

## IS 500 Fall 2016

### Written Take-home Exam (01.12.16 to 02.12.16)

Read the case on the next 3 pages and prepare a report (max 2500 words) to meet the assignment listed at the end. Read also the Appended Case. Hand-in your answers to **Inspira**. **The deadline for handing in is Friday, December 2<sup>nd</sup> at 16:00.**

Remember that it is open book and you can consult any source as long as it is not another human being. Do not discuss this with any other person in any form. Use the standard UiA front page for handing in assignments and on that page, include a declaration that this your own work and that you have not consulted any other person.

Draw on the readings, lecture notes and especially the discussions (both in-class and online). You should find these discussions (led by student groups) and guest lectures very helpful. Do not copy and paste: that will be plagiarism. Use your own words. If you quote any material directly, then be sure to provide the reference and the page number from where you are citing this quote. **Be sure to answer ALL the questions listed at the end of the case.** The simplest way to structure your report is to answer each question in order. If you use any other structure (e.g. a case narrative), include a list indicating where you have answered the listed questions.

Take some time to read the assignment and the questions posed. If you are unclear about the questions (or any aspect of the assignment), contact Maung, Calle or Devinder immediately through e-mail. Carefully plan your answer. Number the pages and use sub-headings to make your report readable. Spell check before you turn it in.

**You may answer in Norwegian if it is easier for you.**

Good luck!!

Lykke til!!

## **A”SIST”ing Holding Hands..**

Impressed by the excellent performance of their employees hired from graduates of the master’s program of a university in Southern Norway, and on their recommendation, you have been hired as a consultant by a consulting company. The company, Systems Integration Solutions in Total (SIST for short which was the basis for their famous advertisements where satisfied customers smile broadly at the camera and say ”Takk for SIST”!), follows IBM’s ”Systems Integrator” strategy and thus offer complete solutions on information systems to their clients. You have now been given your first assignment.

The client organization is called Holding Hands (HH). It is a foundation that operates charitable projects around the world, especially in developing countries, but also in in poor neighborhoods in developed countries. It is a medium-sized organization, which is headquartered in Kristiansand and has units in different countries, which run the charitable projects.

HH also works with a network of partners such as Helping Hands in Johnson County in the US state of Washington (Description attached) In fact, Helping Hands was the inspiration for HH and its activities are extended forms of the activities of Helping Hands. HH is organized into three different types of units, one local, one international, and the third could be either.

- The local unit is the headquarter in Kristiansand with 30 employees. It is responsible for administrating the entire global organization and for raising funds. It is broadly divided into two departments. Administration is responsible for administering and managing the entire global organization and for making strategies and plans. The other department is Fund Raising that raises funds from donors to cover HH’s expenses. These donors are both organizations (government agencies, business companies) and individuals. It also collects food, medicine, tents, clothes, clean water and other supplies needed to provide relief in disaster-hit areas (such as an earthquake, flood or storm)
- The international type consists of the more permanent projects located in several countries over 5 sites in the Middle East (in Syria, Palestine and Iraq), 3 sites in Asia (Myanmar and Thailand) and 4 in Africa (West Africa, East Africa, Southern Africa and the Horn of Africa). These run medical clinics and a total of 3 hospitals. They also provide education for

children growing up in refugee camps, and help refugees in establishing income-generating activities, such as small-scale businesses.

- The third type consists of ad-hoc response teams that respond to areas hit by natural disasters either in Norway or around the world. These responses often last several months after the disaster occurs. The most recent case is Nepal, which has been hit by a series of earthquakes.

Response teams are at times enhanced to permanent projects. An example is Nepal, where HH has a response team in Nepal now, which they are planning to enhance to a permanent project. This project will establish, a medical clinic, provide education to children and provide income-generating activities to people displaced by the earthquakes.

HH now stands at a crossroads. Its operations have expanded greatly and it needs to have IT support for its ever increasing and ever evolving activities. They contacted SIST who has assigned you to the project. In your first meeting with the head of HH (called HHH – pronounced Ho Ho Ho), you discovered that much of the enhanced activities are a direct result of the current refugee crisis.

Currently, HH's IT department is part of Administration and has four employees. Three of them are technicians running HH's local area network, which connects the PCs that all employees in Kristiansand have. HH has an ISP provider through whom it gets Internet access. These three technicians are also responsible for the operation of other ICT equipment such as printers and telephones and for providing help to users. HH does not have any special equipment for teleconferences. They use Skype. Fund transfer from Kristiansand and the international projects are done through bank transfer where possible. The fourth IT employee is also the CIO and is responsible for new IT projects, procuring new systems and equipment and IT strategy. The projects in other parts of the world are currently running their own systems with little or no control from headquarters. HH's technicians helped them set up their systems. The disaster response teams use whatever IT equipment they can get hold of. HH pays for all equipment.

**Your assignment is as follows. Answer ALL these questions:**

- Advice HH on how to develop an appropriate infrastructure and architecture. HHH is very impressed by an article he recently read (Kettinger et al. 2010 ) and wants you to decide one of the models in the article. Fortunately, you have read this article too. Do you agree with HH or follow an entirely different way with mixing the models?
  - Would a “life event approach” (see the USAA case) be appropriate to develop HH’s architecture? Why or why not?
  - To what extent would you recommend using common systems? (Refer to the session on Global issues). Discuss this in the light of the next two questions
- How would you go about developing an IT strategy for the Nepal project as it changes from a response team to a permanent project? Who would you involve in the process?
  - Suggest an infrastructure, and a recruiting strategy for IT personnel. Make your assumptions of what IT equipment the current response team has.
- What are the technical, formal and informal information security challenges for HH? Explain your answer using the "Bring Your Own Device" issue.

## Appendix:

### Helping Hands Decomposing business plan

#### Executive Summary

Helping Hand is a tax-exempt not-for-profit food bank that serves all of Johnson County, Washington. Helping Hand's goal is to alleviate hunger in Johnson County by soliciting, collecting, growing, and packaging food for distribution through a network of service

agencies and programs that serve our target population groups. Our services include food box programs, emergency food programs, and a youth farm that provides opportunities for self-sufficiency activities for "at risk" youth. Helping Hand receives support from the county, charitable organizations and corporate sponsorship.

Approximately 20% of Johnson County residents qualify for assistance from Helping Hand. Our client base is low-income people, mainly families, who need emergency help to put food on the table. Nearly half of those served by the program are children. Helping Hand operates a warehouse facility where we store donated or rescued

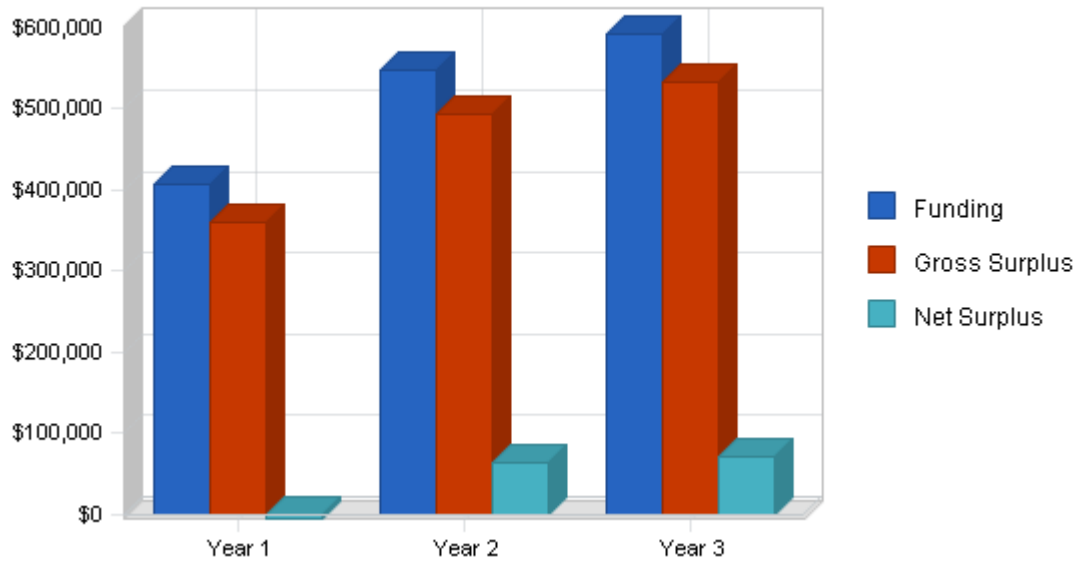


food for distribution. The program actively solicits food from local food growers, retailers, wholesalers, and processors. In addition, Helping Hand collect food donations from restaurants for immediate distribution to service programs.

It is estimated that the number of children who need services from Helping Hand will increase during the next five years. Johnson County is growing and a number of new families are entering the area to look for employment. A number of programs exist to help transition these new families into the county. Helping Hand is an important resource to these programs because we can respond quickly with the one of the most important resources these families need. Food!

Our services improves the ability of families to care for children and achieve goals of self-sufficiency. Helping Hand's services, now, are a small investment in comparison to cost of ignoring the problem of hunger in the county and the influence it has on a number of health and crime issues.

Highlights



## 1.1 Mission

The mission of Helping Hands is to alleviate hunger in Johnson County by soliciting, collecting, growing, and packaging food for distribution through a network of agencies and programs, as well as provide opportunities for self-sufficiency. Our services include food box programs, emergency shelters, congregate meal sites, residential treatment

services, and children's programs.

## 1.2 Objectives

This new initiative is designed to create a food bank that will serve all of Johnson County, Washington. Our objectives are:

- Establish donation network of local growers, retailers, wholesalers, and processors in Johnson County.
- Establish youth farm that will employ "at risk" youth.
- Collect over four million pounds of food the first year of operation. Increase collection amount by 20% each year.
- Effectively distribute the food to low-income families that make up over 20% of Johnson County.
- Acquire \$200,000 of start-up funding through corporate, private charities and government financial support.
- Raise an additional \$100,000 in fundraising activity.