirical

Case

7.1 Stakeholders

Method

- 8.1 Action Research
- 8.2 Data Generation
- 8.2.1 Interview
 - 1. User objective
 - 2. User desired outcome
- 8.2.2 Observation

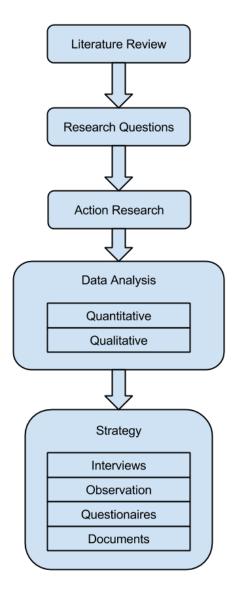


Figure 8.1: Overview of the research process

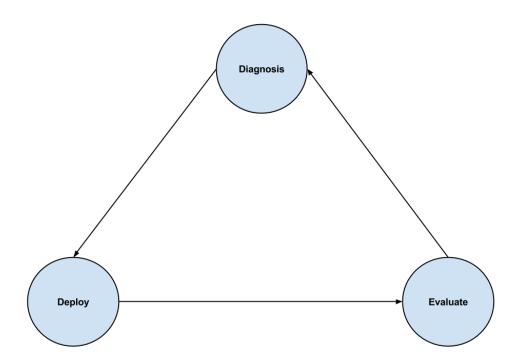


Figure 8.2: Overview of Method

Part III Discussion

Part IV Conclusion

Appendix A

Journal

A.1 Day 14

10.02.2014 Mange dager er brukt på andre ting. Jobb på Peppes tar en del tid. Mamma var på besøk i helgen. Så det er på tide med fokus. Jeg trenger 8 timer daglig fremover satt av til skolen om jeg skal klare dette. 8 timer og det er det jeg har. Er desverre ikke flere timer i døgnet. Det må faktisk bli 7 timer. Har behov for 8 timer søvn og det er som regel 8 timer på jobb. Det gir meg 24 - 8 - 8 - 7 = 1timer søvn.

Klokka fungerer fint som autoritær. Bare hør på den så vil jeg bruke tid på det jeg skal.

Reisen må bestilles og jo tidligere desto bedre.

Fått gjort litt på forsknings spørsmål i dag, håper det går veien med Eric.

Fått gjort en del i dag. Tar en ny runde imorgen. Opp og stå!

Bibliography

- [1] Michael Hammer. Reengineering work: Don't automate, obliterate. *Harvard Business Review*, 1990.
- [2] Richard Heeks. Information systems and developing countries: Failure, success, and local improvisations. *The information society*, 2000.