



CSP650
Final Year Project
Writing Conclusion,
Recommendation and
Abstract



WRITING CONCLUSION

Notes _____

Signature _____

Date _____

The Purpose of a Conclusion

The conclusion chapter of section seeks to:

1. Tie together, integrate and synthesize the various issues raised in the discussion sections, whilst reflecting the introductory thesis statement (s) or objectives
2. Provide answers to the thesis research questions (s) 
3. Identify the theoretical and policy implications of the study with respect to the overall study area
4. Highlights the study limitations
5. Provide direction and areas for future research 

Conclusions

- Conclusions are shorter sections of academic texts which usually serve two functions.
- The first is to summarise and bring together the main areas covered in the writing, which might be called "looking back"; and the second is to give a final comment or judgement on this.
- The final comment may also include making suggestions for improvement and speculating on future directions.

Conclusions (cont)

- **Summarising the content**
 - This paper has given an account of and the reasons for the widespread use of X
 - This essay has argued that X is the best instrument to
 - This assignment has explained the central importance of X in Y.
 - This dissertation has investigated

<https://www.phrasebank.manchester.ac.uk/writing-conclusions/>

RECOMMENDATION

Recommendations for further work (research)

- Further work needs to be done to establish whether
It is recommended that further research be undertaken in the following areas:
Further experimental investigations are needed to estimate
More broadly, research is also needed to determine
Further research might explore/investigate
Further research in this field/regarding the role of X would be of great help in
Further investigation and experimentation into X is strongly recommended.
A number of possible future studies using the same experimental set up are apparent.
It would be interesting to assess the effects of
These findings provide the following insights for future research:
Considerably more work will need to be done to determine

ABSTRACT

Outline

- Introduction
- Types of abstract
 - Executive
 - Descriptive
 - Informative
- Writing a good abstract
- Example
- Exercise

Introduction

- Comments from FYP Report Readers..
 - Abstract for FYP are found not properly done, even for those scoring A.
 - They are too brief and do not cover the background, objective, methodology and discussion of results, *future work*.
 - Most abstract only cover the background and what they intend to achieve by doing the project.

Introduction

- What is it?
 - An abstract is the most important part of a scientific paper/thesis/report.
 - The first or front page of your report.
 - Submitted first for paper acceptance and review.
 - It not only summarizes the significant aspects of the paper/report but also lures a reader into reading it!

Introduction

- Why do it?
 - Attract readers to read the entire article
 - Help readers to remember the key findings on a topic
 - Provide clear overview of the main text
 - Index articles for quick recovery and cross-referencing
 - Allow supervisors to review technical work without becoming slowed down by details

Types of Abstract

Generally, fall into three categories:

- Executive summary
- Descriptive abstract
- Informative abstract

Executive Summary

- Written primarily as a stand-alone document and can be quite long – up to 10% of the word-length of the longer paper
- Starts with the key findings of the research, which are then expanded upon
- Provides relatively brief coverage of the purpose, research problem and methodology used
- Strong focus on the recommendations and their justification
- Must accurately reflect what is in the report (the recommendations are sometimes word for word from the report)
- Targeted at people who are likely to implement the recommendations
- Used mainly when a research report has been developed for an industry partner, a government department or an organisation that participated in the research

Descriptive Abstract

- Commonly found in conference proceedings, but they are also used for articles.
- Describes the main proposition or finding of the paper, and the main themes or bodies of evidence provided in the paper.
- In this sense it acts like a preview of the main event.
- It should relate directly to the information that is in the longer paper or presentation
- More likely to speak about 'the paper' rather than 'the research'.
- Descriptive abstracts are short, sometimes under 100 words, and usually contain the following elements.
 - topic/background/purpose
 - main proposition or finding
 - overview of contents.

Informative Abstract

- An extension from **descriptive abstract**
- Most found in scientific writing.
- Generally written after the research has been conducted and the **longer paper** has been written.
- Describes what happened during the **research process**.
- It is therefore more likely to speak about '**the research**' rather than '**the paper**'.
- Contains specific information about the research

Writing a good abstract

- Content
 - Clear and Complete (essential information, adequate)
 - Core messages, Comprehensive
 - Contain NO new information
 - Not rely on referenced material
 - Avoid using I or we, but choose active verbs instead of passive when possible
(the study tested rather than it was tested by the study).
 - Avoid if possible, the trade names, acronyms, abbreviations, or symbols.

Writing a good abstract

How to do it?

- **Informative Abstract**

Components :

1. **Introduction** ✓

2. **Motivation/problem statement:** ✓

- Why do we care about the problem?
- What practical, scientific, theoretical or artistic gap is your research filling?

3. **Methods/procedure/approach:**

- What did you actually do to get your results?
- What was the *extent of your work*?
- What important *variables* did you control, ignore, or measure?

Writing a good abstract

4. Results/findings/product:

- As a result of completing the above procedure, what did you learn/invent/create?

5. Conclusion/implications:

- What are the larger implications of your findings, especially for the problem/gap identified in step 1? Are your results *general, potentially generalizable, or specific to a particular case?*

6. Future Works

Writing a good abstract

How to do it?

Writing an effective abstract

- Reread your report with the purpose of abstracting in mind. Look specifically for these main parts: purpose, methods, scope, results, conclusions, and recommendations.
- After you have finished rereading your report, write a rough draft WITHOUT LOOKING BACK AT YOUR REPORT. Consider the main parts of the abstract listed in step #1. Do not merely copy key sentences from your report. You will put in too much or too little information. Do not summarize information in a new way.
- Revise your rough draft to
 - correct weaknesses in organization and coherence,
 - drop superfluous information,
 - add important information originally left out,
 - eliminate wordiness, and
 - correct errors in grammar and mechanics.
- Carefully proofread your final copy.

Writing a good abstract

An effective abstract should..

- Meet the count limit : The abstract should not exceed one (1) page and less than 300 words
- Use an introduction/body/conclusion structure
- Follow the chronology of the report
- Adds no new information but simply summarizes the report
- Is understandable to a wide audience

Writing a good abstract

Effective abstract should..

- Avoid blurred results. (“some”, “small”, “very”, “significant”). Provide exact number.
- Avoid future tense. The biggest mistake is to mention that such and such "will be discussed".
- DO NOT left out the most important data and findings.

Example of Informative Abstract

- This is an abstract from a published paper. It is 220 words long. Identify the main purpose of each sentence (for example, presenting research problem, objective, methodology, main findings, or conclusion).

Experimental Study of the Performance of Solar Dryers with Pebble Beds

Major problems of the arid region are transportation of agricultural products and losses due to spoilage of the products, especially in summer. This work presents the performance of a solar drying system consisting of an air heater and a dryer chamber connected to a greenhouse. The drying system is designed to dry a variety of agricultural products. The effect of air mass flow rate on the drying process is studied. Composite pebbles, which are constructed from cement and sand, are used to store energy for night operation. The pebbles are placed at the bottom of the drying chamber and are charged during the drying process itself. A separate test is done using a simulator, a packed bed storage unit, to find the thermal characteristics of the pebbles during charging and discharging modes with time. Accordingly, the packed bed is analyzed using a heat transfer model with finite difference technique described before and during the charging and discharging processes. Graphs are presented that depict the thermal characteristics and performance of the pebble beds and the drying patterns of different agricultural products. The results show that the amount of energy stored in the pebbles depends on the air mass flow rate, the inlet air temperature, and the properties of the storage materials. The composite pebbles can be used efficiently as storing media.

Helwa, N. H. and Abdel Rehim, Z. S. (1997). Experimental Study of the Performance of Solar Dryers with Pebble Beds. *Energy Sources*, 19, 579-591.

Example of Informative Abstract

- *Major problems of the arid region are transportation of agricultural products and losses due to spoilage of the products, especially in summer.*
- *This work presents the performance of a solar drying system ... The drying system is designed to dry a variety of agricultural products.*

Example of Informative Abstract

- *Major problems of the arid region are transportation of agricultural products and losses due to spoilage of the products, especially in summer.*
 - General problem of the research is stated rather than the specific research problem) in order to provide a rationale for the research.
- *This work presents the performance of a solar drying system consisting of an air heater and a dryer chamber connected to a greenhouse. The drying system is designed to dry a variety of agricultural products.*
 - This part of the abstract gives the main objective of the research.

Example of Informative Abstract

- *The effect of air mass flow rate on the drying process is studied.*
- *Composite pebbles, which are constructed .. from cement and sand for night operation. The pebbles are placed ... process itself. Accordingly, the packed bed is analyzed .. during the charging and discharging processes..*

Example of Informative Abstract

- *The effect of air mass flow rate on the drying process is studied.*
 - Here the authors give the parameter they will be focusing on in order to measure the effect of air mass flow rate on the drying process.
 - Their research problem, therefore, is to find out the effect of air mass flow rate on the drying process.
- *Composite pebbles, which are constructed .. from cement and sand for night operation. The pebbles are placed ... process itself. Accordingly, the packed bed is analyzed .. during the charging and discharging processes.*
 - This part of the abstract summarizes the methodology used.



Example of Informative Abstract

- *Graphs are presented that depict the thermal ... different agricultural products. The results show ... depends on the air mass flow rate, the inlet air temperature, and the properties of the storage materials.*
- *The composite pebbles can be used efficiently as storing media.*

Example of Informative Abstract

- *Graphs are presented that depict the thermal ... different agricultural products. The results show ... depends on the air mass flow rate, the inlet air temperature, and the properties of the storage materials.*
 - Here we are told in what form the results are presented, and the main findings.
- *The composite pebbles can be used efficiently as storing media.*
 - Finally, we are presented with the main conclusion of the research.

g

✓

Example of Informative Abstract

- Take note that:
 - Background information: present tense / modal auxiliaries (e.g. has proposed)
 - Research problem: past tense ✓
 - Methodology : past tense ✓
 - Results : past tense ✓
 - Conclusions: present tense with some tentative verbs (offers) and modal auxiliaries (potential)

Example of Descriptive abstract

The postmodern appeal of complementary and alternative medicines (CAM) to Australian consumers: A review of the literature

Heather Eastwood

University of Queensland

The increasing popularity of complementary and alternative medicines (CAM) amongst health consumers and orthodox service providers in Australia **is** well documented. **However**, understandings about the reasons for increasing consumer use of CAM in Australia and elsewhere **are** poorly developed and invite further research. This paper **presents** the results of a systematic literature review on reasons for CAM use by the Australian population. There **are** four main themes: 1) criticism of conventional medicine, 2) attraction to the holistic model of health, 3) treatment options for chronic and terminal illness, and 4) lifestyle factors which **are** identified and explored through social change theory, namely globalization and post modernisation.

Abstract, Introduction, Summary and Conclusion

Abstract

- An abstract is the in-depth analysis or theme of an article that is written in the form a short summary. You can say an abstract is the short summarized statement that high-lights the important parts of an easy or article.

Introduction

- Introduction is the first paragraph or first few lines of a story, or piece of writing. As Introduction is a preliminary part of an easy, so it prepares the ground for reading an essay by describing the area of study that is discussed in next lines.

Summary

- Summary is just brief but comprehensive description of whole story of an easy. The aim of writing summary is describing all the discussed matters in a brief but meaningful way.

Conclusion

- Conclusion is the answer or final part of an easy or piece of writing that describes the verdict or final decision of an essay.

Example of Conclusion

Aim

- The aim of this project is to design a mobile phone tower.

Conclusions

- In this report, a design for a mobile phone tower has been presented. The key features of the tower are... It was found that...

Abstract, Introduction, Summary and Conclusion

Abstract vs Introduction vs Summary vs Conclusion

Abstract is in fact, not the part of an easy. It just describe the theme of writing an easy or piece of writing in contrast to summary that is different with abstract just in this sense, that it includes all the important parts of a detailed easy. By reading a **summary**, a person has no need to read all the detailed easy, while by reading abstract, a person cannot think about content of essay. Similarly, **introduction** is preliminary part of a piece of writing that disclose the area of discussion that is going to discussed in that easy. However, **conclusion** is just the final verdict of an essay.

ABSTRACT

bold, TNR 14

2 single lines, TNR 12

A short summary of the whole project consists of project motivation/problem statement, methodology, and findings that emphasize the novelty of the approach adopted, the actual work performed and the overview of findings obtained in preferably one paragraph between 250 to 300 words.

*4 cm – set
in margin*

*Paragraph single spacing, TNR 12, justified
alignment*

*2.5 cm – set in
margin*



Writing the Abstract



Step-by-Step Process:

1. Write **1-2 introduction sentences** that explain topic, purpose, and research question(s).
2. Write **1-2 sentences describing your research methods** (this may also include the type of data analysis you used). 
3. Write **1-2 sentences describing the results / findings**.
4. Write **1-2 sentences containing your conclusions** and recommendations.

Revising the Abstract

- Read your abstract all the way through:
 - add transition words to tie ideas together,
 - eliminate unnecessary content and add in things that are missing,
 - correct errors in mechanics, and proofread.

This ~~article~~article describes the results of ~~a-~~an investigation of the benefits of playing different ~~kinds~~genres of music to plants, measuring how well they then

Motivation

Abstract:

1. Introduction / Problem Statement
2. Aim
3. Method Used
4. Results Obtained
5. Conclusion & Future Work/ Recommendation

Solving the examination scheduling problem is a complex and tedious task. This is due to the many-to-many relationships between the students and exams data. Even though some state-of-the-art in the literature have reported encouraging results, but it was reported in the literature that many of the methods failed to produce feasible solutions, due to the utilization of random search element in the methods. This study aims to propose a more systematic and deterministic approach to solve the examination scheduling problem. We have proposed a method which is called Domain Transformation Approach (DTA) that has avoided to use any random search element. Based on the results obtained through the experiments, it has been proven that DTA has produced very encouraging results. Out of all experiments, it was observed that DTA has outperformed the state-of-the-art in the literature when experimented on the benchmark datasets. Sixty percent (60%) improvements has been recorded by the DTA as compared to the results obtained by other methods. Thus, it is confirmed that DTA is a powerful method with better expressive power in generating good feasible solutions.

ABSTRACT

THE DESIGN OF SYNDROMIC SURVEILLANCE LIVESTOCK MONITORING SYSTEM (SYSLIMOSYS) TOWARDS PRECISION LIVESTOCK FARMING CONCEPT IN TIROI FARM

6/16

3 findings

With the increasing number of populations each year, food security has become a global concern that needs to be addressed. However, managing livestock and ensuring their welfare remains a difficult task to accomplish due to reliance towards paper form for record keeping, causing inefficiency in the livestock farming process. There is also lack of alerts issued towards potential disease outbreak that might occur in the farm causing disastrous consequences. Thus, this project aims to design a monitoring system that applies syndromic surveillance concept in Tiroi Farm. The main feature of the system focuses on record keeping of data at the farm with the elements of welfare monitoring using syndromic surveillance concept and sending out alerts to farmers. In syndromic surveillance concept, the production data are used to determine welfare of animals. In this project, the mortality rate and hatching rate were used as the syndromic indicators. When the system detects that the syndromic indicators exceed the threshold, the system will send out alert to notify the farmers. The act of monitoring and sending out alert are taken from precision livestock farming concept. This project uses rapid application development methodology as the basis for the project methodology. The project methodology consists of initial planning, requirement gathering and analysis and user design phase. During initial planning, informal interview and literature review was conducted to gain deeper knowledge in the project area. In this phase, it was found that syndromic surveillance has three main components which are syndromic data source, syndromic indicators, and population under surveillance. The result of this phase is the project proposal. In the next phase, the requirements for the system were obtained through face-to-face interview session, requirement analysis and document analysis. The result of this phase is the requirements specification. In user design phase, the system was designed by applying syndromic surveillance concept based on the requirements identified. The design was validated through prototype demonstration. This project went through 2 iterations in which the prototype was refined in each phase according to the feedback given by the stakeholders. The results of this phase are the prototype. For future work, this project can include additional syndromic indicators with participation from multiple farms located in nearby area which would truly reflect the syndromic surveillance concept.

ABSTRACT

THE DESIGN OF REAL ESTATE SALES LEAD MANAGEMENT SYSTEM WITH THE IMPLEMENTATION OF 2X2X2 FOLLOW-UP TECHNIQUE

Sales lead or potential customer are crucial for the sales-oriented company. Real estate agency can be classified as a sales-oriented company as they focus on selling or leasing property to generate revenue. Sales lead are the primary source of revenue for the real estate company. Without proper sales lead management, the process of converting sales lead to sales would be "A needle in a haystack". Therefore, lies the importance of managing sales leads to maximize the company profitability. Thus, this project aims to design a sales lead management system that implements 2x2x2 follow-up technique. The main problem that this project is trying to solve is the lack of centralized repository to store the sales lead data. The potential customer record needs to be preserved as every sales lead is valuable. The problem is solved with the development of real estate management system that contains a dedicated database to store the customer's information. The main feature of the sales lead management system is the follow-up that implements the 2x2x2 follow-up technique. This follow-up technique is a systematic approach to ensure consistent follow-up with the potential customer or sales lead. The 2x2x2 stands for 2 days, 2 weeks and 2 months. After the first engagement with the customer, the customers are scheduled to be followed up by the system in the next 2 days, 2 weeks and 2 months. With the implementation of this technique in the follow-up features, it will help provide a clear and robust structure for the real estate agents to follow in order to maintain the meaningful contact with the potential customers and elevate the potential of converting them to sales. As a house transaction involves numerous stages before the customers can legally own the house, it is crucial to track these stages' status. Before a real estate agent can declare the sales lead has converted into sales, the customers need to sign the specific document with the lawyer. Therefore, it is important to track down the status of each sales lead. Thus, come the second important features of this system which is sales lead tracking that helps the real estate agents to track each sales lead's status. This project uses evolutionary prototyping as its development methodology. This methodology consists of initial concept, design and implement initial prototype, refine prototype until acceptable and complete and release the prototype. However, as this project is focused on the design, it will not undergo the complete and release the prototype phase. For the initial concept, the informal interview and literature review is conducted to gain deeper insight into the project topics. During this phase, it was found that key components of sales lead management system consist of lead generation, lead nurturing, lead tracking and lead conversion. The requirements are gathered in this phase through interviews conducted with the stakeholders to create the initial concept of the system. The result of this phase are the project proposal and the first initial concept of the project prototype. In the next phase, the initial concept of the project prototype is taken to the design phase. The first high-fidelity prototype will be developed using the initial concept gained from the requirements gathered from the last phase. The last phase is refine prototype until acceptable. After this first prototype is complete, a functional testing is done with the stakeholder to gain feedback regarding the system. This phase goes through 2 iterations of refinement with the feedback from the stakeholders. The result of this phase is the final prototype that is validated by the stakeholders. For future work, this project can implement the lead generation and follow-up automation which would definitely ease the lead management process.

F11 - PROJECT EVALUATION RUBRIC (REPORT)

No.	Assessment Criteria	Excellence (8-10)	Good (6-7)	Satisfactory (5)	Poor (1-4)	0
1.	Abstract	Highly reflects the following elements: <ul style="list-style-type: none"> • Project motivation • Methodology • Findings • Future work 	Clearly reflects the following elements: <ul style="list-style-type: none"> • Project motivation • Methodology • Findings • Future work 	Adequately reflects the following elements: <ul style="list-style-type: none"> • Project motivation • Methodology • Findings • Future work 	Does not reflect the following elements: <ul style="list-style-type: none"> • Project motivation • Methodology • Findings • Future work 	No evidence

5. Conclusion and Recommendations

(Conclusion of what has been achieved, explaining limitations/problems and recommendation for future work.)

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& Report Presentation