

Financial Planning & Analysis. EMBA B7007 Summer 2022

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COURSE OVERVIEW AND OBJECTIVES

This course explores the use of financial information for internal planning, analysis, and decision-making. The main objective of the course is to equip you with the knowledge to understand, evaluate, and act upon the many financial and non-financial reports used in managing modern firms.

Managing any modern firm requires information about the firm's products, processes, assets, and customers. This information is a key input into a wide range of decisions: analyzing profitability of various products, managing product-line portfolios, setting prices, measuring and managing profitability of customers, making operational and strategic decisions, evaluating investments, guiding improvement efforts, and so on.

The focus of this course is on modern internal-reporting systems. We will discover that many firms do not provide their managers with useful information; we will see numerous examples of value destruction and bankruptcies caused by this. We will also investigate some modern ideas in how an organization's internal information system should be designed to enhance value creation; and we will see how world-class firms take advantage of their competitors' internal-reporting mistakes.

To attain the right level of understanding, we will briefly explore the mechanics of the many techniques used to prepare internal reports. But the emphasis in this course is very much on interpretation, evaluation, and decision-making.

We will examine the following key topics:

- Designing managerial information systems to support an organization's strategy.
- Determining which financial and non-financial metrics are necessary for internal control and for success in various competitive environments.
- Evaluating profitability of products, services, assets, and customers.
- The capabilities and the limitations of various reporting systems in guiding value-maximization, cost-control, and improvement efforts.
- The limitations of traditional cost-estimation systems.
- Activity-based costing and activity-based management.
- Estimating and managing the costs of capacity resources.
- Relevant costs and relevant revenues in business decisions.
- The information necessary to evaluate long-term business decisions.
- The incentives created by various performance-evaluation techniques. Balanced scorecards.

COURSE MATERIALS

The textbook is *Managerial Accounting*, by Garrison, Noreen, and Brewer, 16th edition. (Note that this is not the most recent edition of the textbook and is frequently available used at a low cost.)

Roughly half the course sessions will rely on pre-readings from this text. Also, for most course topics, I will suggest several problems from the text for self-study and self-evaluation.

Additional readings and cases are on Canvas. I will also provide extensive lecture notes (and post them on Canvas before each class session).

CLASSROOM NORMS AND EXPECTATIONS

Students are expected to adhere to CBS Core Culture in this class by being Present, Prepared, and Participating.

To prepare for class, you should go through the readings and prepare the case questions.

Case discussion will take up approximately half of the course. I have found that a mix of lectures, cases, and discussions provides an ideal interactive learning environment.

Students will be active participants in case discussions, providing summaries of issues, analyses, and recommendations. This requires you to prepare the case and reading assignments before class and to share your insights during class.

Note that many of the managerial problems we will address through cases will not have clear-cut or "correct" solutions; do not let this discourage you.

EVALUATION

The course grade will be based on class participation, two case write-ups, and a final exam:

- Class participation 15%;
- Case write-up: *Adapconn Technologies*, due at start of session 2 15%;
- Case write-up: *Falco Scooters (A)*, due at start of session 5 15%;
- Final exam: in person, online, 3 hours, dates to be determined 55%.

Case write-ups. Both case write-ups are Type B1 assignments: you may discuss the assignments with other students in the course, but must prepare and submit your own write-up.

Please upload your case write-ups on Canvas.

Both cases will be graded based entirely on **effort** in answering the case questions. The assignments will be forward-looking – you will work on topics that we will not cover until after the assigned case is due, and the case will then be the focus of our in-class discussion. Because we will cover each case in the session the day the case is due, I will not accept late write-ups (if you know of a conflict in advance, let me know, and we can find a solution).

*Please note: when preparing the case write-ups, you are **not** allowed to use lecture or case notes from previous sections of the course.*

Final exam. The final exam will be online, open-book, open-notes. The final exam will be available on Canvas; once you download the final exam, you will have 3 hours to submit it on Canvas. The date(s) the final exam will be available will be determined later. The exam is type C: it must be done individually without any discussion with anyone else.

The final exam will only cover topics, concepts, ideas, and examples that we specifically cover **in class**. To help you prepare, I will provide optional problems and solutions for self-study and self-evaluation during the course. These will include: (i) lower-level number-crunching problems from the textbook (these are in the course syllabus), and (ii) sample final exams with solutions (these will be on Canvas).

The case write-ups and the final exam are subject to the CBS Honor Code. Violations of the CBS Honor Code may lead to failing the assignment, failing the course, suspension, and/or dismissal.

FEEDBACK

I encourage you to provide feedback on class topics, content, and cases. I appreciate any concerns, questions, or opinions regarding the course. I would like to continue to improve this course; participants' feedback is critical.

INCLUSION, ACCOMMODATIONS, AND SUPPORT FOR STUDENTS

At Columbia Business School, we believe that diversity strengthens any community or business model and brings it greater success. Columbia Business School is committed to providing all students with the equal opportunity to thrive in the classroom by providing a learning, living, and working environment free from discrimination, harassment, and bias on the basis of gender, sexual orientation, race, ethnicity, socioeconomic status, or ability.

Columbia Business School will make reasonable accommodations for persons with documented disabilities. Students are encouraged to contact the Columbia University's Office of Disability Services for information about registration. Students seeking accommodation in the classroom may obtain information on the services offered by Columbia University's Office of Disability Services online at www.health.columbia.edu/docs/services/ods/index.html or by contacting (212) 854-2388.

Columbia Business School is committed to maintaining a safe environment for students, staff and faculty. Because of this commitment and because of federal and state regulations, we must advise you that if you tell any of your instructors about sexual harassment or gender-based misconduct involving a member of the campus community, your instructor is required to report this information to a Title IX Coordinator. They will treat this information as private, but will need to follow up with you and possibly look into the matter. Counseling and Psychological Services, the Office of the University Chaplain, and the Ombuds Office for Gender-Based Misconduct are confidential resources available for students, staff and faculty. "Gender-based misconduct" includes sexual assault, stalking, sexual harassment, dating violence, domestic violence, sexual exploitation, and gender-based harassment. For more information, see <http://sexualrespect.columbia.edu/gender-based-misconduct-policy-students>.

Course Calendar At-A-Glance

Date		Topic	Case to prepare
Friday May 13	1	Introduction to the course Managerial information systems: theory and practice	
Saturday May 14	2	Measuring and managing the costs of capacity Standard techniques and value destruction	<i>Adapconn (turn in)</i>
Friday May 20	3	Enhanced reports and value creation Activity-based costing	<i>Coffee Services Company</i>
Saturday May 21	4	Estimating and managing customer profitability	<i>Infinity Bank (A)</i>
Friday June 3	5	Decision analysis: Introduction Using reports for value-maximizing decisions	<i>Falco Scooters (A) (turn in by)</i>
Saturday June 4	6	Decision analysis: Investments and strategic issues Course wrap-up and takeaways	<i>Falco Scooters (B)</i>

Key Dates:

May 14: Individual assignment *Adapconn Technologies* case due at start of session 2

June 3: Individual assignment *Falco Scooters (A)* case due at start of session 5

Date to be determined: Final exam



Course Outline

Session 1. *Introduction to the course.*
Managerial information systems: theory and practice.

Friday, May 13

Topics

- Course objectives: yours and mine.
 - What information do managers need?
 - Reporting, strategy, and value.
 - Multiple objectives of internal-reporting systems.
 - Direct and absorption costing; normal costing.
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Textbook

Chapter 1, pages 24-40. Make sure you understand the terminology introduced in this chapter. You have seen many of these terms before; we will use many of them throughout the course.

Chapter 2, pages 67-82. You can skip low-level details such as: “Measuring Direct Materials Cost”, “Job Cost Sheet”, and “Measuring Direct Labor Cost” on pages 70-71.

Self-study Problems

Exercises 2-1; 2-3; 2-13.

Session Plan

Complexity of modern firms requires managers to rely on aggregated reports, both to make decisions and to manage processes and costs. To use these reports, you must understand how they are prepared. This requires you to comprehend how information is aggregated and presented. This is the main topic of the session.

We will also discuss the “big picture” of the course, course objectives (both yours and mine), and key dates in the course.

Sessions 2. *Measuring and managing the costs of capacity.
Standard techniques and value destruction. Adapconn.*

Saturday, May 14

Topics

- Costs of capacity: measuring and managing.
- Allocating capacity costs using practical and budgeted capacity utilization.
- Internal controls to manage excess capacity.
- The “death spiral” – dangerous reporting-system-induced phenomenon in cyclical industries.

**Prepare and
turn in by
start of
session 2**

Case study *Adapconn*. Address the questions in the case. **Note:** We will work on the case in class. Make sure you read the case carefully and work through the questions; please do not feel that you need to get the “right” answers.

The write-up will be graded based entirely on **effort**.

Session Plan

We will spend most of the session discussing the *Adapconn* case and suggested enhancements to *Adapconn*’s reporting system.

Session 3. **Enhanced reports and value creation.**
Activity-based costing. Coffee Services Company.

Friday, May 20

Topics	<ul style="list-style-type: none"> ▪ Enhanced reports and value creation. ▪ Activity-based costing. ▪ Differences from and advantages over “traditional” costing systems. ▪ Hierarchy of activities. ▪ Translating activity-based costing into improved profitability.
Textbook	Chapter 7, pages 310-334. <i>Do not get overwhelmed by the details</i> ; we will clarify the main ideas in the class session.
Prepare	<i>Coffee Services Company</i> case. This is a very easy case. Get to know the facts and think through the two questions in the case.
Self-study Problems	Exercises 7-4; 7-5; and the review problem on pages 336-337.
Session Plan	<p>We will begin our discussion of activity-based costing (ABC) and activity-based management (ABM). These information-system tools are now generally accepted as solutions to many of the problems of “traditional” reporting systems.</p> <p>However, there is no general agreement about how ABC and ABM should be designed and implemented for a given firm. Even more problematically, there is no general agreement about what an economic model of the firm must include to qualify for the title <i>activity-based</i>.</p> <p>We will investigate exactly how ABC and ABM differ from the “traditional” systems. We will also look at what the activity-based models have to offer firms. Along the way, we will focus on several disadvantages of the “modern” systems.</p> <p>We will do most of this in the context of the <i>Coffee Services Company</i> case.</p>

**Session 4. Estimating and managing customer profitability.
Infinity Bank (A).**

Saturday, May 21

Topics

- Customer profitability and customer life-time value.
- Actions to manage profitability of products and customers.
- Translating reporting innovations into shareholder value.
- Using management reports to make business decisions.

Read

I will post several readings on Canvas.

Prepare

Case study *Infinity Bank (A)*. Address the following questions:

1. Summarize Infinity Bank's competitive environment. What are the major issues facing the bank? How has the bank performed in 1998-2003?
2. What were the conclusions of the product-profitability project? What were the surprises?
3. What are the potential advantages of the "supermarket" strategy? What are the potential disadvantages of the strategy?
4. What are the objectives of customer-profitability analysis (at Infinity and in general)? What does it add to the product-profitability system? Is it important? How should Philippa Smith's customer-profitability pilot study be improved / extended?
5. What were the conclusions of Philippa Smith's customer-profitability pilot study? What were the major sources of variation in customer profitability?
6. Examine the customer-profitability database. Construct a graph to communicate the profitability of the 2,205 customers in the *Weighted Sample* sheet, ranked from best to worst.
7. Given the customer-profitability analysis, does the "supermarket" strategy make sense?
8. How should the bank use the customer-profitability information? What should we do about the large number of unprofitable customers?
9. Overall, what are your recommendations for Infinity Bank's managers?

NOTE: See the course web site for Excel spreadsheet with case data.

Session Plan

We will spend our time in class focusing on customer-profitability analysis and the *Infinity Bank (A)* case.

Session 5. Decision analysis: Introduction.
Friday, June 3
Using reports for value-maximizing decisions. Falco (A)
Topics

- Contribution margin ratio (CMR) analysis.
- Degree of operating leverage (DOL) analysis.
- Relevant costs and relevant revenues.
- Opportunity costs.
- Routine and non-routine business decisions.

Textbook

Contribution Margin Ratio (CMR) and Degree of Operating Leverage (DOL) are two techniques used by firms that use cost-volume-profit (CVP). You have seen CVP analysis in other courses. Chapter 5 (pages 196-214) provides a good summary of this analysis tool; read this if you need a review of CVP.

Chapter 12 (pages 560-581) provides a nice, if tedious, background for our analysis of decisions.

Prepare and turn in by start of session 5

Case study *Falco Scooters (A)*. Address the questions in the case. **Note:** We will work on the case in class. Make sure you read the case carefully and work with the numbers; please do not feel that you need to get the “right” answers.

The write-up will be graded based entirely on **effort**.

Self-study Problems

From Chapter 5: Exercise 5-4. Problem 5-23.

From Chapter 12: Exercises 12-3; 12-4. Problem 12-23.

Session Plan

We will first review two decision-analysis tools frequently used (and misused) in practice: Contribution Margin Ratio (CMR) and Degree of Operating Leverage (DOL).

We will then discuss using internal reports – good or bad – to support value-maximizing decisions. We will do a number of examples, focusing on the following question: how do we use various management reports to extract data and analyze implications of decisions? We will then analyze the *Falco Scooters (A)* case.

Session 6. ***Decision analysis: Investments and strategic issues. Falco (B).***
Course takeaways.

Saturday, June 4

Topics

- Implications of changes in inventories, receivables, payables, and other assets.
- Investments and performance measurement.
- Incorporating erosion and cannibalization.
- Strategic issues.
- Balanced scorecards.

Textbook

Chapter 11, pages 483-486 on *residual income* and *EVA*[®]. This is useful for doing the *Falco Scooters (B)* case.

Prepare

Case study *Falco Scooters (B)* case. Address the questions in the case. You will need to use ideas from corporate finance and managerial economics to address the case.

**Session
Plan**

In the first hour, we will analyze the *Falco Scooters (B)* case.

We will then review the key takeaways and wrap up the course.