**COMMENT**

**The Research concept is a brief (4-5 pages document) where the DBA student provides a high-level overview of what he/she would like to study.**

**Below sections could be included:**

- For the Introduction part you should briefly introduce the topic of your study (e.g., why your topic is important? why you would like to study it? why is it novel? what is so new with your topic? what you will bring to the management/business world by studying that particular topic? etc...)

- For the Literature review: at this stage you can use Google Scholar as the main database and you should query it with some keywords related to your topic (e.g., if your topic is "Business challenges related to Bitcoin introduction" - then you should enter some keywords in google scholar such as "business challenge bitcoin" or "organization challenge bitcoin". etc. Once done, you need to briefly review what for example top 20 papers said about that topic (you need at least to read the abstract of those papers). Finally, once you analyze the first 20 or 30 papers, you should do the critical review of that literature and say what your work bring and you will fill the gap with your work. You do not need to go too much in details but just to indicate and CITE past papers in this literature review section.

NOTE: Remove this comment so you can use the template that starts on the next page

**TENTATIVE TITLE**

A Research Concept Paper Proposal

Presented

by

STUDENT NAME

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**INTRODUCTION**

## 1.1 Introduction

Every construction project is unique and has its own operating environment and sets of technical requirements. As a result, the execution of a construction project is subject to numerous constraints that limit the commencement or progression of field operations, which invariably have significant negative impact on overall project performance. By definition, constraints refer to any condition, such as temporal/spatial limitations and safety/quality concerns, which may prevent a project to achieve its goals. Successful execution and control of a construction project relies on effective identification and management of constraints through master planning and short-term look-ahead scheduling. While the master schedule provides a global view of a project and the overall execution strategy, a look-ahead schedule offers a detail account of operational constraints and a detailed plan showing work to be done within a relatively short time window. Ideally, these detailed schedules should reflect actual field conditions and provide field personnel with operation instructions free of constraints and conflicts (Hinze 2008). This look-ahead scheduling and constraint analysis procedure is also a critical component of the last-planner methodology proposed by Ballard (2000). This research project will provide an overview of state-of-art schedule constraint analysis practice during look-ahead scheduling. In addition, it will propose a conceptual framework for managing constraints.

**COMMENT**

**Background or introduction section provides a description of the basic facts and importance of the research area - What is your research area, the motivation of research, and how important is it for the industry practice/knowledge advancement?**

**PRELIMINARY LITERATURE REVIEW**

## 2.1 Preliminary Literature Review Objectives

A preliminary literature review shows that past studies are primarily focused on understanding and modeling a particular type of constraint, such as technological, contractual, resource, spatial, and information constraints. Limited progress has been made on classifying various constraints according to their characteristics in a comprehensive manner. In terms of modeling and resolving constraints, various approaches have been recommended. For example, many CPM-based methods are applied to deal with time-related constraints; knowledge-based systems were used to automate work plan generation; network-based optimization algorithms were developed to resolve constraints; and databases and visualization techniques, such as 3D, 4D, and Virtual Reality (VR), are used to communicate and visualize constraints. What is missing from the past studies is a comprehensive and structured approach in managing constraints What is missing from the past studies is a comprehensive and structured approach in managing constraints

**COMMENT**

**Preliminary literature review: provide a summary of previous related research on the research problem and their strength and weakness and a justification of your research - What is known/what have been done by others? And, why your research is still necessary?**

# 

**DISCUSSION AND CONCLUSION**

## 3.1 Discussion

The primary research method for this study is literature review and conceptual modeling. Constraint identification and classification through a structured approach is the very first step toward a “zero-constraint” environment. This study will first review various types of constraints in construction and their characteristics. Based on this understanding, a classification method will be developed to categorize constraint factors for the purpose of constraint identification and modeling. In the second stage of this study, existing constraint modeling methods will be identified based on a comprehensive review of current industry practices and academic researches. Finally, once the constraint classification and modeling techniques are identified, a conceptual framework for total constraint management will be outlined. This study will be conducted between September 2020 and May 2021.

## 3.2 Conclusion

With this research we intend to demonstrate that xxx…

**COMMENT**

**Discussion and Conclusions should provide a high level overview of the research methods and logic steps - What to do and how to solve the problem and achieve proposed objectives? Which research methods (e.g. survey, modeling, case study …) will be used? Attach a project schedule table, if necessary.**

# BIBLIOGRAPHY

Branford, Victor. *Interpretations and Forecasts: A Study of Survials and Tendencies in Contemporary Society.* London: Duckworth & Co., 1914.

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Geddes, Patrick. *Cities in Evolution: An Introduction to the Town Planning Movement and to the Study of Civics.* London: Williams & Norgate, 1915.

**COMMENT**

**All factual material that is not original with you must be accompanied by a reference to its source. Please use proper citation style (Harvard style).**