

ICT256 Knowledge Management Techniques

2016

Assignment 2 – extra notes

Extra hints for doing the assignment ...

To Do:

Complete ALL of the questions below for the case study. Please use the question numbers (e.g. 1a, 2b, etc) in your answer.

Please do this. Don't leave them out, don't make up your own headings, don't write an essay. There are marks for each part of each question, and if I can't find your answer, you won't get the marks.

Preliminary investigation

1. Carry out the preliminary investigation of the organisation and yourself in relation to it, as follows:
 - a) Give an initial appraisal of the **organisation's** aims and preparedness for a knowledge audit. In your assessment, consider specifically whether it is:
 - mature
 - viable
 - holistic
 - self-aware,as discussed in Topic 6. Note that while you should consider the items in the checklist in carrying out your appraisal, you do not need to address each of the items in detail here.

Address each of the points mature, viable, holistic and self-aware (these are discussed further in Topic 6 and in the associated tutorial). As the question states, you can also consider the checklist items, but your main analysis of them will be in 2a so do not spend a lot of time on them here.

Do NOT start recommending solutions yet! At this point you have done only a very preliminary appraisal and haven't done the in-depth analysis, so you are in no position to recommend solutions.

- b) Give an assessment of **your own** preparedness in undertaking the knowledge audit for the organisation. In carrying out your assessment, make use of the issues of expertise, ontological structure, background knowledge, opinions and prejudices, and tacit components of knowledge, as discussed in Topic 6. What areas of knowledge do you need to research to bring yourself up to speed?

Question 1(b) is all about **YOU**. It is **not** about the organisation - **you should not be discussing the organisation's preparedness at all here**. Expertise, knowledge of relevant ontologies, background knowledge, opinions and prejudices, are all as they apply to **YOU**.

By 'ontological structure' we mean not just formal ontologies (such as knowing about scientific naming if investigating a Zoo project) but also the general terms and concepts used to describe the subject area of an organisation, and how they fit together. Or if you don't have any direct knowledge of the area, what about related areas? You probably know more than you think that could be of relevance to the investigation. This can mean having knowledge about a broader area (e.g. you know about personal computers in general rather than Macs in particular) or a sibling area that can help (e.g. you know about Linux computers rather than Mac computers).

You should address all of the issues mentioned in a realistic manner and end up with an appraisal of what you already know, don't know, areas of weakness you will have to address before you can go further with the assignment, prejudices/biases you will have to look out for (e.g. do you have a preference for technical solutions?) and so on.

- c) Give your assessment of whether it is worthwhile proceeding with the knowledge audit, and why, based on your findings above.

Explain **WHY** it's worthwhile proceeding. What, in particular, can the organisation hope to achieve from the audit?

Assuming it is worthwhile proceeding with the knowledge audit (hint: it is worthwhile!) continue to the next part of the assignment.

Knowledge Audit

2. Commence the knowledge audit by identifying the knowledge gaps and blockages in the organisation, as follows:
 - a) Consider each of the ten checklist issues listed, and assess from the case study whether the organisation addresses them *well* (needing no further attention), *adequately*, or whether there is a *problem*. Justify your assessment in each case.
Take some time to do this part of the assignment thoroughly.

Good answers to this question will involve looking for evidence from the case study, backed up by realistic assumptions based on other similar organisations. You should make use of the suggestions in the tables in Practical 6, but you **must apply them to the particular case**.

- b) Where you consider that more information would be needed to properly identify the knowledge gaps and blockages, outline your strategy for finding out this information.

What exactly do you need to know? Where in the organisation could you find it out? What questions would you ask/people would you ask/documents would you look at/techniques

would you use? Be specific here. Think of it as a real investigation. Initially you were only given the case information, what else do you need to know in order to go on?

Good answers here identify a definite knowledge need, and an appropriate strategy for finding it out, ideally directed at an appropriate place in the organisation. You might even list actual questions. You have already done quite a lot of work in 2(a) and the purpose of this part is to clarify what you have found out and/or find out stuff that is still unclear. It shouldn't repeat what is in the checklist or add no relevant information.

Ask yourself if it is possible to get an answer to the question(s) you list, and would the answers move the investigation forward in any way? If they don't, then it's not a very good information-finding strategy.

- c) Include a list of sources you have consulted in carrying out your investigation so far (for example: books, journals, Internet sites). Give the complete reference using Chicago/APA format.

Include your references **HERE, not all together at the end of the document**. I asked for sources in several sections because the nature of the information you (as investigator) need will change as the investigation proceeds, and listing the sources under each section makes it clear what need each source addresses. We want to see what sources you have found relevant at each point in the investigation.

In this section (2c) your references would most likely be background sources for the problem domain, especially if you have no knowledge of the area (as identified in Q1b); possibly background on knowledge audits, possibly on K elicitation or requirements gathering techniques. Ideally, you would also state WHY you have consulted that source.

3. Summarise the organisation's KM goals, and state which issue you consider to be the organisation's most pressing problem in achieving their goals, explaining your reasons.

This will be a summary of what the organisation is trying to achieve, and a summary of their problems that you have found from your analysis. It should come largely out of your checklist analysis but also look for a more holistic description of their problems – what do the checklist issues amount to? Look at the big picture - is there anything you can see is an issue that hasn't surfaced from the checklist?

Fixing the Knowledge Gap: Planning

4. Now commence the 'Fixing knowledge gap' phase by identifying the broad nature of the solution required, as follows:
 - a) Wherever you have identified the organisation has a *problem* in the checklist of issues, suggest the nature of the solution required to address the issue (bridge the knowledge gap). This solution needs to be in broad terms only: you are not recommending particular vendor products as yet.

This part is where you work out the 'what' of the solution before you go on and decide on the 'how' in question 5. You are defining the requirements of the solution, not how it will be implemented. Your answer should remain at a fairly high level and talk in design terms - you should not, for example, be going into any details about the products you would use (that belongs below in Q5). However, your solution should be sufficiently precise to provide a basis for subsequent decisions to be made.

You should ensure that the various parts of your solution will complement each other to form a coherent answer to the organisation's goals. This doesn't mean you will eventually recommend a single package that does everything, but you need to be aware of how the different parts of the solution will work together in the bigger picture.

- b) Include a list of sources you have consulted in carrying out your research for this stage. Give the complete reference using Chicago/APA format.

Again, include your references **here**, not at the end of the case. They should be different from those you consulted in your answer to question 2c, because you are now finding out different things. In this section, your sources should help you narrow down potential solutions that address the gaps you have identified.

Fixing the Knowledge Gap: Solutions

5. Having identified the knowledge gaps and broad plan for fixing them for your chosen organisation, now proceed to recommend a solution it can implement.
 - a) Briefly describe the extent of IT infrastructure (hardware, application software, operating system, networks) **already present** in the day-to-day running of the organisation. (Some of this information may be stated in the case study, for the remainder you should make an educated estimate and explain your reasoning.) This infrastructure is what your proposed solution will have to work with (by building on/ extending/ replacing).

This is what the organisation has **AT PRESENT**. It is **NOT what you are recommending they should do**. For some reason this question is often misinterpreted, but I have stated it as clearly as I can 😊

- b) Summarise the requirements for a Knowledge Management System for the organisation, and create a list of suggested software packages that will build on the existing infrastructure and assist the organisations in reaching its KM targets.

We are looking for realistic solutions in terms of fitting the solution to the problem **AND** to the organisation. A good solution will involve both technological and social aspects. Sometimes in this part people forget that they are being asked for a KM solution and give extremely technical solutions, but neglect the organisational/social aspects.

You don't need to get down to very detailed hardware/software specs, but it should be possible to take your solution as a basis for going forward.

c) Describe any potential problems that could arise with implementing your solution in the organisation. What would you do to avoid or minimise these problems?

These would be side effects of your solution, not things that you should have thought about earlier and built into the solution package. If the solution is a good fit to the organisation then there may be minimal problems, but there are always things that you would need to look out for.

d) List the sources for your solutions. Give the complete reference using Chicago/APA format.

Sources in this section would likely be product/technology/technique/standards based – the various components that make up your solution.

KDLC exists

6. A potential problem with any knowledge system is 'brain drain' - the departure of key staff with 'knowledge in their head'. If this is significant, it could amount to a 'catastrophe' event where the organisation might be unable to continue operating in its normal way.

How vulnerable would the organisation you have discussed be to this sort of knowledge loss, after your solutions have been put into place? Explain your assessment. If your solutions still leave the organisation vulnerable, what would it take to address this problem?

This section is for you to consider how your resilient your solutions are to organisational turnover, and to address any potential issues there may be. You don't need to go into detail about how you would address the problem (if there is one), but give the broad approach.

7. The KDLC has investigator separation as an end point for the work-flow: this is where the investigator helps the organisation continue without him or her, but also involves the investigator taking stock of what new knowledge or skills they have gained in the process.

How has carrying out the investigation in this assignment skilled *you*, as a knowledge investigator? How would this influence your approach the next case you may need to undertake? Reflect on how your personal analytical, research and problem solving skills have been developed (or not) through carrying out the work of this assignment. Where do you consider there are still gaps in your own skill base, and how would you address them?

This section is for you to reflect on your experience with the assignment.