



BUSI 450 Capstone Handbook

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PREFACE

The BUSI 450 Capstone Handbook provides a comprehensive guide to the structure, expectations, assessment standards, and applied learning framework governing the Capstone—Portfolio and Applied Research course in the Bachelor of Business Administration Program in E-Business Management of Alexander College. The capstone represents the culminating academic and professional experience of the program, integrating knowledge, skills, and competencies developed across prior coursework into authentic, industry-relevant applications.

This handbook is intended for students, faculty, and industry partners. It clarifies roles and responsibilities, outlines required deliverables, and documents the alignment between course learning outcomes, handbook components, and assessment practices. By establishing transparent and consistent guidelines, the handbook supports academic rigour, applied degree expectations, and high-quality learning experiences that prepare graduates for professional practice in digital business environments.

In this handbook, “Capstone” refers to BUSI 450. The Capstone includes two major assessed components: (1) the Individual Professional Portfolio, and (2) the Group Applied E-Business Research Project (including industry evaluation).

1. CAPSTONE OVERVIEW & PURPOSE

1.1. Purpose of the Capstone

The BUSI 450 Capstone represents the culminating academic and applied experience of the E-Business Management program. It integrates theoretical knowledge, research capability, and industry engagement to prepare graduates for professional roles in digital business environments.

The purpose of the Capstone is to provide students with a structured opportunity to demonstrate integrated mastery of program-level learning outcomes through applied, industry-relevant work. As the culminating course in the E-Business program, the capstone requires students to synthesize knowledge and skills developed across prior coursework and apply them to authentic business contexts.

1.2. Applied Learning Framework (BUSI 450)

The Capstone uses an applied learning framework in which students demonstrate competency through real-world deliverables and professional practice. Learning is evidenced through two complementary components: (1) an Individual Professional Portfolio that consolidates and refines major artifacts from prior E-Business courses, and (2) a Group Applied E-Business Research Project that addresses a real operational problem of an existing organization. Students apply research, analytics, digital tools, and strategic thinking to produce professional reports, dashboards, and presentations. Assessment emphasizes demonstrated competence, reflective improvement, stakeholder engagement, and the ability to propose feasible solutions under real-world constraints.

The Capstone, therefore, serves as a summative assessment of professional readiness and aligns with applied degree expectations for experiential learning, workplace relevance, and demonstrable competency development.

2. COURSE LEARNING OUTCOMES

2.1. BUSI 450 Learning Outcomes (from Curriculum Guide)

Upon successful completion of this course, the student will be able to:

- Review and integrate e-business concepts, strategies, and tools from previous courses.
- Produce a self-actualization portfolio
- Produce an applied e-business research project.
- Analyze a business scenario and define related problems.
- Demonstrate problem-analysis and problem-solving skills.
- Conduct mining, conversion, and analysis of data
- Build a digital dashboard and make a report from it.
- Translate marketing challenges into an opportunity by creating an e-marketing strategic plan.
- Collaborate and effectively work on a team project.
- Professionally interact and communicate with stakeholders of an existing business.
- Develop competence in producing business reports and presentations to prospective stakeholders.
- Research, analyze, assess, present findings, and propose business solutions and alternatives given the constraints and risks in a business.
- Identify key strategic decisions in a business and communicate them for evaluation.

2.2. Alignment of Handbook Components to Learning Outcomes

All handbook components are deliberately aligned with the BUSI 450 learning outcomes to ensure that instruction, assessment, and demonstrated competencies are consistent. The Individual Professional Portfolio evidences integration of e-business concepts, analytics, marketing strategy, and professional communication, while the Group Applied E-Business Research Project assesses applied research, problem-solving, data analysis, teamwork, and strategic decision-making. Industry partner evaluation provides external validation of professional relevance and communication. This alignment supports applied degree accreditation expectations for outcome-based, experiential learning.

3. CAPSTONE STRUCTURE

The Capstone is structured around a Two-Pillar Model designed to integrate individual mastery with collaborative applied practice. The first pillar, the Individual Professional Portfolio, requires each

student to curate, refine, and reflect upon major artifacts from upper-division E-Business courses (BUSI 301, 340, 360, 400, and 430), demonstrating progressive development of technical, analytical, and strategic competencies. The second pillar, the Group Applied E-Business Research Project, engages students in addressing a real-world operational challenge faced by an existing organization, requiring applied research, data analysis, dashboard development, strategic recommendations, and professional stakeholder presentation. Together, these pillars ensure that students demonstrate both independent competence and collaborative, industry-relevant problem-solving aligned with applied degree expectations.

4. SELF-ACTUALIZATION PORTFOLIO (INDIVIDUAL PROFESSIONAL PORTFOLIO)

4.1. Portfolio Composition

The Individual Professional Portfolio consolidates selected major projects from upper-division E-Business courses to demonstrate each student's progressive development of technical, analytical, and strategic competencies. The Portfolio artifacts include:

4.1.1 BUSI 301 (E-Commerce) – Online Store Profile, Web Map, and Web Administration Manual Summary

Students develop a structured profile of an online store, design a website map outlining information architecture, and produce a summary of administrative procedures, demonstrating understanding of e-commerce platforms, usability, and site operations.

4.1.2 BUSI 340 (Web Analytics) – Web Analytics Report

Students analyze website performance using analytics tools, interpret key metrics and user behaviour, and present findings to support data-informed business decisions.

4.1.3 BUSI 360 (Database Management and Cyber Security) – Sample Database

Students design and document a database structure of a company engaged in e-business, including tables and relationships, and address basic security considerations relevant to managing business data.

4.1.4 BUSI 400 (E-Marketing Management and Strategy) – E-Marketing Strategy Plan

Students develop a digital marketing strategy that identifies target markets, selects channels, sets objectives, and proposes tactics and budgets to achieve business goals.

4.1.5 BUSI 430 (Business Analytics) – Digital Dashboard

Students build an interactive dashboard that visualizes key performance indicators and supports managerial decision-making.

Students refine and reflect on these five artifacts to demonstrate readiness for professional practice in digital business environments. The artifacts can be in physical or digital form.

4.2. Portfolio Artifacts → Program-Level Competency Crosswalk

Artifact	Digital Strategy	Analytics	Marketing	Technical Systems	Professional Communication
BUSI 301 – E-Commerce	X		X	X	X
BUSI 340 – Web Analytics		X			X
BUSI 360 – Database		X		X	X
BUSI 400 – E-Marketing Plan	X		X		X
BUSI 430 – Digital Dashboard		X			X

4.3. Portfolio Enhancement Requirements

4.3.1 Portfolio Enhancement Requirements

To be accepted for BUSI 450 assessment, each portfolio artifact must be updated, polished, summarized, and consolidated to demonstrate professional readiness. Students must complete the following enhancements for each artifact (BUSI 301, 340, 360, 400, 430):

1. Professional Formatting and Presentation
Revise the document/dashboard to a professional standard (clean layout, consistent headings, labelled visuals/tables, correct spelling/grammar, and appropriate citations where relevant).
2. Executive Summary (1 page maximum)
Add a brief summary describing the business context, objectives, approach, key outputs, and practical value of the work.
3. Evidence of Improvement
Identify and implement at least 3 concrete improvements based on prior instructor feedback, updated best practices, or new tools/standards (e.g., clearer KPIs, improved database normalization, stronger dashboard usability, refined marketing segmentation).
4. Reflection (1–2 pages per artifact)
Include a short reflection that explains: the problem addressed, methods/tools used, key outcomes, lessons learned, and how the artifact demonstrates employability.

5. Tool/Method Transparency

Clearly state what tools and methods were used (e.g., analytics platform, dashboard tool, database design approach) and provide brief documentation so the work can be understood and evaluated.

6. Portfolio Consistency and Consolidation

Ensure all artifacts follow a consistent portfolio style (cover page, table of contents, naming conventions, and standardized section structure). Remove unnecessary course-specific clutter and present work as a coherent professional portfolio.

7. Ethical and Data Compliance

Remove personal or sensitive data, anonymize company/user information if required, and confirm compliance with privacy and academic integrity requirements.

4.4. Sample Portfolio Table of Contents

1. Cover Page
2. Executive Summary
3. Professional Profile
4. BUSI 301 Artifact + Reflection
5. BUSI 340 Artifact + Reflection
6. BUSI 360 Artifact + Reflection
7. BUSI 400 Artifact + Reflection
8. BUSI 430 Artifact + Reflection

4.5. Reflection Guiding Questions (Per Artifact)

Students must address the following for each artifact:

1. What business problem or opportunity does this artifact address?
2. What tools, technologies, or methods were used?
3. What key insights or outcomes were produced?
4. What skills did you develop through this project?
5. How does this artifact demonstrate readiness for professional practice?

4.6. Assessment Rubrics with Percentage Weightings

Criterion	Weight	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)
Artifact Quality & Completeness	15%	All required components are present, comprehensive, and exceed expectations; work demonstrates strong depth and polish.	All required components present and complete; minor gaps or inconsistencies.	Most components present; some important elements incomplete or underdeveloped.	Major components missing or substantially incomplete.

Integration of Prior Coursework	10%	Comprehensive integration of concepts, tools, and artifacts across multiple courses	Strong integration of relevant coursework with minor gaps	Basic integration with limited depth or coherence	Little or no meaningful integration of prior coursework
Technical Accuracy & Use of Tools	20%	Tools and methods are used correctly and effectively; outputs are accurate and well-documented.	Minor technical errors; tools generally used appropriately.	Noticeable errors or limited documentation; partial understanding of tools.	Frequent errors or inappropriate tool use.
Application to Employability	10%	Strong alignment to career goals and employability outcomes	Clear relevance to employability with minor gaps	General employability relevance but weak articulation	Unclear or missing employability connection
Business Relevance & Problem–Solution Alignment	10%	Clear connection between business problem, analysis, and solution; recommendations are practical and well-justified.	Connection is evident; recommendations are mostly practical.	Weak or inconsistent alignment between problem and solution.	Little or no connection between problem and solution.
Reflection Depth & Insight	20%	Reflection demonstrates critical thinking, self-awareness, and strong linkage to professional practice.	Reflection is thoughtful and relevant.	Reflection is mostly descriptive with limited insight.	Reflection is superficial or missing.
Professional Presentation & Organization	15%	Portfolio is exceptionally well-organized, clear, and professional in appearance.	Organization and formatting are generally professional.	Organization or formatting is inconsistent.	Poorly organized and difficult to follow.

4.7. Timeline

The following Gantt-style timelines outline the recommended progression of work for the Self-Actualization Portfolio (Individual) over a standard 14-week academic term.

Task	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14
Portfolio Orientation & Requirements Review	■													
Artifact Collection from Prior Courses	■	■												
Portfolio Structure & Planning		■	■											

Artifact Updating & Polishing			■	■	■	■								
Reflection Writing & Self-Assessment				■	■	■	■							
Draft Portfolio Assembly							■	■						
Faculty Feedback & Revision								■	■	■				
Final Editing & Professional Formatting										■	■	■		
Final Portfolio Submission													■	

5. APPLIED E-BUSINESS RESEARCH PROJECT (GROUP)

5.1. Purpose and Scope

The Applied E-Business Research Project is the main experiential component of BUSI 450 and requires students to apply primary research, analytics, and digital business tools to a real operational problem faced by an existing organization. Students define a focused e-business issue, analyze relevant data, and develop evidence-based recommendations supported by appropriate analytical outputs. Projects must be practical, achievable within the academic term, and aligned with ethical data handling and professional standards. This applied research process demonstrates students' readiness for professional practice and supports applied degree expectations for outcome-based, industry-relevant learning.

5.2. Applied Research Project Structure and Progression

The E-Business program is structured to progressively develop competencies in digital strategy, analytics, marketing, operations, and research. BUSI 210 establishes foundational research literacy and quantitative reasoning skills. BUSI 445 builds on this foundation by advancing students' analytical, digital research, and dashboard development capabilities. BUSI 450 integrates these competencies into a comprehensive applied research engagement with a real organization, serving as the culminating experience of the program.

5.2.1 Program Progression Diagram

Course	BUSI 210 Business Research Methods	BUSI 445 Advanced Business Research	BUSI 450 Capstone
Deliverables	Foundational Skills Basic Research	Business Research with advanced Analytics & Dashboards	Industry Applied Research
Highlights	Problem definition Survey design Basic statistics	Mixed methods Digital KPIs Regression Data visualization	Real company project Industry evaluation Strategic recommendations

5.2.2 Competency Crosswalk (Program → Capstone)

Program-Level Competency	Introduced (BUSI 210)	Reinforced (BUSI 445)	Demonstrated (BUSI 450)
Problem Definition	X	X	X
Research Design	X	X	X
Quantitative Analysis	X	X	X
Qualitative Analysis	X	X	X
Digital Analytics / Dashboards		X	X
Strategic Recommendations		X	X
Professional Reporting	X	X	X
Industry Engagement			X
Ethical Research Practice	X	X	X

5.2.3 Project Selection Criteria

All Applied E-Business Research Projects must be based on a real organization and address a clearly defined e-business operational issue identified in collaboration with a participating organization or industry partner. Projects must focus on practical digital business functions such as digital marketing performance, web analytics, data management, customer experience optimization, or related e-business processes. The selected problem must be feasible to investigate and address within the 14-week academic term and must require the application of research, data analysis, and appropriate digital tools.

Project topics must demonstrate clear applied research value, including the use of evidence to support problem definition, analysis, and recommendations. All projects must comply with ethical and legal standards, including responsible data handling, privacy protection, and academic integrity.

Each project topic must be approved by the instructor before commencement. In addition, student teams must secure an agreement with the participating organization or industry partner confirming access, scope, and expectations for collaboration. Projects that do not meet these criteria or lack documented organizational agreement will not be approved.

5.2.4 Timeline

The following Gantt-style timelines outline the recommended progression of work for the Applied E-Business Research Project (Group) over a standard 14-week academic term.

Task	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14
Project Orientation & Team Formation	■													
Business Problem Identification		■	■											
Research Design & Data Plan			■	■										
Data Collection				■	■	■								
Data Cleaning & Preparation					■	■	■							
Data Analysis						■	■	■	■					
Dashboard Development							■	■	■					
Findings Interpretation									■	■				
Strategic Recommendations Development										■	■			
Draft Report & Presentation											■	■		
Faculty Review & Revisions												■	■	
Final Presentation & Industry Panel Review														■

5.2.5 Project Deliverables

The Applied E-Business Research Project requires students to produce a set of professional deliverables that demonstrate applied research, analytical rigour, and strategic thinking. Deliverables typically include a formal applied research report that documents the business context, problem definition, research approach, data analysis, findings, and evidence-based recommendations. Where appropriate, students must also produce analytical outputs such as a digital dashboard, data visualizations, or supporting analytical models that inform managerial decision-making.

In addition, student teams must deliver a professional presentation to faculty and, where applicable, participating organizations or industry partners. All deliverables must be clearly written, professionally formatted, and suitable for executive audiences. Collectively, these deliverables provide evidence that students can translate analysis into practical recommendations and communicate results effectively in professional digital business environments.

5.2.6 Student Project Suggested Proposal Template

Student teams must complete and submit a project proposal containing the following elements:

- 1. Project Title**

A concise and descriptive title that reflects the e-business focus of the project.

- 2. Business Problem**

A clear statement of the operational e-business issue faced by the participating organization or industry partner.

- 3. Research Objectives**

Specific and measurable objectives outlining what the project seeks to investigate or achieve.

- 4. Methodology**

A brief description of the research approach and analytical methods to be used (e.g., data analysis, analytics tools, dashboard development).

- 5. Data Sources**

Identification of primary and/or secondary data sources, including organizational data where applicable.

- 6. Deliverables**

A list of expected outputs (e.g., research report, dashboard, presentation).

- 7. Timeline**

A high-level schedule showing key milestones and completion within the 14-week term.

5.2.7 E-Business Capstone Suggested Research Paper Template

Title Page

Project Title

Student Name

Program

Instructor

Date

Executive Summary

Provide a concise summary of the research problem, methods, key findings, and recommendations.

1. Introduction

- Business context
- Problem statement
- Research objectives
- Research questions

2. Literature Review

- Key academic and industry sources
- Theoretical and practical frameworks
- Research gaps

3. Research Methodology

- Research design
- Data sources
- Sampling and data collection
- Ethical considerations

4. Data Analysis & Findings

- Analytical methods
- Key results
- Visualizations (tables/figures)

5. Discussion

- Interpretation of findings
- Business implications
- Limitations

6. Recommendations

- Strategic recommendations
- Operational or product implications

7. Conclusion

- Summary of insights

- Future research directions

References

- APA-formatted reference list

Appendices

- Survey instruments, interview guides, supplementary

5.3. Assessment Rubrics with Percentage Weightings: Applied E-Business Research Project (Group)

Criteria	Weight (%)	Excellent (A)	Good (B)	Satisfactory (C)	Needs Improvement (D/F)
Problem Definition & Business Context	15%	Clearly defined, well-contextualized, and strategically relevant problem	Clear problem with adequate context	Problem identified, but lacks depth or clarity	Unclear or inappropriate problem definition
Research Design & Methodology	15%	Rigorous, appropriate, and well-justified methodology	Appropriate methodology with minor weaknesses	Meets minimum standards but lacks rigour	Weak or inappropriate methodology
Data Analysis & Digital Dashboard	20%	High-quality analysis with effective, insightful dashboards	Solid analysis with functional dashboards	Basic analysis with limited insight or usability	Poor or incorrect analysis and dashboards
Strategic Recommendations	20%	Actionable, evidence-based, and well-justified recommendations	Reasonable recommendations with supporting evidence	General or weakly supported recommendations	Unclear or unsupported recommendations
Professional Communication & Presentation	15%	Clear, professional, and compelling report and presentation	Clear communication with minor issues	Meets minimum communication standards	Unclear or unprofessional communication
Team Collaboration & Contribution	15%	Strong collaboration, accountability, and equitable contribution	Effective collaboration with minor issues	Uneven contribution but acceptable collaboration	Poor collaboration or contribution

6. INDUSTRY PARTNER EVALUATION

Industry partner evaluation provides an external, professional perspective on the relevance, practicality, and value of student applied research projects. Industry input supplements faculty assessment and contributes to 10–20% of the group project grade. Final grading authority remains with the faculty.

Industry partners assess only applied dimensions related to professional quality and business usefulness. Academic rigour and methodological correctness are evaluated by faculty.

6.1 Industry Evaluation Criteria

Criteria	Weight within Industry Evaluation	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)
Business Problem Relevance	20%	Problem clearly reflects a real and important organizational e-business challenge	Problem is relevant and understandable	Problem loosely connected to organization	Problem unclear or not relevant
Understanding of Business Context	15%	Demonstrates strong understanding of company, market, and digital environment	Good understanding with minor gaps	Basic understanding	Limited or inaccurate understanding
Quality of Insights	20%	Insights are clear, meaningful, and supported by evidence	Insights are reasonable and mostly supported	Insights are basic or descriptive	Insights unclear or unsupported
Practicality of Recommendations	20%	Recommendations are feasible, realistic, and actionable	Mostly feasible recommendations	Some recommendations impractical	Recommendations unrealistic
Potential Business Value	15%	Strong potential to improve performance or decision-making	Moderate potential value	Limited value	Minimal value

Professional Communication	10%	Clear, well-structured, professional report/presentation	Generally professional	Adequate but inconsistent	Unprofessional or unclear
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6.2 Written Feedback (Optional but Encouraged)

In addition to rubric-based scoring, industry partners are encouraged to provide brief written commentary on the strengths of the project, areas for improvement, feasibility considerations, and suggestions for implementation. Written feedback should focus on the practical and professional dimensions of the applied research, including the clarity of problem framing, relevance of insights, realism of recommendations, and potential organizational value. This qualitative feedback provides students with an external professional perspective that complements faculty evaluation and supports reflective learning.

6.3 Use of Industry Feedback

Industry partner feedback is used to inform a designated portion of the group project grade and to enhance the educational value of the capstone experience. Feedback supports student learning and professional development by helping teams understand how their work is perceived in real organizational contexts. While industry input contributes to assessment, it does not override faculty academic judgment. Final responsibility for evaluation and grading remains with faculty in accordance with institutional policy and applied degree standards.

7. FACULTY SUPERVISION

Faculty supervision in BUSI 450 is structured to ensure academic rigour, applied relevance, and alignment with program-level learning outcomes. The instructor serves as academic supervisor, mentor, and evaluator throughout the duration of the course, supporting students in the completion of both the individual self-actualization portfolio and the group-based applied research project. BUSI 450 instructors also collaborate with the program chair and make recommendations to the Program Advisory Committee regarding course improvement.

Faculty supervision includes the following responsibilities:

Academic Oversight and Project Direction

The instructor provides guidance on company selection, project scope, research methodology, data acquisition, analysis techniques, and professional standards appropriate to applied e-business research and portfolio development.

Structured Monitoring and Milestone Review

Instructor supervision is conducted through lectures, tutorials, and small-group mentoring sessions, including scheduled milestone reviews to monitor progress, ensure feasibility, and confirm alignment with course learning outcomes. A milestone review is a structured check-in to assess progress at a key point in the applied research project.

Quality Assurance and Standards Compliance

The instructor ensures that all student work meets institutional expectations for academic integrity, ethical research conduct, analytical rigour, and professional communication.

Formative Feedback and Iterative Development

Ongoing feedback is provided on interim submissions, drafts, presentations, dashboards, and portfolio components to support continuous improvement and refinement prior to final submission.

Team Management and Professional Conduct

Faculty monitor group dynamics, support effective collaboration, and provide guidance on conflict resolution, accountability, and professional project management practices as required.

8. STUDENT EVALUATION

Student evaluation in BUSI 450 is summative, outcomes-based, and designed to assess both individual competency development and collaborative performance in applied business contexts. Assessment methods reflect the integrative and professional nature of the capstone experience.

Evaluation is guided by the following principles:

Integration of Individual and Group Performance

Students are assessed on individual learning artifacts (self-actualization portfolio) and collective outputs (applied e-business research project), ensuring accountability for both personal achievement and team contribution.

Application of Theory to Practice

Evaluation emphasizes the ability to synthesize concepts, tools, and methodologies acquired throughout the program and apply them effectively to real-world business scenarios.

Process- and Outcome-Oriented Assessment

Both project execution (planning, research design, collaboration) and final deliverables (reports, dashboards, presentations) are evaluated.

External Industry Perspective

A designated portion of the applied research group project assessment incorporates evaluation by an external industry panel, providing validation of professional relevance, clarity, and practical value. The external industry perspective supplements but does not replace academic evaluation. Final responsibility for assessment and grading remains with qualified faculty, in accordance with

institutional policy and DQAB expectations. It is externally structured, transparent, and aligned with the course learning outcomes. It may take the form of structured feedback based on pre-approved assessment criteria, participation in review panels or presentation evaluations, or written or recorded evaluative commentary on applied deliverables.

External industry input is formally incorporated into the assessment process in a manner that is clearly defined, documented, and moderated. Its weight in the grade criteria is between 10 % to 20% according to the course syllabus. The faculty supervisor retains full academic authority and accountability for assessment and grading.

Transparency and Consistency

Detailed grading rubrics are provided for all major assessment components, outlining expectations related to analytical quality, research depth, communication effectiveness, professionalism, and teamwork.