HOW EXAMINER REQUIREMENTS HAVE BEEN MET

PREAMBLE

Several requirements, when taken together, indicated that some portions of the thesis needed to be rethought and would benefit from being restructured. In seeking to fulfil them, it was decided to restructure Chapters 4-10 as Chapters 4-8. In particular, the quantitative and qualitative analyses have been combined.

The original structure of chapters 4-10 were as follows, along with what happened to them:

- Chapter 4, Aspectual analysis of definitions - removed as not necessary to the thesis, with the examiners' agreement.

- Chapter 5, Research methods - becomes Chapter 4.

- Chapter 6, Aspectual Interpretation of interview data - tables moved to Appendix 1 and the rest of the chapter forms half of Chapter 5.

- Chapter 7, Aspectual Interpretation of papers - tables moved to Appendix 2, and some discussion incorporated in new Chapter 7.

- Chapter 8, Quantitative analysis of aspectual data - Discussions combined with qualitative analysis from Chapter 9, to form new Chapter 6.

- Chapter 9, Qualitative analysis of aspectual data - Qualitative coding of users data moved to form half of Chapter 5, qualitative coding of papers moved to Appendix 2, discussions combined with quantitative analysis to form new Chapter 6.

- Chapter 10, Discussion of meeting research needs - forms part of new Chapter 7.

- Chapter 11, Conclusion - Renumbered as Chapter 8, with some expansion.

The new structure of the thesis is as follows:

- Chapter 1, Introduction - as now

- Chapter 2, Literature Review - as now

- Chapter 3, Conceptual framework - as now but expanded and deepened

- Chapter 4, Research methods - as old Chapter 5 with some changes according to examiner requirements

- Chapter 5, Aspectual Interpretation of interviews - formed from material from chapters 6 and 9.

- Chapter 6, Quantitative and Qualitative Comparisons of cohorts - formed from material from chapters 8,9 and expanded with more discussion.
- Chapter 7, Reflections on the aspectual analysis process - formed from material from Chapters 7,10 with extra material.
- Chapter 8, Conclusion, formed from old Chapter 11, with extra material.

FULFILMENT OF REQUIREMENTS

1. Provide clarity regarding the contribution which it seems from discussion in the viva, is focused on using aspects to reveal meaningful issues in a particular context, to support transition from paper to electronic medical records. There is also a possible contribution to theory, on the use of Aspects to uncover down-to-earth issues

- Discussion of contributions have been expanded in chapter 8.

2. Aims and objectives should be clearly stated and, in particular, be consistent throughout the thesis
- This has been carried out.

3. Explain clearly how you distinguish high level and down to earth issues - you have suggested that down-to-earth issues emerge from users that are a good distinction but you will need to be clear about who might be users of a particular EMR system. It may be that the distinction is less important than a focus on what is meaningful to users - and this would address a challenge in Chapter 7 where the classification of issues as down-to-earth is hard to follow:
- Discussion of down-to-earth issues now occurs in three stages. Chapter 2, section 2.4 contains initial discussion, based on Ahmad's work, the end of section 2.5 finds further challenges. Chapter 3 uses Dooyeweerd to provide a clearer understanding of the down-to-earth approach as focusing on multi-aspectual functioning, and of the difference between down-to-earth and high-level issues.
- Who the users of EMR are, is set out in section 2.1 and in the introduction to chapter 5.

4. There is a need throughout the thesis to justify the selection / dismissal of existing research, and the weight being given to your own individual experience (e.g. in 2.1.5 your experience of content of medical records is presented but you don't discuss the role of context, or how this relates to any research in this area)

- The comparison of literature with what users find meaningful is no longer a major theme of the thesis. It has been moved to chapter 7 section 7.2 as a reflection. Researcher context is discussed in the limitations section of chapter 8.

5. You must address the subjective nature of the use of aspects in an interpretive context - if another person conducted an aspectual analysis would they reach an identical view? What does this mean for your work?
This is discussed in chapter 7 in sections 7.3 (subjective nature) and 7.4 (impact of researcher experience).

6. It is unclear why a subset of the data is analysed or how that subset was reached - this is important as it has impact on your analysis and findings, especially the qualitative analysis. You need to consider whether it is appropriate to discount some of the data, and if so to explain clearly the process you used to remove duplicates, to demonstrate that this is achieved in such a way as not to impact upon your results. Given that there is a quantitative element to your analysis, you need to be very careful with removing duplicates, as these could be meaningful in themselves.

- The reasons for excluding some interviews from analysis are set out near the start of chapter 5, in the list of criteria for selection.
- The quantitative analysis now depends less on comparing numbers and more on looking at overall patterns.

7. The work needs a thorough proof read; addressing spelling, grammar, presentation and flow (including removing repetitions).

- Referencing is inconsistent, some are missing.
- Reference list needs to be formatted consistently.
- Table naming should be informative and consistent.
- Referencing style: The referencing has been made consistent.

- Missing references: Missing references (around 12) were identified but, owing to a mishap just before submission, have not been included. A full reference list will be provided.
- Table naming has been made informative and consistent.

AT CHAPTER LEVEL
Abstract:
8. The abstract should show the main findings and conclusions
- The abstract has been rewritten.

CHAPTER 1:
9. This links to Chapter 3: the motivation here for including DW is okay, but AR unconvincing. As suggested, might just leave AR out altogether.
- ANT has been removed from Chapter 1.

CHAPTER 2:
10. Clarity of terms is essential given this element of your work. In the thesis a number of terms are used - medical record / electronic patient record / health record / health information system. You discuss definitions in chapter 2 but don't then provide the working definitions being used in the context of your thesis - this is essential given your analysis of definitions later. A table could be useful to present and compare different aspects of definitions in literature.
- Terms used are clarified in section 2.2. As far as possible, one term is used throughout, EMR (and MR when not necessarily electronic).
- Definitions are discussed.
- Reasons for not providing a definition are also given, namely that no definition could cover all issues that are important.

11. Section 2.1.5 would benefit from more details on MR, e.g. could include key MR providers and what their systems include/promise.
- Section 2.2 now explains how MR operates in practice and includes a short list of example providers.

12. Section 2.5 is unusual in its presentation: it is a series of paper summaries, which are inconsistently presented. You need to explain why these papers were selected and provide analysis / synthesis of the papers you are using - in particular drawing learning's across papers.

- The reason for the unusual structure is explained in section 2.5, along with criteria that were used in the selection of papers. The discussion of papers has been made more consistent.

13. The thesis would benefit from acknowledging a broader literature and theories relevant to user-related issues with IS in general and MR in particular, such as TAM, eHealth, etc. While no in-depth expositions are needed, it would provide a stronger context.

- Three major IS theories (TAM, ANT, ISSM) are discussed in chapter 3, as possible frameworks by which to understand down-to-earth issues of MR use.

CHAPTER 3:

14. ANT could be removed /. Substantially reduced.

- Discussion of ANT has been substantially reduced and set alongside TAM and ISSM as possible frameworks, before introducing Dooyeweerd.

15. Again the presentation of a series of articles with no justification / analysis / synthesis needs to be addressed.

- This has been removed and material from it has been condensed into the new shorter discussion of ANT.

16. The synthesis table for aspects includes a subset of aspects without explanation for why some were omitted

- This has been removed, as not necessary to the thesis.

17. Dooyeweerd introduction should be extended referring to its origins and discussions in literature about aspectual analysis. Here, also, you need to develop a strong sense of what 'meaningful' actually means in the aspectual analysis - which is

in particular important for your findings and analysis, as there 'meaningful', 'important', 'interesting' are used as synonyms, which they not necessarily are.

- This has been done in section 3.3.
- Terminology throughout the thesis has been standardized with 'important' and 'interesting' being replaced by 'meaningful' where it is appropriate to do so.

CHAPTER 4:

18. This should be moved to after the methodology and its role in the overall thesis should be explained.

- Chapter 4 has been removed, since aspectual analysis of definitions is not relevant to answer the Main Research Question. It had only been used as an example to illustrate use of aspectual analysis, and other examples are provided in appropriate places.

19. A clear explanation and justification for the selected definitions should be included as well as a deeper analysis.

- n/a since chapter 4 has been removed.

CHAPTER 5:

- What was Chapter 5 (Methodology) is now Chapter 4.

20. 5.7 'The Actual Study' should be edited so that it articulates the relationship between the choice of hospitals and the research question - i.e. that two use EPR and two use paper records

- This has been done.

21. The justification for the selection of the papers used in the study needs to be strengthened and the process used to select them explained.

- The analysis of papers is no longer part of the main research, but has been treated as part of reflecting on the aspectual analysis of users, to see whether the analysis of users comes up with anything that the literature does not. The eight papers analysed are now treated as a pilot study, pending further research directed at the literature as such. The criteria for their selection are found in section 7.2.

22. A summary table of the hospitals / staff interviewed would be helpful, and you should ensure that the numbers are consistent throughout

- This has been provided. Moves were made to ensure that the numbers were made consistent. HOWEVER, just before submission, some further small inconsistencies were discovered and the deadline prevented them being resolved. It is intended that a revised version will be produced by the time the examiners have examined the thesis.

23. When presenting data from the interviews, direct quotes from participants should be clearly identifiable as such

- This has been done.

24. Need to more consistently show how your research addresses methodological concerns, in particular around objectivity and 'coding'.

- This is discussed in section 7.3 and 7.4 around objectivity and impact of researcher experience.
- It was not clear whether "coding" referred to the assignment of aspects or to qualitative grouping, but the record of discussions at the viva suggested it refers to assignment of aspects, the objectivity and subjectivity of which has been discussed in Chapter 7 as just indicated.

CHAPTER 6:

- What was Chapter 6 is now chapter 5 and Appendix 1.

25. See point 6 at the top

- Done.

26. Categorisation of aspects needs explanation.

- "Categorization of aspects" is assumed, from the record of the viva discussion, to refer to whether they are aspects of questions, direct answers or meaningful (multiple) extras. This categorization is now made clear near the start of chapter 5.

27. Consider revising the format so there is less 'raw data' in the chapter in order to make it more accessible.

- The raw data of the tables in chapter has been moved to Appendix 1.
- Two example tables are retained in chapter 5 for explanation.

28. 6.7 needs some discussion of the table

- This can be found in chapter 5, section 5.4.

CHAPTER 7:

- What was chapter 7 has been moved to Appendix 2 and into section 7.2.

29. Clarification on the selection of papers

- This is given in section 7.2.

30. Included reasons (column)

- The analysis of papers has been moved to Appendix 2.
- The reasons column has been removed. It is not needed.

31. The DTE classification is hard to follow

- This is now explained better in section 7.2.

CHAPTER 8:

- What was Chapter 8 is now combined with qualitative analysis in chapter 6.

32. Explanation of the reasons for the choices of analysis / comparisons

- This is given in the introduction to chapter 6.

33. Summary and discussion to draw together important and interesting findings (eg 8.2. and 8.3 consist solely of bar charts, without discussion).

- This is found in section 5.4 for the aspectual profile of all users, and throughout chapter 6 for cohort analysis.

34. Discuss how accurate your coding is and implications of you making errors in the coding, i.e. a 'sensitivity' analysis of the strength of your findings, relating to 'how big a difference is big enough to make claims on relative importance'?

- This is discussed in section 7.3 (subjectivity) and 7.4 (impact of researcher experience).
- Quantitative analysis relies, not on exact numbers, but on patterns.
- Qualitative analysis has been changed, so that priority topics of cohorts are identified.

CHAPTER 9:

- What was Chapter 9 (Qualitative analysis) has been combined with quantitative analysis in chapter 6.

35. Explanation of the reasons for the choices of analysis / comparisons
- This is given in the introduction to chapter 6.

36. Summary and discussion to draw together important and interesting findings
- This is given throughout chapter 6 for cohort analyses, and in section 5.5 for aspectual issues of users as a whole.

CHAPTER 10:

- The conclusion chapter is now chapter 8.

37. Revise to make clear the contribution as discussed in the viva
- The contributions section in chapter 8 has been significantly expanded.