

IS-500 1 IT og ledelse

Kandidat 5649

Oppgaver	Oppgavetype	Vurdering	Status
i IS-500, forside	Dokument	Ikke vurdert	Leveret
1 IS-500, opplasting	Filopplasting	Manuell poengsum	Leveret

IS-500 1 IT og ledelse

Emnekode	IS-500	PDF opprettet	13.09.2017 12:35
Vurderingsform	IS-500	Opprettet av	Emma Hansen
Starttidspunkt:	01.12.2016 10:00	Antall sider	14
Sluttidspunkt:	02.12.2016 17:00	Oppgaver inkludert	Ja
Sensurfrist	201612230000	Skriv ut automatisk rettede	Ja



IS-500, forside

Course code: IS-500

Course name: IT and Management

Start: December 1st 09.00 am

Deadline: December 2nd 04.00 pm

Information regarding home-examinations:

<http://www.uia.no/en/student/examinations/assignments-home-examinations>

Exam text:

[Home exam IS-500 Fall 2016](#)

IS-500, opplasting

Upload your file, make sure you find the right one

The file has to be a PDF-file!

After uploading your file, you click forward to the next page.

Upload your document here, one PDF-file only

BESVARELSE

Filopplasting

Filnavn	9015800_cand-2442686_9797236
Filtype	pdf
Filstørrelse	485.676 KB
Opplastingstid	01.12.2016 23:55:19



Neste side

Besvarelse vedlagt

Kandidatnummer: 5649 <small>(Hvis besvarelsen skal leveres på navn, skrives navn i stedet for kand.nr.)</small>

FORSIDE

ved besvarelse av hjemmeeksamen, semesteroppgave, rapport, essay m.m.

Emnekode:	IS-500
Emnenavn:	IT og ledelse
Emneansvarlig (normalt faglærer):	Maung Kyaw Sein
Eventuell veileder:	
Innleveringsfrist/ tidspunkt:	02.12.2016 / 16:00
Antall ark inkl. denne forside:	10
Merknader/Tittel på bacheloroppgave:	This is my own work, and I have not consulted any other person.

Jeg/vi bekrefter at jeg/vi ikke siterer eller på annen måte bruker andres arbeider uten at dette er oppgitt, og at alle referanser er oppgitt i litteraturlisten.	Ja <input checked="" type="checkbox"/>	Nei <input type="checkbox"/>
---	--	------------------------------

Kopiering av andres tekster eller annen bruk av andres arbeider uten kildehenvisning, kan bli betraktet som fusk.

Kan besvarelsen brukes til undervisningsformål?	Ja <input checked="" type="checkbox"/>	Nei <input type="checkbox"/>
---	--	------------------------------

Gjelder kun gruppeeksamen:		
Vi bekrefter at alle i gruppa har bidratt til besvarelsen	Ja <input type="checkbox"/>	Nei <input type="checkbox"/>

Written at-home exam, 01.12.2016 – 02.12.2016

Holding Hands Case

1: Working out an appropriate architecture and infrastructure is certainly not an exact science, and it's not necessarily a question with just one right answer. We need to make a series of choices and make the best of the limited amount of information, time and resources we have at our disposal. It's also worth pointing out that architecture and infrastructure are not projects that can be viewed to have a definite end-date, ideally there should be continual work being done reviewing, evaluating and improving upon them. Considering that the Head of HH has already read and understands the lingo of the article by Kettinger et. al. (2010) this is a good place to start, especially since it helps to establish top-management support which is an important factor in any large change project. The article describes four different models for approaching globalizing operations:

- The Multinational Approach – Maximize flexibility, at the cost of standardization.
- The International Approach – Introduce some standardization while keeping some flexibility in the regional infrastructure.
- The Transnational Approach – More standardization, particularly with the systems used, but there's a higher focus on exploiting the lessons learned by each regional unit.
- The Global Approach – Maximize standardization, at the cost of flexibility.

I would argue that the current approach HH is using is the multinational approach, judging from the following description in the case text: *"The projects in other parts of the world are currently running their own systems with little or no control from headquarters."* This appears to be not so much a choice of approach or architecture, but rather what has come to grow out of a lack of set direction by HH. This likely has been the correct choice (whether accidental or otherwise) while the organization was young and relatively small, but as it's grown larger a more focused direction appears to be needed. Thus, I'll exclude the multinational approach from further discussion. Next I'll exclude the global approach, as maximizing standardization at the cost of flexibility does not mix well with the diverse and emergent needs of the different units in HH. Particularly the units dealing with disasters (the ad-hoc response teams) would be ill-fitted to this approach, but I'd argue even the more permanent units require a fair degree of local flexibility. The question then becomes which to choose between the two more nuanced approaches; international or transnational.

Looking more closely at the international approach, Kettinger et. al. (2010, p.102) describes its goal: *"The enterprise IT architecture for the International approach attempts to leverage parent-company IT infrastructure resources to gain costs efficiencies within local BUs (business units) while still fostering sense-and-respond capabilities at the local level."* In contrast, the transnational approach leaves a higher degree of control in the hands of a centralized IT-decision making function, especially with regards to infrastructure. Kettinger et. al. (2010, p. 102) goes on: *"However, organizations adopting this (transnational) approach seek to share responsibilities for ESs with regions and local countries."* This shared responsibility means that decision making with regards to use and localization of systems

require a dialogue between local managers and global managers and that “*ES decisions are handled through a managed consensus.*” (Kettinger et. al. p. 102). It’s this focus on having an open debate about systems experiences, needs and usage that I find to be both a major challenge, but also a great selling point. HH needs the ability operate in a variety of culturally and developmentally diverse environments. Because of this, having an underlying architecture that not only encourages debate and discussion but in fact demands it could be a great boon to the organization. There is of course a point to be made that HH is a non-profit charitable organization and not a for-profit business. This doesn’t mean that effectiveness and efficiency isn’t still important however, and HH should strive to put their limited resources to the greatest use possible. Based on this, my recommendation is to start creating an architecture based on the transnational approach, see figure 1 for a visualization of the approach. One weakness with this approach, is the danger of IT falling behind, or not being agile enough to keep up with the changing needs of the local units (Kettinger et. al., p.108). Agility and freedom is therefore a challenge that needs to be emphasized, especially when it comes to the response teams.

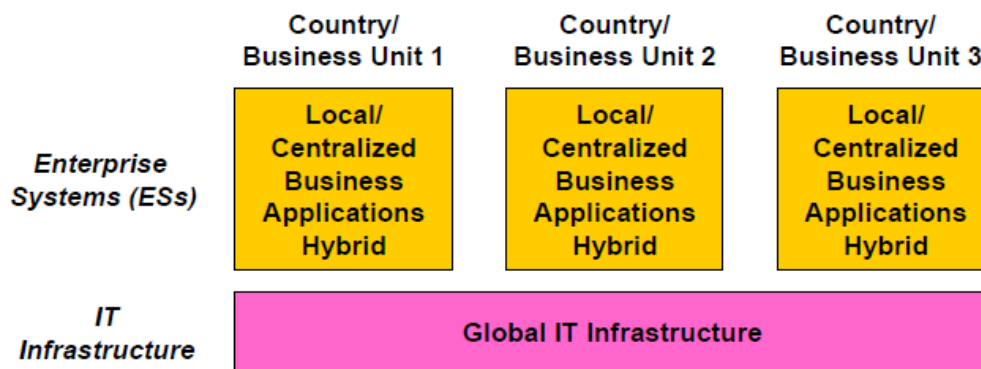


Figure 1 – The Transnational Approach from Kettinger et. al. (2010, p. 103).

Having chosen the transnational approach, this now helps to inform us on how to proceed regarding the structure of HHs IT-governance. Weill (2004) describes several different IT-governance archetypes.

- **Business monarchy:** Leaves decisions mainly in the hands of top-level management.
- **IT monarchy:** Leaves decisions mainly in the hands of IT-professionals.
- **Feudal:** Decisions are mainly made by leaders of regional units.
- **Federal:** Decision-making involves both a centralized function and a local unit; at least two levels of the organizational hierarchy must be involved.
- **IT-duopoly:** Decisions are made by two groups, one representing business and another representing IT.
- **Anarchy:** Decisions are made on a highly granular level, with individuals or small groups making decisions for themselves.

To get a better overview over these archetypes, see figure 2.

Decision rights or inputs rights for a particular IT decision are held by:		CxO Level Execs	Corp. IT and/or Business Unit IT	Business Unit Leaders or Process Owners
Business Monarchy	A group of, or individual, business executives (i.e., CxOs). Includes committees comprised of senior business executives (may include CIO). Excludes IT executives acting independently.	✓		
IT Monarchy	Individuals or groups of IT executives.		✓	
Feudal	Business unit leaders, key process owners or their delegates.			✓
Federal	C level executives and at least one other business group (e.g., CxO and BU leaders)—IT executives may be an additional participant. Equivalent to a country and its states working together.	✓	✓	✓
		✓		✓
IT Duopoly	IT executives and one other group (e.g., CxO or BU leaders).	✓	✓	
			✓	✓
Anarchy	Each individual user			

Figure 2 – IT Governance Archetypes from Weill (2004, p.5).

If we consider the present-day state of HH, I would argue that IT-governance is applied in a feudal form where local leaders make most of the IT decisions relevant to them. Moving to the transnational approach, the governance form would also need to shift. I suggest aiming for a federal governance approach as that fits the requirements for multi-level debate and dialogue that the transnational approach requires.

I will briefly consider a few success factors presented by Kettinger et. al. (2010) in the context of this case.

Articulate the vision and the need for change. Simply showing the leaders of different regional units the reduced costs of a more standardized structure might not inspire a lot of support, and may instead lead to some resistance. It might be better to emphasize the greater focus on internal dialogue in the organization and wanting to learn from and incorporate the lessons learned by each local unit. Instead the reduced costs may be mentioned as a secondary point.

Scoping the transition. Don't bite over more than you can chew. Don't attempt a full architectural overhaul overnight, instead do a gradual implementation where possible, and keep an eye towards "quick wins" to garner further support.

1a: Integrating “events” into the architecture of the organization as presented in the case study of USAA by Mocker et. al. (2015) is an interesting concept. Having established a recommendation for a transnational approach, where speed and agility may be a weakness, this event structure may help to offset this weakness. This comes into play with the response-teams. Instead of different life events, we will consider the different types of disasters HH may have to respond to. Standard protocols and procedure for different types of disaster may be worked out beforehand to help support decision-making. To make it quicker and easier to deploy response-teams, I suggest creating a new department at the central headquarters. This new department can be called the Response Center (RC). Operators in the RC would be equipped to pull needed resources internally from other parts of the headquarters (HQ) and horizontally from other departments. The RC would act as a SPOC (Single Point of Contact) for response team leaders. To help illustrate this, I drew up a model of the initial conceived structure, see figure 3.

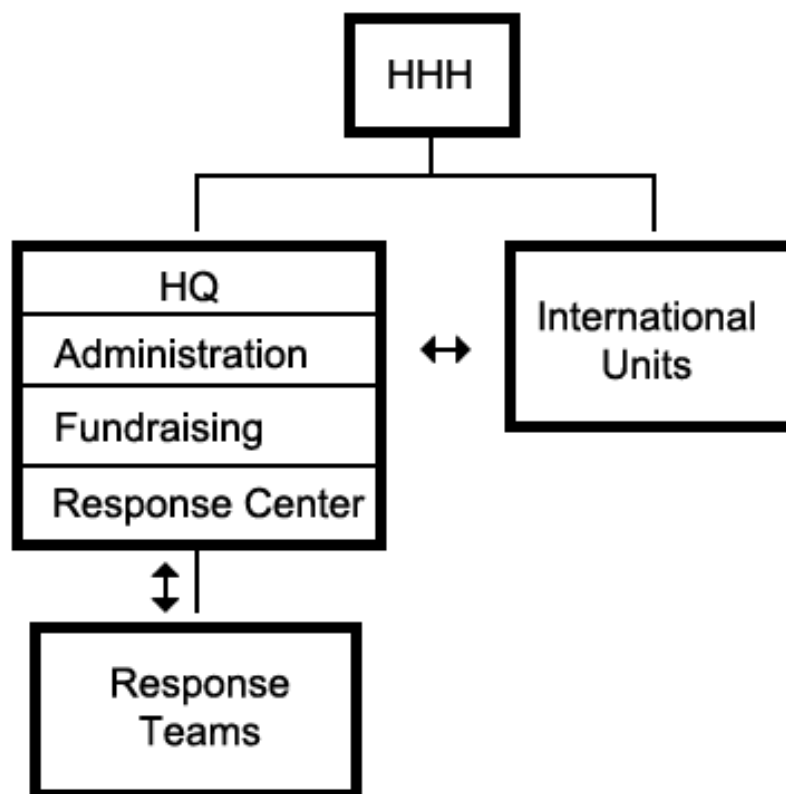


Figure 3 – How the Response Center fits into HHs structure. Based on model from Mocker et. al. (2015, p. 143).

1b: When choosing which systems should be common throughout the whole of the organization, our choice of transnational architectural approach and federal governance model may come to be quite helpful. Looking at a system and deciding whether or not it would be useful for a specific location should involve both the central management as well as management from the location in question. While this may be a time-consuming process, it will help to paint a picture for the central management concerning which of the systems are fitting for most or all the different units. Beyond that, there are some specific systems and functions worth mentioning. Financials, like salary payment, is a strong candidate for implementation through a common system. Several companies offer systems that can handle this across national borders. Having a common system for managing employee information (both current employees and possible future hires) would also be quite beneficial. With the work HH is doing the organization is likely to attract “adventurous” individuals not averse to moving across borders. Having access to all the global talent-pool is therefore helpful, especially considering possible emergent needs within response teams.

2: When looking at a strategy for transitioning the Nepal project from a temporary response project to a permanent project, it may be helpful to first consider the term “strategy”. It is not uncommon to view strategy as a plan, devised and detailed beforehand, to be implemented at a later point. An article by Mintzberg & McHugh (1985) attempts to widen the term “strategy” by looking at how strategies can be formed in project organizations (or “ad-hocracies”). Such organizations are defined with the following (paraphrased) attributes by Mintzberg & McHugh (1985, p.160-161):

1. Dynamic and complex environment.
2. Unique outputs.
3. Experts deployed in temporary teams.
4. Mutual adjustment as main coordinating mechanism.
5. The organization is decentralized "selectively": power over different decisions is diffused in uneven ways, subject to the issue at hand.

These attributes fit the demands of the Nepal project quite well, with the only main exception being the third point. These experts are not to be deployed in temporary teams (any longer), this is now to be a more permanent operation. Even though there is slight deviation from the definition in the article, I still argue that it is a close enough fit that the insights Mintzberg & McHugh offer are valuable for the situation. In the article, the authors consider strategy formation in the National Film Board of Canada (NFB). This is as they describe, “A government agency with a quasi-market function.” (Mintzberg & McHugh, 1985, p.193). HH, much like NFB, is somewhat less constrained by the business pressures of a purely for-profit company. From the case of NFB the authors developed a strategy-making model they coined “grass-roots” (Mintzberg & McHugh, 1985, p.194-196).

In short, this model explains how strategies might grow from the bottom-up, and how certain strategies may spread throughout the (project) organization. During periods of more freedom and less control, more strategies will tend to emerge. This is “the time to sow”.

The managing of such strategy formation involves judging which strategies are helpful and promoting those, while stifling those judged to be less helpful (or even harmful). This is “the time to reap”.

The article concludes by stating that no organizational strategy should be purely plan-driven, nor should it be purely emergence-based. The former would leave one unwilling to learn and adapt, while the latter would amount to chaos. A combination of the two is preferred. Figure 4 demonstrates the relationship between these two strategy formation types.

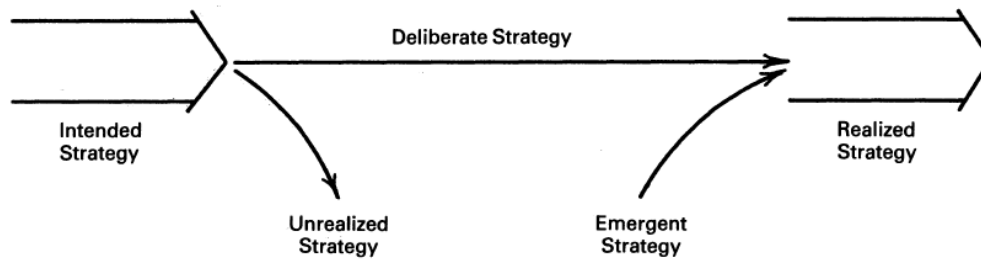


Figure 4 – Basic forms of strategy, from Mintzberg & McHugh (1985, p.162).

Bringing this back to the Nepal project, I would first suggest to keep as many members of the original response team as feasible when transitioning to a permanent unit. The reason for this is the value of the contextual knowledge these members have. Using these original employees as a base, they would be able to swiftly train the new employees. Secondly, I would take this time of relative chaos and use this as “a time to sow”. Team-members should know that they are able to improvise and come up with solutions to the no doubt unique problems they might face. I would suggest to bring in more formal control and governance procedures later, when the proverbial dust has started to settle, and treat that as “the time to reap”. At that stage, the Nepal unit would have to conform to the transnational, federal structure as the rest of the organization.

2a: In my estimation, the biggest challenge regarding IT infrastructure in the Nepal project is the baseline; having the necessary and stable base of computers and internet connectivity. This is because of the fairly remote nature of the location, not to mention the recent earthquakes. Getting this baseline up and running is critical to be able to give the unit access to any common systems, as well as giving any local systems full functionality through internet access. Therefore, recruiting skilled and motivated IT-personnel with a high degree of hardware and network competencies will be important. Let us then consider the recruitment strategy to get the necessary people. An article by Weitzel et. al. (2009) provides us with a framework for recruiting IT-talent in different situations, see figure 6.

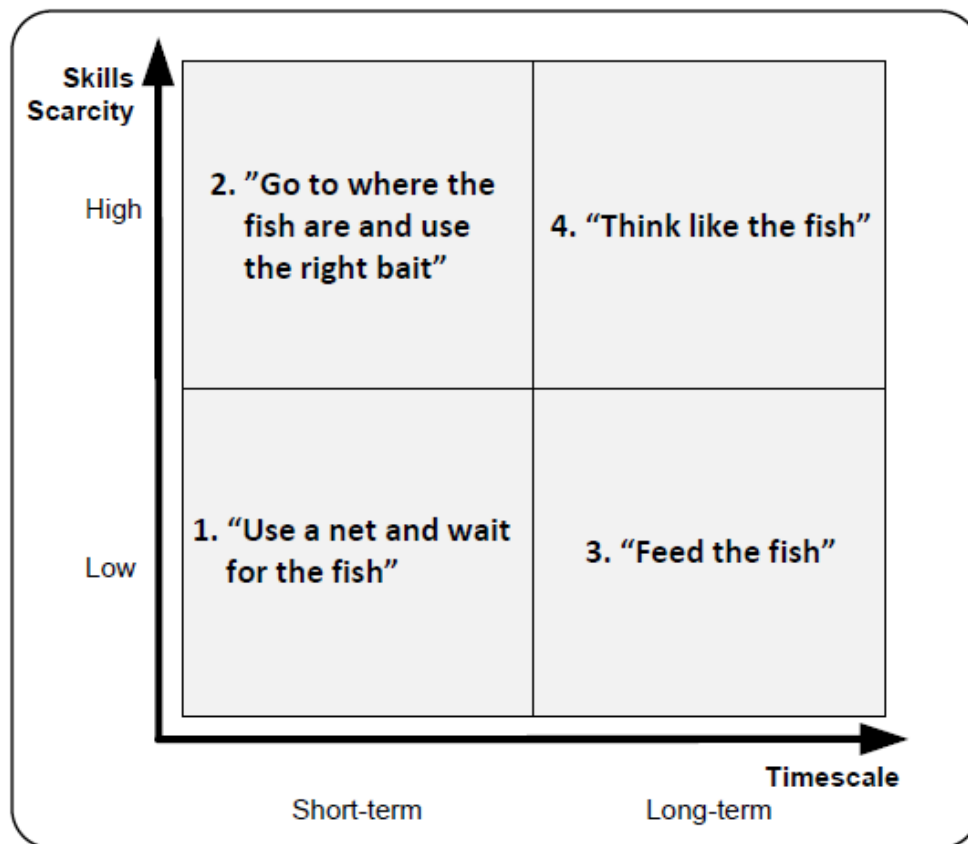


Figure 5 – Framework for IT Recruitment from Weitzel et. al. (2009, p.177).

We need people relatively quickly, and we need highly skilled (and likely scarce) people. This leaves us in the second quadrant of the model. In this quadrant, the strategy needs to include going out and actively seeking out people, rather than just posting job openings and waiting for responses. Being successful at recruiting in this quadrant requires knowledge and understanding about the target groups behavior, preferences and communication channels (Weitzel et. al., 2009). I suggest starting internally in HH, looking for people already familiar with the organization and with the necessary skills. Another fishing hole is the partner organization Helping Hands (HeHa); while people from HeHa would have to relocate we

already know they are interested in this line of work. Finally, the local and surrounding area in Nepal should be used as recruiting grounds, and a recruiter would need to research IT-communities in the area. Even though this is a short-term strategy for a short-term need, the long-term strategy should not be ignored either. Keeping a database of potential candidates is a good strategy for helping recruitment needs in the future. Always keep a good CV on file!

3: “Bring Your Own Device” (BYOD) is quite relevant for HH, particularly in the different international units (both permanent and response units). In permanent units in the developing countries, it seems particularly wasteful to disallow BYOD in a context that might otherwise be light on resources. In the response teams a high degree of improvisation, “ad-hocracy” is to be expected, and BYOD supports that very well. As Thomson (2012) puts it, “enabling the chaos”. Let’s consider security challenges in light of BYOD.

Technical controls are increasingly less effective in an environment with unpredictability of devices. How do you safeguard something when you don’t know what it is? The challenges are plentiful; lack of standardization, constant updates and a steady stream of backdoors for potential cybercriminals to abuse. The answer is not to foolproof every possible device and solution, but rather consider which data is sensitive and restrict access to it. An example could be allowing remote access to sensitive data through a login, but not allowing local saving or caching.

Formal controls, the security rules and protocols can potentially be quite effective in a BYOD environment, since desirable behavior is easier to codify compared to the technical unpredictability. What sort of data is permissible to save on your device? What’s the routine if a device is lost or stolen? Who’s responsible in the event of a data leak or security breach? A challenge here is being able to communicate the formal controls to all employees, and have them be followed.

Informal controls (culture and security awareness) are arguably the most important, and most cost-effective. The multinational and multicultural nature of HH makes it challenging to promote a unified security culture, and units in certain countries may require extra focus and training so that the importance of good security habits is fully understood. Employees in some developing countries may for instance have less experience with the technology in question. Additionally there are language barriers and making sure the message is interpreted as intended.

References

Kettinger, W. J., Marchand, D. A., & Davis, J. M. (2010). Designing Enterprise IT Architectures to Optimize Flexibility and Standardization in Global Business. *MIS Quarterly Executive*, 9(2).

Mintzberg, H., & McHugh, A. (1985). Strategy formation in an adhocracy. *Administrative science quarterly*, 160-197.

Mocker, M., Ross, J. W., & Hopkins, C. (2015). How USAA architected its business for life event integration. *MIS Quarterly Executive*, 14(4), 137-150.

Thomson, G. (2012). BYOD: enabling the chaos. *Network Security*, 2012(2), 5-8.

Weill, P. (2004). Don't just lead, govern: How top-performing firms govern IT. *MIS Quarterly Executive*, 3(1), 1-17.

Weitzel, T., Eckhardt, A., & Laumer, S. (2009). A Framework for Recruiting IT Talent: Lessons from Siemens. *MIS Quarterly Executive*, 8(4).

