MBA Assessment Report: Systems Thinking, Value-Chain Analysis

To assess the learning goals of **Systems Thinking & Critical Analysis** and **Value-Chain Analysis**, a team of 6 assessors rated 10 students' final case exams from the Fall 2008 BA 850 course.

The assessment team consisted of the following persons:

- John Levendis, Economics
- Patrick Lynch, Accounting
- Brett Matherne, Management
- Stephanie Mansfield, Asst. MBA Director
- Kendra Reed, MBA Director / Management
- Nate Straight, Assessment Coordinator

Each student's case exams were rated on a 0-2 scale on a total of 12 dimensions of these two learning goals. 0 represented a student that "failed expectations"; 2 represented "exceeded."

The overall assessment results, by dimension, are as follows:

Observable Dimensions of Learning Goals	Fails	Meets	Exceeds	M or E
1. Understanding of the value proposition / strategy	1	4	4	89%
2. Understanding of the strategic fit / market position	2	3	4	78%
3. Understanding of the firm's resources / capabilities	1	7	1	89%
4. Understanding of the value-chain activities leveraged	3	4	2	67%
5. Understanding of the nature of the business problem	2	2	6	80%
6. Ability to integrate many diverse business perspectives	1	6	3	90%
7. Ability to communicate and defend solution and risks	2	7	1	80%
8. Ability to approach business problems strategically	2	6	2	80%
9. Understanding of forces driving / changing industry	2	4	4	80%
10. Understanding of business model used by the firm	2	5	3	80%
11. Understanding of overall competitive environment	2	5	3	80%
12. Understanding of capabilities leveraged by strategy	0	6	4	100%

The dimensions map onto learning goals or objectives as follows:

Learning Goal: Value Proposition & Value-Chain	Fails	Meets	Exceeds	M or E
1. Analyze the external environment (# 9 - 11)	2	5	3	80%
2. Analyze the internal structure / strategy (# 1 - 3)	2	4	3	78%
3. Create strategic plan based on value-chain (# 4, 12)	1	4	4	89%

Learning Goal: Systems Thinking & Critical Analysis	Fails	Meets	Exceeds	M or E
1. Identify the business problem to be solved (# 5)	2	2	6	80%
2. Explore multiple approaches to solving problem (# 6)	1	6	3	90%
3. Communicate & defend a recommended solution (# 7)	2	7	1	80%
4. Demonstrate strategic foresight / critical analysis (# 8)	2	6	2	80%

In addition to the quantitative results above, the raters made these qualitative observations:

Qualitative Observations of Positive Behaviors

- Students seemed to be adept at "cutting through" the case information to find the real business issue; they were able to frame the problem well using the data provided.

Qualitative Observations of Negative Behaviors

- Students did not always grasp the "flip-side" or drawbacks of their proposed solution.
- Students focused too much on some aspects (quality, regulation, etc) of international business decisions to the exclusion of other important considerations (labor cost, etc).
- Students did not appreciate a "follow the leader" strategy as a competitive threat.
- Students identified business dilemmas well, but were unable or reluctant to take a strong stance on either side of the issue and instead only presented "pro's & con's".
- Students did not synthesize knowledge well and wrote only what they were taught.
- Students utilized skills from various business functions adequately, but were unable fully to integrate the functions or see the effect of each function on all of the others.

The assessment team identified the following key learning areas for potential improvement:

1. Ability to approach a business problem with a comprehensive strategic perspective
2. Ability to make a decision concerning a business problem and defend it convincingly
3. Ability to realistically describe the consequences, justification, and risks of a scenario

In order to improve student learning in these key areas, the team recommends the following:

Area #1: Comprehensive Strategic Perspective

- Improve teaching of business integration with team teaching or cross-function lectures.
- Be more intentional toward learning by tying course learning goals to overall learning goals related to integration of business processes / business systems; incorporate at least 1 learning goal or assignment, in key functional area courses, that is specifically targeted toward that function's role in strategy and relationship to other functions.

Area #2: Ability to Communicate & Defend a Decision

- Assign more professional business presentations, focused on the convincing and persuasive communication of business ideas / decisions, in other MBA core courses.
- Incorporate managerial skills / mindset from communication workshop into capstone.

Area #3: Realistic Understanding of Business Scenarios

- Offer real-world perspective by inviting more guest lecturers from business community.
- Utilize more assignments or projects that require students to work closely with local businesses or entrepreneurs to solve real-world business problems for real firms.

The assessment worked well, but could be improved. Data summarizing the process is below:

Raw Inter-Rater Reliability by Observed Dimension	% Score Pairs Match
1. Understanding of the value proposition / strategy	38%
2. Understanding of the strategic fit / market position	55%
3. Understanding of the firm's resources / capabilities	48%
4. Understanding of the value-chain activities leveraged	55%
5. Understanding of the nature of the business problem	42%
6. Ability to integrate many diverse business perspectives	42%
7. Ability to communicate and defend solution and risks	62%
8. Ability to approach business problems strategically	47%
9. Understanding of forces driving / changing industry	47%
10. Understanding of business model used by the firm	44%
11. Understanding of overall competitive environment	56%
12. Understanding of capabilities leveraged by strategy	49%

Raw Inter-Rater Reliability by Goal (Value Chain)	% Score Pairs Match
1. Analyze the external environment (# 9 - 11)	49%
2. Analyze the internal structure / strategy (# 1 - 3)	47%
3. Create strategic plan based on value-chain (# 4, 12)	52%

Raw Inter-Rater Reliability by Goal (Systems Thinking)	% Score Pairs Match
1. Identify the business problem to be solved (# 5)	42%
2. Explore multiple approaches to solving problem (# 6)	42%
3. Communicate & defend a recommended solution (# 7)	62%
4. Demonstrate strategic foresight / critical analysis (# 8)	47%

With a rating scale of 0-2, the expected level of inter-rater agreement by chance is around 33%. All of the observed dimensions or learning goals display at least some level of internal reliability.

In addition to improvements to learning, the team recommends these process improvements:

- The data is not robust enough for longitudinal comparisons; more raters, a larger scale, greater inter-rater reliability, or a larger student sample could improve the robustness.
- The assessment questions and rating category prompts are too broad; a narrower, more focused wording of dimensions such as 1, 3, 5, 6, 10, & 12 would improve validity.
- It was difficult to judge student's performance from such a small writing sample; a single, comprehensive case analysis would be more appropriate as a domain for assessment; the instructor may need to develop such a case specifically for this purpose / task.
- It was difficult for faculty who had no experience with strategy / policy / value-chain analysis to understand what was asked by some of the assessment questions; it would help to provide a brief list of terms / definitions along with the assessment rating sheet.