Stevens Institute of Technology

School of Business

**AACSB
ASSURANCE OF LEARNING**

**Master of Science in Information Management**

**LEARNING GOAL #3**

**Students will be able to formulate and articulate plans to align business and IT**

**Responsibility:** Michael Parfett

December 2021

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# 1. INTRODUCTION: LEARNING GOAL #3

*Students will be able to formulate and articulate plans to align business and IT.*

This goal is assessed in MIS 760 IT Strategy: Strategic Issues in IT Management, which is one of the required courses in the MIS core curriculum. This learning goal helps students to understand the relationship between IT and the business and the value that IT can bring to the business in enabling competitive positioning. In MIS760, the students have the opportunity to develop strategies to create alignment. This requires a top-level view of the organization, creative thinking, and the development of strategic initiatives for the business.

The current version of the course uses a newly designed assignment that is focused on the key objectives of alignment, partnership and how IT drives business improvement and competitive advantage.

A key goal here is to enable the student to establish new viewpoints in two key areas: 1) they must think like a top executive (which for most of them is several levels above their current position (if they have any work experience at all) and 2) they must think outside of the IT organization (which is also difficult since the majority of our students have primarily IT experience). As a result, they are exercising their creativity and innovative thinking far beyond what they have done to date in their education or work experience.

In addition, there are **specific competencies** that are needed in strategy development that this goal will address. The skills that are targeted are communication, ability to see the big picture, problem solving ability, analytic skills, leadership ability.

# 2. LEARNING OBJECTIVES AND TRAITS

The following is currently used:

|  |
| --- |
| **Objective 1:** *Students recognize the role of the CIO as a corporate executive and leader and the IT organization as a contributor to the strategic direction of the firm.* |
| **Traits** |   |
| Trait 1: | The student learns to think strategically beyond the IT function alone – ability to see the big picture |
| Trait 2: | The student understands how to develop an IT strategy that aligns with the business strategy – problem solving ability |
| Trait 3: | The student demonstrates creative, analytic and innovative thinking |
| Trait 4: | The student articulates the way in which technology enables business strategy i.e., drives business improvement and leads to a competitive advantage |
|  |  |
|  Trait 5: | The student demonstrates how they would forge a partnership with the business – leadership ability |
|   |  |
|  |  |
|  Trait 6: | The document is well written, demonstrating good communication skills |

# 3. RUBRICS

|  |
| --- |
| **Objective 1:** *Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm.* |
|   | **Trait** | **Poor (0-6)** | **Good (7 - 9)** | **Excellent (10)** | **Score** |
|   | **Value** | **0** | **7** | **10** |  |
| Trait 1: | The student learns to think strategically beyond the IT function alone – ability to see the big picture | Focus remains on IT alone | Alignment between business and IT is articulated | Innovative ideas are brought forth |   |
| Trait 2: | The student understands how to develop an IT strategy that aligns with the business strategy;Demonstrated problem solving ability | The understanding of alignment is poor, incremental change | The understanding clearly shows a relationship between IT and business | The understanding goes beyond commonplace thinking and demonstrates insight into the future of the firm |   |
| Trait 3: | The student demonstrates creative, analytic and innovative thinking | Thinking is incremental | Some elements of the analysis process show radical change | The recommended strategies present a clear opportunity for competitive advantage |   |
| Trait 4: | The student articulates the way in which technology enables business strategy, in particular demonstrates how IT drives business improvement the leads to a competitive advantage | Relationship between IT and business strategy is not clear | Clear link between IT and business strategy is shown | The alignment of IT & business through strategy will provide competitive advantage. |   |
| Trait 5: | The student demonstrates how they would forge a partnership with the business – leadership ability | Doesn’t show a real understanding of how to build a partnership | Shows good elements of how to build a partnership | Demonstrates how they would build a true partnership with the business |  |
|  Trait 6: | The document is well written demonstrating good communication skills | The ideas are not clearly stated; the sentence structure and grammar are poorly done | The ideas are well presented; the sentence structure and grammar are correct | A good writing style is displayed; easy to understand; all English constructs are mastered |  |
| **Criterion: Does not meet expectations: 0 – 44; Meets: 45-59 ; Exceeds: 60**  |

# 4. ASSESSMENT PROCESS

|  |  |  |
| --- | --- | --- |
| **Where and when measured?** | **How measured?** | **Criterion** |
| Course-embedded analysis assignment in required in course *MIS 760 IT Strategy: Strategic issues in IT management. A direct measurement –* Assessment will be done in the fall semester each year.Indirect measurements will be taken periodically.  |  MIS 760 students from all sections of course. Individual written project.Indirect measure - competitions, exit surveys, advisory board feedback … | 90% of students get a grade of meets or exceeds expectation on the assessment assignment as measured by the rubric for this learning goal. |

# 5. RESULTS OF LEARNING GOAL ASSESSMENT - INTRODUCTION

The results of the learning goal assessments carried will be included below.

**Explanation for direct measurements:**

The learning goal has a learning objective which is measured using a rubric that in turn contains a number of desired “traits”. Students are scored on each trait.

The grading sheets for each student are used to develop a Summary Results Sheet for each learning goal objective. A selection of these Summaries is included below.

The first table in the Summary Results Sheet for a learning objective and trait gives the counts of students falling in each of the three categories:

- Does not meet expectations
- Meets expectations
- Exceeds expectations

The right-hand column in the table is used to record the average score of the students on each trait. This table provides an indication of the relative performance of students on each trait.

The second table on each sheet provides the counts of students who fall in each of the above three categories for the overall learning objective.

The person doing the assessment provides explanatory comments and recommendations on the bottom of the Results Summary Sheet. The recommendations improve content or pedagogy changes for the next time the course is given.

**Explanation for indirect measurements:**

Indirect measurements will be taken at periodic intervals. Depending on the measurement chosen a diagnostic tool will be selected for analysis.

#  6. Assessment Fall 2021:

NOTICE THAT THE DIRECT ASSESSMENT IS DONE FOR ON CAMPUS; WEBCAMUS AND COMBINED

WE WILL START ASSESSMENTS IN FALL OF 2021

## The direct measurement is the written assignment

1. A indirect measurement is use periodically. These could include: competitions, exit surveys, alumni surveys, advisory council feedback, employer input, career fair feedback, focus groups, interviews …

# RESULTS OF ASSESSMENT: Fall 2021

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: MIS760A – 11/15/21 ASSESSOR: Professor Parfett**

 **MIS760B – 11/8/21**

**NO. OF STUDENTS TESTED: (11; 27) Combined = 38**

**COURSES: MIS760A and MIS760B(campus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions 0 - 6** | **Meet Expectat-ions 7-9** | **Exceed Expectat-ions 10** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone – ability to see the big picture** |  **0** | **6** | **32** | **9.7** |
| **The student understands how to develop an IT strategy that aligns with the business strategy – demonstrated problem solving ability** | **3** | **7** | **28** | **9.3** |
| **The student demonstrates creative, analytic and innovative thinking**  | **2** | **7** | **29** | **9.4** |
| **The student articulates the way in which technology enables business strategy, in particular demonstrates how IT drives business improvement and leads to a competitive advantage** |  **15** | **11** | **12** | **7.4** |
| **The student demonstrates how they would forge a partnership with the business – leadership ability** | **12** | **10** | **16** | **8.2** |
| **The document is well written demonstrating good communication skills** |  **2** | **10** | **26** | **9.18** |
| **Average Grade (Maximum 10)** |  |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* |  **6** | **26** |  **6** |
| **Students meeting or exceeding expectations:****Target is 90%** | **84** |

**NO. OF STUDENTS TESTED: 11 COURSE: MIS760WS (Webcampus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone – ability to see the big picture** | **0** | **2** | **9** | **9.55** |
| **The student understands how to develop an IT strategy that aligns with the business strategy – demonstrated problem solving ability** | **0** | **0** | **11** | **10** |
| **The student demonstrates creative, analytic and innovative thinking** | **0** | **2** | **9** | **9.55** |
| **The student articulates the way in which technology enables business strategy, in particular demonstrates how IT drives business improvement and leads to a competitive advantage** | **1** | **3** | **7** | **8.8** |
| **The student demonstrates how they would forge a partnership with the business – leadership ability** | **2** | **1** | **8** | **8.45** |
| **The document is well written demonstrating good communication skills** |  **0** | **2** | **9** | **9.55** |
| **Average Grade (Maximum 10)** |  |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **1** | **5** | **5** |
| **Students meeting or exceeding expectations:****Target is 90%** | **91** |

**NO. OF STUDENTS TESTED – All courses: 49 COURSES: MIS760A, MIS760B, MIS760WS**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions 0 - 6** | **Meet Expectat-ions 7-9** | **Exceed Expectat-ions 10** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone – ability to see the big picture** |  **0** |  **8** |  **41** |  **9.6** |
| **The student understands how to develop an IT strategy that aligns with the business strategy – demonstrated problem solving ability** |  **3** |  **7** |  **39** |  **9.43** |
| **The student demonstrates creative, analytic and innovative thinking**  |  **2** |  **9** |  **38** |  **9.43** |
| **The student articulates the way in which technology enables business strategy, in particular demonstrates how IT drives business improvement and leads to a competitive advantage** |  **16** |  **14** |  **19** |  **7.7** |
| **The student demonstrates how they would forge a partnership with the business – leadership ability** |  **14** |  **11** |  **24** |  **8.33** |
| **The document is well written demonstrating good communication skills** |  **2** |  **12** |  **35** |  **9.3** |
| **Average Grade (Maximum 10)** |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category*(Based on Average score across all traits)*** |  **7**  |  **31** |  **11** |
| **Students meeting or exceeding expectations:****Target is 90%** |  **86** |

**Comments:**

The results for traits 1,2,3,6 are excellent across all 3 courses. Traits 4 (competitive advantage) and trait 5 (forging a partnership) do need improvement. These 2 traits are critical to the course and the understanding of the golden tread emphasized throughout the course.

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**REMEDIAL ACTIONS:**

We are going to need to enhance the way partnership and competitive advantage are addressed in this course. We will add some additional research and present it in class. As well as add reading materials that address these topics and discuss it in class. Additionally, we will add an individual written assignment that will be hand in for grading about the midpoint of the course.

# 7. Outcomes from Previous Assessments:

**OUTCOMES: MSIS LEARNING GOAL # 3 AFTER ROUNDS OF ASSESSMENT**

After the Review Fall 2021

Competencies (knowledge, skills, abilities) addressed in this course:

* Trait 1 – ability to see the big picture – this skill was well understood
* Trait 2 – demonstrated problem solving ability – this skill was well understood
* Trait 3 – demonstrates creative, analytic and innovative thinking – this trait was well demonstrated
* Trait 4 – IT drives business improvement that leads to a competitive advantage – this not well understood by 16 of the 49 students.
* Trait 5 – forge a partnership with the business and demonstrate leadership ability – this trait needs improvement, 14 of the 49 students did not address this skill appropriately
* Trait 6 – communication skills, in particular written skills – most of the documents were well written

Mode of delivery evaluation:

The 2 modes of delivery of MIS760 were on campus and web campus. In evaluating these 2 modes the results were:

 On campus Web campus

|  |  |  |
| --- | --- | --- |
| Trait 1  |  9.7 |  9.55 |
| Trait 2 |  9.3 |  10 |
| Trait 3 |  9.4 |  9.55 |
| Trait 4 |  7.4 |  8.8 |
| Trait 5 |  8.2 |  8.45 |
| Trait 6 |  9.18 |  9.55 |

The web campus students faired better in 5 of the 6 traits. The course is taught exactly the same in both delivery modes. The main reason for the scoring, is the web campus students had significantly more work experience and most of them are currently working in the Information Technology disciplines. The only reason they did not exceed in all 6 traits is the class size for the web campus course was 11 and 2 of those students had health issues throughout the semester so could be active participants for several weeks.

As far as the mode of delivery there is nothing to change.

The following table shows the average scores on each goal objective over time

|  |  |
| --- | --- |
|  | Objective 1 – students recognize the role of the CIO as a contributor to the strategic direction of the firm |
| Fall 2021 | 86 |
|  |  |

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# 8. Close Loop Process – Continuous Improvement Record

**Assurance of Learning**

**Assessment/Outcome Analysis**

**Close Loop Process - Continuous Improvement Record**

**Program:** Master of Science in Information Systems

**Goal 3:** Students will be able to formulate and articulate plans to align business and IT

**Goal Owner:** Michael Parfett

**Where Measured:** Course-embedded analysis assignment in required course *MIS 760 IT Strategy : Strategic issues in IT management.* Assessed in the fall semester each year.

**How Measured:**  MIS 760 students from all sections of course: Individual written project.

**Closing the Loop: Actions taken on specific objectives**

|  |  |
| --- | --- |
| **Objective 1** | Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm |
| **When** **Assessed** | Fall 2021 |
| **Remedial****Action**  | We are going to need to enhance the way partnership and competitive advantage are addressed in this course. We will add some additional research and present it in class. As well as add reading materials that address these topics and discuss it in class. Additionally, we will add an individual written assignment that will be hand in for grading about the midpoint of the course.  |
| **Outcome from previous assessment** | THIS WILL BE BLANK FOR THE FIRST ASSESSMENT |
|  |  |

# Appendix A:

# Currently used

A multiple page assignment that addresses the students’ understanding of IT and business alignment of strategies as well as how to build a true partnership with the business, which drives business improvement and leads to a competitive advantage.