Gisma University of Applied Sciences

Module Handbook

B199/M598/M599 Bachelor/Master Dissertation

2025

1. Introduction

The dissertation is a central component of any bachelor's or master's program. This module handbook provides essential guidelines for students to successfully complete their dissertations across all levels and programs. **Dissertation supervisors should ensure that students read this document as a first step.**

2. Submission Deadline

The submission deadline for the dissertation depends on the student's degree and whether it is their first attempt or a retake after a previous failure.

Degree	First Attempt	Retake from Previous Term
Bachelor (B199 – 10 ECTS)	Assessment Week of the Current Term	Reassessment Week of the Current Term
Master (M598 - 60 ECTS)	Assessment Week of the Current Term	Reassessment Week of the Current Term
Master (M599 - 90/120 ECTS)	Assessment Week of the Next Term	Reassessment Week of the Current Term

The exact submission time is usually 16:00 on the Friday of the deadline week. Please refer to the **submission folder deadline on Canvas** as the primary reference.

Failure to submit by this deadline will result in a mark of zero. If you are unable to meet the deadline, for example due to health issues, you must contact the Academic Registry before the submission deadline to discuss the possibility of applying for a short extension. The university may grant an extension of up to 5 working days, depending on the circumstances you present; you should consult with your supervisor and obtain a supporting statement from them. Extensions beyond this period are not permitted, and you may use the Extenuating Circumstances policy to submit at the next available opportunity.

3. Supervision

The university assigns each student a dissertation supervisor at the beginning of their dissertation term. It is essential that both the student and the supervisor clearly understand their respective roles and responsibilities.

The student is primarily responsible for the success of their dissertation. They lead the research project, manage their time, request meetings, ensure continuous progress, and submit the completed dissertation before the deadline. The supervisor is not responsible for chasing or reminding the students to work. If any issues arise with the supervisor, the student is responsible for raising the matter with the module leader, program director, or head of the department.

The supervisor is responsible for providing guidance and feedback as needed. They mentor the student, assist with brainstorming, and help address challenges when the student encounters difficulties in their research. Supervisors are required to have at least six supervision meetings with students. They should also add a summary of each meeting to the logbook, which is shared with them by the dissertation team.

The supervisor also chairs the presentation session and marks the dissertation. They will schedule the presentation session in the week following the submission deadline and invite the student, the examiner, the dissertation email[1] and Ajitha[2]. The supervisor is tasked with recording the session, marking both the dissertation and the presentation, and providing feedback on Canvas. The examiner will either attend the presentation live or watch the recording later to complete the second marking.

If the student feels they need to discuss their progress or receive feedback, they should request a meeting with the supervisor. The supervisor should then schedule an online meeting within **three working days** to provide the necessary feedback.

In addition to their direct supervisors, students are encouraged to participate in other training and supervision meetings, such as dissertation workshops and coffee drop-in sessions, which are organized by the dissertation team.

4. Assessment Criteria

The students are required to produce the following components.

- **Element 1:** A well-structured and written dissertation. (80%)
    - Clear articulation of the research problem, objectives, and contributions. (15%)
    - Comprehensive and critical review of relevant literature. (20%)
    - Effective explanation, justification, and application of research methodology. (15%)
    - Thorough presentation of results and their interpretation, with clear linkages to earlier chapters. (20%)
    - Clear, well-structured, and scientific writing, including grammar, visuals, logic, coherence, and correct use of the Harvard referencing system. (10%)
- **Element 2:** A viva presentation. (20%)
    - Effective presentation of the research, demonstrating its significance and contributions. (10%)
    - Confidence, clarity, and depth in answering questions, reflecting a strong understanding of the research. (10%)

To pass this module, students must achieve an overall mark of 50% or higher for each element. Failure to present the oral exam will result in a mark of zero. However, students who are absent

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for reasons beyond their control, such as illness supported by formal documentation, may reschedule and take only the oral exam during the next examination session.

Dissertation Length

The required length of the dissertation is as follows.

Degree	1 Student	2 Students
Bachelor (B199 – 10 ECTS)	10k Words (35 Pages)	13k Words (50 Pages)
Master (M598 - 60 ECTS)	12k Words (50 Pages)	16k Words (70 Pages)
Master (M599 - 90/120 ECTS)	16k Words (70 Pages)	20k Words (90 Pages)

The standard penalty for work that exceeds or falls short of the specified word count is a deduction of 1 mark for every 100 words over or under the stated limit, up to a maximum penalty of 10 marks. For example, if a submission is between 1 and 100 words over the limit, it will incur a penalty of 1 mark; if it is between 101 and 200 words, it will be penalized by 2 marks; if it is between 201 and 300 words over, a 3-mark penalty will apply, and so on. Word counts should generally be determined using an electronic word count.

Presentation Length

The individual presentation should last 10 minutes, the group presentation 15 minutes, and be followed by a 10-minute question-and-answer session.

5. Ethical Approval

All students planning to undertake a research project must complete the Ethical Approval Form, which is available on Canvas, before starting data collection.

The supervisor will review and approve the Ethical Approval Form if the data collection does not involve human participants (e.g., working with secondary data).

However, additional documentation is required if the data collection involves human participants (e.g., projects involving tests, questionnaires, interviews, reaction time experiments, etc.). The student must prepare an Ethics Participant Consent Form tailored to the project. Do not simply copy an existing consent form; while model forms can be adapted, a copied form is likely to be inadequate and may result in your application being rejected. Discuss both the completed application form and the participant consent form with your supervisor, as their approval is necessary before your application can proceed. The supervisor will then forward the application form to the University Ethics Sub-Committee.

Allow two weeks for the form to be processed, including the possibility of it being returned for improvements and resubmission. The University Ethics Sub-Committee will relay its decision to the Academic Registry, and you will receive an email notification of the decision. You may

also receive information on any revisions required before your application can be approved. Once approval is granted and returned to you, only then may you begin your research.

Note that you cannot collect any data before your application is approved. Retroactive approval for research involving human participants is not possible. If evidence arises that you engaged with participants before approval was granted, you may be subject to a disciplinary hearing. Under no circumstances should participant recruitment begin until written approval (typically via email) is received from the Gisma Ethics Panel. Failure to obtain ethical approval will prevent you from submitting your work.

6. Academic Integrity

Any work by others that is included in the assignment must be properly attributed to its source, and a list of references must be provided.

The use of generative AI technologies (such as ChatGPT) in your final assignments is not allowed unless the assessment guidelines explicitly clarify under which terms you are allowed to use these technologies. Any violation of this rule will result in an investigation of academic misconduct.

In the case of a group dissertation, **both team members must contribute to both the technical work and the write-up**. These contributions should be clearly specified in the introduction of the dissertation.

7. What Happens If I fail?

If you receive a mark below 50% for either of the elements (dissertation or presentation), you will fail that element.

- If you fail the dissertation element (scoring below 40 out of 80), you will be required to redo both the dissertation and the presentation.
- If you fail the presentation element (scoring below 10 out of 20), you will only need to repeat the presentation.
- If you fail both elements (scoring below 40 out of 80 for the dissertation **and** below 10 out of 20 for the presentation), you will be required to redo both the dissertation and the presentation.

In either case, you will be allowed to resubmit your work **only once**. In such cases, you will receive feedback from one or more examiners highlighting the aspects of your work that require revision. You may request clarification of these comments, either in person or via email. Additionally, your supervisor will review and provide feedback on a draft of the revised dissertation, provided you submit it to them with sufficient time before resubmission. Please take this final opportunity **seriously** and collaborate closely with your supervisor to ensure a successful resubmission.

8. Research Topic Selection

The student should select a topic related to the field of study with the help of the supervisor. While it is understandable to prefer focusing on a simpler problem with a typical solution, especially given time constraints, we encourage students to embrace this opportunity to acquire new skills and enhance their CV before entering the job market. Where applicable, students are encouraged to write their dissertation in collaboration with the company they are primarily affiliated with.

Theoretically, the student can change the topic at any point during the dissertation's development, provided they consult with their supervisor. However, it is advisable to narrow down your topic to a well-defined and manageable scope early in the process by reviewing relevant research papers. A clearly defined problem is the first step towards conducting a successful research project.

The specific types of permitted research depend on your program of study and whether it falls under the Department of Business Studies (BS) or the Department of Computer and Data Sciences (CDS). Below is a list of permitted research types for each department. Definitions and examples of each research type can be found in the **appendices**. If the research topic does not fall into any of the categories listed below, the student should discuss it with their supervisor to ensure that the chosen research type is acceptable within the department.

Research Type	**BS Department**	**CDS Department**
Experimental Research	✓	✓
Applied Research	✓	✓
Development-Based Research		✓
Simulation-Based Research		✓
Benchmarking Research		✓
Empirical Research		✓
Survey-Based Research	✓	✓
Qualitative Research	✓	
Quantitative Research	✓	
Mixed Methods Research	✓	
Descriptive Research	✓	
Correlational Research	✓	
Case Study Research	✓	
Action Research	✓	
Grounded Theory Research	✓	
Comparative Research	✓	
Cross-Sectional Research	✓	
Longitudinal Research	✓	
Content Analysis Research	✓	
Theoretical Research	✓	
Meta-Analysis Research	✓	

Systematic Review Research	✓	
Participatory Research	✓	
Simulation Research	✓	

Note that **the research topic of CDS department students must include a technical contribution.** Their dissertation must provide evidence of this contribution, such as a link to a well-documented implementation hosted in a **GitHub repository**.

9. Dissertation and Presentation Structure

The exact structure of the dissertation and presentation depends on the topic and the author. Most importantly, students must ensure that their supervisor approves the chosen structure. However, the **appendices** provide general guidelines for students in both the Business Studies (BS) and Computer and Data Sciences (CDS) departments. Note that the recommended structures for dissertations and presentations differ slightly between business and technical research.

We **recommend**, but do not require, that CDS department students learn LaTeX in just 30 minutes[3] and use our **LaTeX template**[4]. **You are free to modify the template** based on your research needs and feedback from your supervisor. Alternatively, you may use Microsoft Word to create a similar template and write your dissertation.

[3] https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes
[4] https://github.com/m-mahdavi/teaching/tree/main/templates

Appendices

Research Types

Experimental Research

Experimental research focuses on testing hypotheses through controlled experiments to study cause-effect relationships. This type of research often involves altering certain variables and observing the changes in outcomes. It is frequently used to evaluate new algorithms, system behaviors, or methods in comparison to existing ones. Typical problems may include testing the performance of a new machine learning model, comparing different data processing techniques, or evaluating system scalability under varied conditions. Methodologies involve setting up experiments with controlled variables, collecting data, and using statistical techniques for evaluation. Example dissertation topics are as follows:

- Comparing the effectiveness of traditional vs deep learning models for sentiment analysis.
- Investigating the performance impact of a newly proposed caching algorithm in distributed systems.
- Experimentally analyzing the impact of different database indexing techniques on query speed.
- Evaluating security vulnerabilities using penetration testing on a web application platform.
- Testing user engagement effects for various interface designs in mobile applications.

Applied Research

Applied research aims to solve practical problems through the application of existing theories, methods, and technologies. It is highly focused on finding immediate solutions to specific challenges in industry or society. Problems tackled can include improving business processes, optimizing software systems, or automating complex tasks using artificial intelligence. The methodology often includes literature review, developing and adapting existing methods or software, and iterative testing. Evaluation involves measuring the practical impact or efficiency of the solution in real-world scenarios. Example dissertation topics are as follows:

- Developing a machine learning model for predicting stock market trends in real-time.
- Creating an automated data-cleaning pipeline for large-scale data warehouses.
- Applying NLP techniques to create a chatbot for customer service in healthcare.
- Optimizing warehouse operations using IoT and real-time data analysis.
- Developing an accessible educational platform using gamified elements for visually impaired students.

Development-Based Research

Development-based research focuses on creating new tools, applications, systems, or frameworks to address specific needs or improve existing technologies. It typically involves software design and engineering principles, where the main output is a functional prototype or software system. Problems include building new applications, improving user experience, or increasing system reliability. Methodologies often follow software development processes (e.g., agile), and evaluation measures include usability testing, performance metrics, or software quality assurance. Example dissertation topics are as follows:

- Designing and implementing a real-time speech-to-text mobile application for accessibility.
- Developing a secure and efficient e-commerce web platform using blockchain for transactions.
- Creating a collaborative coding environment for remote software development teams.
- Building a microservices architecture for a scalable enterprise application.
- Developing a recommendation engine for personalized content delivery in e-learning platforms.

Simulation-Based Research

Simulation-based research involves the use of models to replicate complex systems or processes to predict behaviors, evaluate scenarios, and test hypotheses without real-world risk. This type of research is popular in areas like performance optimization, network security, or predictive modeling. The methodology typically includes building and validating simulation models, executing simulations, and analyzing results. Evaluation focuses on the accuracy, validity, and insights derived from the simulations. Example dissertation topics are as follows:

- Simulating network traffic patterns to identify and mitigate potential congestion issues.
- Developing a simulation model to predict the impact of energy-saving algorithms in smart grids.
- Modeling the spread of misinformation on social media platforms and testing intervention strategies.
- Evaluating the efficiency of different pathfinding algorithms using simulated robotic movements.
- Simulating climate impact on data centers to optimize cooling solutions.

Benchmarking Research

Benchmarking research focuses on comparing systems, methods, or tools against established standards or competitors to assess performance, efficiency, accuracy, or other metrics. It often involves the identification of key performance indicators and measurement techniques.

Problems addressed can include evaluating new algorithms, comparing programming frameworks, or testing software efficiency. The methodology entails collecting data through experiments or testing and analyzing results using statistical comparisons or established benchmarks. Example dissertation topics are as follows:

- Benchmarking the accuracy and efficiency of different data compression algorithms.
- Analyzing and comparing the performance of various deep learning frameworks for image recognition.
- Evaluating software build times and resource consumption across CI/CD tools.
- Comparing database query performance between SQL-based and NoSQL databases.
- Benchmarking cybersecurity protocols for cloud-based applications.

Empirical Research

Empirical research relies on observation, experimentation, and data collection to study real-world behavior or outcomes. In computer science, it often focuses on understanding software engineering practices, human-computer interaction, or system behaviors. Problems may include examining the efficacy of programming paradigms, analyzing system logs for performance metrics, or studying developer behaviors. Methodologies involve data collection, observational studies, experiments, and statistical analysis to draw valid conclusions. Example dissertation topics are as follows:

- Studying how programming language features impact developer productivity using empirical data.
- Measuring software defect rates and their relation to team structures in agile projects.
- Analyzing user behavior patterns from telemetry data in a software product.
- Observational study of network performance in high-load scenarios.
- Evaluating the effectiveness of automated code reviews on software quality.

Survey-Based Research

Survey-based research combines technical reviews with experimental evaluations to assess tools, algorithms, or frameworks by testing specific features or analyzing algorithm performance. The objective is to deliver a detailed, comparative analysis that provides insights into the effectiveness, strengths, and weaknesses of various tools, techniques, or methodologies within a domain. This approach enables an in-depth exploration of different technologies, yielding valuable information for practical applications. Example dissertation topics are as follows:

- Assessing the accuracy of database query optimization tools by evaluating execution speed and resource usage across different database systems.

- Conducting a comparative analysis of image classification algorithms to determine the most efficient options for mobile applications.
- Experimentally evaluate network security protocols to assess their effectiveness in preventing cyber threats.
- Surveying text mining tools for social media analytics, focusing on their ability to process and analyze social media data accurately and efficiently.
- Analyzing the performance of real-time data processing frameworks for edge computing applications, with a focus on latency, scalability, and resource management.

Quantitative Research

Quantitative research involves the collection and analysis of numerical data to identify patterns, trends, and relationships. It aims to quantify the problem by way of generating numerical data or data that can be transformed into usable statistics. This research type often involves surveys, experiments, or secondary data analysis. It helps businesses make data-driven decisions based on measurable facts and figures. The methodology typically includes data collection through surveys or experiments, followed by statistical analysis. Evaluation is based on the interpretation of numerical findings to draw conclusions. Example dissertation topics are as follows:

- Analyzing customer satisfaction scores across multiple retail locations to identify areas for improvement.
- Evaluating the impact of digital marketing campaigns on sales revenue in e-commerce businesses.
- Examining the relationship between employee engagement and productivity in multinational corporations.
- Measuring the financial performance of companies before and after adopting sustainability practices.
- Assessing the effectiveness of pricing strategies on consumer purchase behavior.

Qualitative Research

Qualitative research focuses on understanding the underlying reasons, motivations, and perspectives behind a phenomenon. It is used to explore issues in depth, often through interviews, focus groups, or content analysis. This type of research is ideal for exploring new concepts, understanding customer experiences, or identifying business trends and behaviors. The methodology typically involves open-ended questions, detailed case studies, and thematic analysis. Evaluation focuses on identifying patterns and insights that can inform decision-making and strategy. Example dissertation topics are as follows:

- Exploring the decision-making process of consumers when choosing between competing brands in a market.
- Understanding employee experiences and organizational culture in tech startups.
- Investigating how small businesses navigate digital transformation.

- Analyzing customer perceptions of corporate social responsibility in the fashion industry.
- Exploring the challenges faced by entrepreneurs in launching sustainable products.

Mixed Methods Research

Mixed methods research combines both quantitative and qualitative research approaches to provide a more comprehensive analysis of a research problem. It is often used when the researcher wants to validate or enrich quantitative findings with qualitative insights. The methodology involves collecting both numerical data (through surveys or experiments) and non-numerical data (through interviews or focus groups), and integrating the results for a more rounded conclusion. Evaluation focuses on how the two methods complement each other and offer a deeper understanding of the research topic. Example dissertation topics are as follows:

- Analyzing customer satisfaction through survey data while exploring detailed feedback from focus groups on product features.
- Examining the effectiveness of employee training programs using performance metrics and employee interviews.
- Investigating the impact of corporate leadership on employee motivation through quantitative surveys and qualitative case studies.
- Evaluating the success of digital marketing campaigns by combining sales data analysis with consumer interviews.
- Studying the market potential for new product launches using sales data and qualitative focus groups to understand consumer perceptions.

Descriptive Research

Descriptive research aims to describe characteristics of a phenomenon or a population without influencing it. This research type is used to understand "what" exists and to collect data that provide a snapshot of the situation at a specific point in time. It involves methods such as surveys, observational studies, and content analysis. The goal is to provide an accurate representation of the subject being studied, often through statistics, charts, and graphs. Evaluation involves summarizing and presenting the data in a way that highlights key trends or patterns. Example dissertation topics are as follows:

- Describing the demographic characteristics of consumers who purchase sustainable products.
- Examining customer service trends in retail stores by analyzing customer feedback surveys.
- Identifying key performance indicators for successful small business operations in urban areas.
- Describing the growth and challenges of online businesses during the COVID-19 pandemic.

- Analyzing the current state of social media usage among businesses in the hospitality industry.

Correlational Research

Correlational research examines the relationship between two or more variables to determine whether they are associated or if a change in one variable is related to a change in another. This type of research does not establish cause-and-effect relationships but identifies patterns and strengths of relationships between variables. In business, it can help identify factors that influence performance, satisfaction, or behavior. The methodology typically involves statistical analysis, such as correlation coefficients, to measure the strength and direction of relationships. Evaluation focuses on interpreting the degree of correlation and understanding its implications. Example dissertation topics are as follows:

- Investigating the relationship between employee job satisfaction and organizational productivity.
- Analyzing the correlation between social media engagement and brand loyalty in the fashion industry.
- Studying the relationship between customer service quality and customer retention in telecom companies.
- Examining the correlation between corporate social responsibility initiatives and company reputation.
- Analyzing the relationship between leadership styles and employee turnover rates in small businesses.

Case Study Research

Case study research involves an in-depth investigation of a single case or a small number of cases within their real-life context. It is particularly useful for exploring complex issues in detail, such as business strategies, organizational behaviors, or market dynamics. This research type allows for a comprehensive analysis of a specific instance, providing rich insights that can be applied to similar situations. The methodology typically includes data collection through interviews, observations, and document reviews. Evaluation focuses on identifying key lessons, insights, and implications for broader business practices. Example dissertation topics are as follows:

- Analyzing the business turnaround strategies of a company that successfully recovered from bankruptcy.
- Examining the decision-making processes of a family-owned business transitioning to a corporate structure.
- Investigating the impact of a digital transformation initiative within a traditional retail company.
- Studying the growth strategies of a successful startup in a competitive market.
- Analyzing the crisis management strategies of a multinational corporation during a public relations scandal.

Action Research

Action research is a problem-solving approach that involves actively participating in the situation being studied to bring about change or improvement. It is often used in business settings to address real-world challenges by collaboratively developing and implementing solutions. This research type focuses on improving practices or processes through iterative cycles of planning, acting, observing, and reflecting. The methodology involves close collaboration with stakeholders, constant feedback, and adjustments based on findings. Evaluation focuses on the practical outcomes and improvements made during the research process. Example dissertation topics are as follows:

- Implementing and evaluating a new employee feedback system to improve workplace communication.
- Developing a customer relationship management (CRM) strategy and assessing its effectiveness on customer retention.
- Enhancing team collaboration through agile project management methods and evaluating productivity improvements.
- Implementing a sustainability initiative within a manufacturing company and measuring its impact on operational efficiency.
- Developing and testing a new marketing campaign strategy to increase brand awareness in a local market.

Grounded Theory Research

Grounded theory research involves developing theories through the collection and analysis of qualitative data. This approach is particularly useful for exploring new phenomena or concepts where no existing theory adequately explains the issue. The methodology typically involves gathering data through interviews, observations, or focus groups, followed by coding and categorizing the data to build a theory grounded in the data itself. Evaluation focuses on how well the emerging theory explains the patterns and relationships observed in the data. Example dissertation topics are as follows:

- Developing a theory of consumer decision-making processes in online shopping environments.
- Creating a grounded theory on leadership styles in tech startups.
- Understanding the factors influencing employee retention in remote work settings.
- Building a grounded theory on the adoption of green technologies by small businesses.
- Developing a theory on how brand trust is built through social media interactions in the retail industry.

Comparative Research

Comparative research involves comparing two or more variables, cases, or groups to identify similarities, differences, and patterns. This research type is often used to assess the effectiveness of different approaches, policies, or strategies in business contexts. It typically

involves selecting multiple cases or groups for comparison and analyzing data to draw meaningful conclusions. The methodology focuses on identifying differences or similarities and evaluating the implications of these findings. Evaluation involves comparing the outcomes or impacts of each case to determine the best approach or strategy. Example dissertation topics are as follows:

- Comparing the marketing strategies of leading e-commerce companies to identify the most effective techniques for customer acquisition.
- Analyzing the differences in business performance between small and large enterprises in the technology sector.
- Comparing the impact of different leadership styles on employee motivation in multinational companies versus local firms.
- Evaluating the effectiveness of traditional retail versus online retail channels in terms of customer satisfaction and sales.
- Comparing customer loyalty programs in the hospitality industry and their impact on repeat business.

Cross-Sectional Research

Cross-sectional research involves studying a population or phenomenon at a single point in time. This type of research is used to examine the relationships between variables or to gather a snapshot of characteristics within a given population. It is often used in business to analyze customer behaviors, market trends, or employee opinions at a specific moment. The methodology typically involves surveys or observational data collection from a sample, followed by statistical analysis to identify patterns or relationships. Evaluation focuses on summarizing and interpreting data to provide insights into the current state of the subject. Example dissertation topics are as follows:

- Surveying customer satisfaction levels with a specific product or service in a given market segment.
- Analyzing employee perceptions of corporate culture within a company at a particular point in time.
- Studying the factors influencing consumer purchasing decisions during a holiday shopping season.
- Assessing brand awareness among consumers in a new market following a product launch.
- Investigating the current state of digital transformation adoption among small businesses.

Longitudinal Research

Longitudinal research involves studying a phenomenon or population over an extended period of time to observe changes and developments. This research type is particularly useful for understanding trends, behaviors, and the long-term impact of interventions. In business, it can be applied to monitor the effectiveness of strategies or policies over time. The methodology

typically involves repeated data collection at different points, allowing researchers to track progress or changes. Evaluation focuses on identifying patterns over time and understanding how certain variables evolve. Example dissertation topics are as follows:

- Tracking customer loyalty and retention rates over several years following the introduction of a new loyalty program.
- Analyzing the long-term effects of employee wellness programs on productivity and health outcomes.
- Studying the evolution of consumer preferences in a particular industry over the last decade.
- Monitoring the impact of a sustainability initiative on a company's financial performance over a five-year period.
- Examining the career progression of employees in a tech company and the influence of continuous learning programs over time.

Content Analysis Research

Content analysis is a research method used to analyze textual, visual, or audio content to identify patterns, themes, or trends. In business, it is often used to examine marketing materials, media coverage, social media posts, or customer feedback. The methodology involves systematically coding and categorizing content to identify meaningful patterns or messages. Evaluation focuses on the frequency, context, and significance of specific themes or ideas within the content. Example dissertation topics are as follows:

- Analyzing social media content to understand brand perceptions and customer sentiment in the fashion industry.
- Examining corporate communication materials (e.g., annual reports) to identify trends in corporate social responsibility messaging.
- Analyzing advertisements in the retail industry to identify the portrayal of gender roles and their impact on consumer behavior.
- Investigating the content of customer reviews on e-commerce platforms to determine factors influencing product ratings.
- Analyzing media coverage of environmental issues and its impact on consumer attitudes toward sustainable brands.

Theoretical Research

Theoretical research focuses on developing, refining, or testing theories within a particular field. This type of research does not always involve empirical data collection but instead builds on existing concepts, models, or frameworks to propose new theoretical insights or explanations. In business, theoretical research is often used to explore fundamental principles behind business strategies, economic models, or organizational behavior. The methodology typically involves extensive literature reviews, conceptual analysis, and the development of new theoretical models or frameworks. Evaluation focuses on the logical consistency and contribution to existing knowledge. Example dissertation topics are as follows:

- Developing a new theoretical framework for understanding consumer decision-making in the digital marketplace.
- Analyzing and refining existing leadership models in the context of modern corporate management.
- Proposing a theoretical model to explain the relationship between corporate culture and employee performance.
- Developing a new economic theory to explain the dynamics of market competition in the tech industry.
- Exploring theoretical approaches to innovation management in high-growth startups.

Meta-Analysis Research

Meta-analysis is a research method that involves synthesizing the results of multiple studies on a particular topic to identify overall trends, patterns, and conclusions. This type of research is used to draw more generalized conclusions from a body of existing literature. In business, meta-analysis can be applied to evaluate the effectiveness of different strategies, practices, or technologies across various studies. The methodology includes systematically collecting studies, statistically analyzing the aggregated results, and identifying common findings. Evaluation focuses on assessing the consistency of results and drawing comprehensive conclusions from the data. Example dissertation topics are as follows:

- Conducting a meta-analysis on the effectiveness of various leadership styles in enhancing employee performance.
- Analyzing the impact of corporate social responsibility on company profitability across different industries.
- A meta-analysis of consumer behavior in response to online versus offline marketing strategies.
- Evaluating the success rates of different digital transformation initiatives in small and medium-sized enterprises (SMEs).
- Investigating the relationship between employee motivation and productivity through a meta-analysis of existing studies.

Systematic Review Research

Systematic review involves a comprehensive, structured approach to reviewing and synthesizing existing research on a specific topic. It aims to identify, evaluate, and summarize all relevant studies to provide a clear understanding of the current state of knowledge. In business, systematic reviews are often used to assess the effectiveness of business strategies, market trends, or organizational practices. The methodology includes identifying research questions, systematically searching for relevant studies, and analyzing the quality and outcomes of those studies. Evaluation focuses on the reliability, validity, and overall contributions of the reviewed studies. Example dissertation topics are as follows:

- Conducting a systematic review of the impact of employee engagement programs on organizational performance.

- Analyzing the effectiveness of different customer retention strategies in retail businesses through a systematic review.
- Reviewing existing studies on the role of corporate governance in enhancing company financial performance.
- A systematic review of the success factors for digital marketing strategies in small businesses.
- Analyzing the impact of remote work on productivity and employee satisfaction through a systematic review of current research.

Participatory Research

Participatory research involves collaboration between researchers and participants to address specific issues, often with the goal of making tangible changes or improvements. This research type emphasizes the active involvement of stakeholders (e.g., employees, customers, or community members) in the research process, from identifying problems to developing solutions. In business, participatory research can be used to engage employees in improving work processes, developing new products, or creating more effective customer service strategies. The methodology includes data collection through group discussions, workshops, or collaborative decision-making, with a focus on creating solutions that reflect the needs and perspectives of participants. Evaluation focuses on the practical outcomes and the effectiveness of the solutions implemented. Example dissertation topics are as follows:

- Collaborating with employees to co-design a new employee wellness program to improve workplace satisfaction.
- Engaging customers in the development of a new product line to better meet their needs and preferences.
- Using participatory research to improve customer service practices in a retail company by involving front-line staff in the design process.
- Working with a local community to develop sustainable business practices for a company focused on community development.
- Involving key stakeholders in the redesign of a company's organizational structure to improve communication and workflow.

Simulation Research

Simulation research involves the use of models to replicate real-world systems or processes in a controlled environment. This research type is used to predict outcomes, test hypotheses, or explore scenarios without the risks or costs associated with real-world experimentation. In business, simulation research can be applied to model market behavior, test new product designs, or optimize operational processes. The methodology typically involves creating a simulation model, running multiple scenarios, and analyzing the results to gain insights. Evaluation focuses on the accuracy of the model and the practical implications of the findings. Example dissertation topics are as follows:

- Simulating customer behavior to predict demand for a new product in the market.

- Modeling supply chain processes to optimize inventory management in a retail business.
- Simulating the impact of different pricing strategies on revenue generation in a competitive market.
- Using simulation models to evaluate the efficiency of various project management approaches in large organizations.
- Simulating the impact of various economic conditions on company profitability in the manufacturing sector.

Dissertation Structure for BS Department

Abstract

- Summarize the research problem, methodology, key findings, and contributions in a concise manner.
- Provide a clear overview of the significance and practical applications of the research.
- Ensure the abstract is self-contained, offering enough detail for the readers to understand the core aspects of the dissertation.

Introduction (Might be varied due to the research type)

- Introduce the research topic, context, and background.
- Define the research problem and outline the objectives clearly.
- Justify the importance of the problem and its relevance to the business field.
- Present the research questions and explain the scope of the research.
- Formulate the Hypotheses (Depends on the type of research)
- Outline the dissertation structure.

Literature Review

- Review and synthesize relevant literature, focusing on key theories, concepts, and findings.
- Identify gaps, trends, or areas where further research is needed.
- Critically evaluate existing research to demonstrate how your work contributes to the field.

Methodology

- Describe the research design and approach based on the research onion (e.g., qualitative, quantitative, mixed methods, etc.).
- Clearly explain the data collection methods (e.g., surveys, case studies, interviews, etc.).

- Discuss the tools, frameworks, or models used and justify your choice.
- Describe the sampling strategy and any limitations of the methodology.
- Explain how the research can be replicated or validated.
- Explain the **Ethical concerns** (if applicable)

Analysis and Findings

- Present the data analysis in a clear, simple, structured format (e.g., tables, charts, or models).
- Interpret the results in relation to the research questions and objectives.
- Compare your findings with existing literature and discuss any unexpected results.
- Identify key patterns, trends, and insights derived from the data analyzed.

Discussion

- Interpret the findings within the broader business context.
- Discuss how the results answer the research questions and contribute to theory and/or practice.
- Address the limitations of the study in different aspects and suggest areas for future research.
- Propose practical implications for business practice based on the findings.

Conclusion

- Summarize the key contributions and findings of the research.
- Reflect on the research objectives and how they were achieved.
- Discuss the implications of the research for academia, businesses or industries.
- Discuss the limitations of research.
- Offer clear recommendations for future research or practical applications.

References

- List all references in a consistent referencing format (e.g., Harvard).
- Ensure that the references are relevant, recent, and from reputable sources.
- Note to have relevant and enough intext citation which is required to be compatible with the reference list of yours.

Appendices (if necessary)

- Include any supplementary materials, such as survey questions, interview guides, raw data, or additional charts.
- Ensure the appendices are clearly labeled and referenced within the main text.
- Only include items that are not central to the core body of the dissertation but add value for the examiners and readers.

Presentation Structure for BS Department

Introduction

- **Problem Statement**: Clearly define the business problem or challenge you are addressing and its importance to the industry, academia or society.
- **Research Objective**: Outline the goal of your research and the key questions you aim to answer.
- **Contributions**: Highlight the novel aspects of your work and what it adds to existing business knowledge or practice.

Related Work

- **Literature Review**: Briefly discuss key studies or practices in the field, emphasizing relevant findings.
- **Gap Identification**: Identify the gap your research fills, highlighting what is missing or underexplored in existing work.

Methodology

- **Research Design**: Explain your research approach (e.g., qualitative, quantitative, mixed methods) and why it was chosen for the problem.
- **Data Collection**: Describe how and where you collected your data (e.g., surveys, interviews, case studies, secondary data).
- **Analysis Approach**: Outline the tools, frameworks, or models used to analyze your data.

Findings and Analysis

- **Key Findings**: Present your main results clearly using charts, graphs, or tables.
- **Interpretation of Results**: Explain what the findings mean in the context of your research problem.
- **Comparison**: If applicable, compare your results with existing solutions or industry standards.

Conclusion

- **Summary of Findings**: Recap the key insights from your research.
- **Implications**: Discuss the practical implications of your findings for businesses or policymakers.
- **Recommendations**: Provide actionable recommendations based on your findings.

Future Work

- **Limitations**: Address any limitations in your research and areas where further investigation is needed.
- **Next Steps**: Suggest directions for future research or improvements to existing practices based on your conclusions.

Q&A

- **Prepared Responses**: Be ready to address potential questions or challenges from the panel regarding your project.

Dissertation Structure for CDS Department

Abstract

- Briefly summarize the motivation, problem statement, methodology, evaluation, and key results.
- Provide a concise overview that emphasizes the contribution and significance of the research.
- The abstract should stand alone as a summary of the dissertation.

Introduction

- Introduce the context of the problem.
- Clearly define the research problem and objectives.
- Justify the importance and relevance of the problem in the field.
- Outline the key challenges addressed and the scope of the research.
- Highlight the specific contributions of the dissertation (what is new or improved).
- Direct the reader to external sources (e.g., GitHub repository) where the implementation can be found.
- Provide an overview of the structure of the dissertation to guide readers.

Foundations/Background

- Review the necessary foundational concepts (e.g., business domain or technical concepts) that the reader must understand to follow the dissertation.
- This chapter differs from the "Related Work" chapter, as it focuses on foundational knowledge rather than discussing existing research.

Related Work

- Summarize existing work related to the research topic, organized logically (e.g., by themes, methods, or approaches).
- Identify key gaps or limitations in the current state of the art that your work aims to address.
- Discuss how your work extends, differs from, or improves upon existing research.
- This section sets up the motivation for your methodology and contributions.

Approach

- Describe the overall research approach and key technical details.
- Provide mathematical formulations, algorithms, or models as needed.
- Explain the design choices, assumptions, and rationale behind the methodology.
- Specify tools, frameworks, datasets, or environments used.
- Detail the data collection process, data preprocessing steps, and any reproducibility details to ensure that other researchers can replicate the work.
- Provide detailed technical implementation information, including system design, tools, software, and hardware used.
- Cover architectural decisions, component diagrams, algorithm design, or programming considerations.
- Include relevant code snippets, flow diagrams, or explanations of technical hurdles and how they were addressed.

Evaluation and Results

- Describe the experimental setup, including datasets, baselines, and performance metrics.
- Present results systematically using graphs, tables, figures, etc., and organize them into logical sections.
- Compare your approach against relevant baselines and state-of-the-art methods, highlighting strengths and weaknesses.

- Discuss any ablation studies, parameter tuning, or sensitivity analyses to demonstrate robustness.
- Interpret the key results and their implications for the research questions or the field as a whole.

Conclusion

- Reflect on how your findings address the challenges or gaps identified in the introduction and related work.
- Discuss the strengths and weaknesses of your approach and outline potential areas for improvement.
- Summarize the contributions, key findings, and significance of the work.
- Recap how the research objectives were met and how the research problem was addressed.
- Provide concise suggestions for future work, building on any limitations or open questions.

References

- List all references in a consistent Harvard referencing format.
- Ensure that cited works are relevant, recent, and particularly published in top computer science research conferences or journals.

Appendices (if necessary)

- Include additional materials, such as extended data, mathematical proofs, detailed implementation steps, or raw datasets that are not core to the dissertation body but provide valuable context.

Presentation Structure for CDS Department

Introduction

- **Problem and Motivation:** Briefly explain the problem its important or relevant to the field.
- **Contributions:** Outline the novel contributions or innovations your work makes to the field.

Related Work

- **Summary of Prior Art:** Briefly highlight existing solutions or approaches and their limitations.
- **Gap Identification:** Clearly state what gap your work fills compared to existing literature.

Approach

- **Approach Overview:** Summarize the methodology, framework, model, or approach you used.
- **Key Technical Details:** Highlight core components, algorithms, or processes critical to your research.
- **Rationale:** Briefly explain why you chose this approach or why it is effective.

Evaluation and Results

- **Experimental Setup:** Provide an overview of your experimental design, datasets, baselines, and evaluation metrics.
- **Main Findings:** Highlight key results using graphs, tables, or visuals for clarity.
- **Comparison to Baseline:** Demonstrate your approach's performance relative to existing methods or benchmarks.
- **Significance:** Briefly explain what your results mean in the context of your research problem.

Conclusion

- **Summary of Contributions:** Recap the main contributions and findings.
- **Implications:** State the broader impact or relevance of your findings in the field.
- **Future Work:** Suggest areas for improvement, expansion, or related work that could be explored further.

Backup Slides

- **Prepared Responses:** Be ready to address anticipated questions or common critiques related to your research.