

MICHIGAN TECHNOLOGICAL UNIVERSITY

School of Business and Economics

Strategic Plan 2000-2010

**Submitted to
MTU Strategic Planning Group**

February 7, 2000

SBE VISION STATEMENT AND MISSION STATEMENT

SBE VISION STATEMENT

"To be recognized as a standard of excellence in the education and development of future business leaders uniquely qualified to manage in a technologically oriented workplace."

SBE MISSION STATEMENT

"The mission of the SBE is to educate undergraduate students in business administration and economics. The SBE will draw students primarily from Michigan's Upper Peninsula and its surrounding region or from transfers and dual majors within MTU. The educational experience will be distinguished by personal attention and guidance to students, a commitment to quality education and continuous improvement, and an emphasis on teamwork, information resources, and the link between the business and technology functions of organizations. Faculty are expected to emphasize quality teaching and the development of excellence in teaching methods, while maintaining a strong commitment to research and service.

SBE SWOT ANALYSIS

The following SWOT analysis constitutes the most significant strengths, weaknesses, opportunities and threats in four critical areas: Instruction & Learning, Faculty Scholarship, Students, and overall Assets available to the SBE.

SBE INSTRUCTION & LEARNING

<p>STRENGTHS</p> <ul style="list-style-type: none"> ▪ Revised curriculum with rigorous business core, technology core, and focussed concentrations ▪ New faculty ▪ Personalized attention through small classes and advising ▪ SBE Computer Lab 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> ▪ Reliance on one-time funding (e.g. open lines) to meet ongoing program expenses ▪ No flagship programs: weak identity on campus ▪ No graduate programs
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> ▪ Industry partnerships ▪ Interdisciplinary programs (e.g. Engineering Enterprise) 	<p>THREATS</p> <ul style="list-style-type: none"> ▪ Physical infrastructure ▪ Increasing expectations for SBE instruction from other units (Eng. Dual degree; CS; School of Technology) without accompanying resources ▪ Competitive market for new faculty

SBE STUDENTS

<p>STRENGTHS</p> <p>Recruiting:</p> <ul style="list-style-type: none"> ▪ Funding: \$10,000 of General Fund Budget resources dedicated to recruiting ▪ Faculty Committee and Full-time Director of Academic Services responsible for recruiting ▪ Gender diversity in students and faculty <p>Student Support:</p> <ul style="list-style-type: none"> ▪ Full-time Director of Academic Services provides advising for underclassmen ▪ Faculty interaction <p>Student Placement:</p> <ul style="list-style-type: none"> ▪ Good reputation of students with employers 	<p>WEAKNESSES</p> <p>Recruiting</p> <ul style="list-style-type: none"> ▪ Lack of identity: No flagship program ▪ Expensive tuition compared to competition ▪ Outdated physical facilities <p>Student Support:</p> <ul style="list-style-type: none"> ▪ Limited technology-based classroom facilities <p>Student Placement:</p> <ul style="list-style-type: none"> ▪ Limited relationships with employers ▪ No personnel dedicated to placement
<p>OPPORTUNITIES</p> <p>Recruiting:</p> <ul style="list-style-type: none"> ▪ Internal transfers ▪ Out-of-state students in top 25% of H.S. class get in-state tuition <p>Student Support:</p> <ul style="list-style-type: none"> ▪ Alumni donors ▪ Industry partnerships <p>Student Placement:</p> <ul style="list-style-type: none"> ▪ AACSB Accreditation ▪ Growing economy 	<p>THREATS</p> <p>Recruiting:</p> <ul style="list-style-type: none"> ▪ Student perception of MTU as only an engineering school ▪ Other business schools in market area <p>Student Placement:</p> <ul style="list-style-type: none"> ▪ Economic downturn ▪ Competition from better-known business schools closer to employers ▪ MTU Career Center focus on engineering

SBE SCHOLARSHIP

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Research-active faculty: diverse interests, joint projects, technological expertise ▪ Internal review (merit raises, promotion & tenure) linked to research output ▪ 	<ul style="list-style-type: none"> ▪ Low internal and external funding of research ▪ Little instructional development scholarship ▪ No graduate program (no research assistants)
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ▪ Industry partnerships ▪ Increasing emphasis on interdisciplinary research 	<ul style="list-style-type: none"> ▪ Low and unpredictable merit raise pool (rewards for research productivity) ▪ Available information resources (research collections, databases)

SBE ASSETS

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ CenTile – endowed chairs -\$3 million commitment ▪ Tidwell Center for Business Student Excellence (Endowed scholarships, student study area, support for student organizations, etc.) - \$800,000 commitment 	<ul style="list-style-type: none"> ▪ Reliance on one-time funding (e.g. open lines) to meet ongoing program expenses ▪ Lack of senior faculty in MIS, Accounting, and Finance ▪ Insufficient classroom, office, and lab space – A new building with modern classrooms is needed. ▪ Small unrestricted endowment fund
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ▪ Fundraising for endowment, new building ▪ SBE advisory board 	<ul style="list-style-type: none"> ▪ Ongoing need to update information technology ▪ Limited MTU budget for growing programs

SBE – CURRENT GOALS

- Secure sufficient resources to effectively achieve the objectives of the SBE mission.
- Continue to follow established SBE review and development processes to ensure the School's mission is appropriate to higher education for business and management and compatible with the mission of the University.
- Recruit and select new faculty consistent with the School's mission. In addition, seek to achieve a demographically diverse faculty.
- Maintain a full-time faculty sufficient to provide stability and ongoing quality improvement for the degree programs offered by the School.
- Maintain a faculty that has sufficient academic and professional qualifications to accomplish the School's mission.
- Develop curricula which provides an understanding of perspectives that form the context of business e.g., global, ethical, diversity, technological issues, et al.
- The SBE curriculum should include foundation knowledge for business in: accounting, behavioral science; economics; mathematics and statistics. Further, SBE concentrations should be consistent with its mission and available resources.
- The SBE should provide and effectively manage resources to meet the instructional responsibilities created by the programs offered.
- The SBE should select students consistent with its mission. It should also demonstrate a continuous effort to achieve demographic diversity in its student enrollments.
- SBE students should receive assistance in making career decisions and in seeking employment following completion of their degree program(s).
- SBE faculty should make intellectual contributions on a continuing basis appropriate to the School's mission.
- Achieve accreditation by AACSB – International Association for Management Education

SBE - CURRENT STATUS

Students, Teaching and Learning

Degree and Certificate Programs

- Bachelor of Science in Economics (BSE) and in Business Administration (BSBA)
- Dual degrees in BSBA program and in BSE program
- Certificates in International Business and in Forestry.
- Master of Science in Mineral Economics

BSBA Concentrations

- Finance
- Accounting
- Industrial Management and Marketing (IMM)
- Management Information Systems (MIS).

Students

Enrollments

Total Number of Students Winter, 1999-2000: 340 (BSBA 330; BSE 9; and MSME 1)

Of the 330 BSBA degree students, concentration enrollments are as follows: Accounting - 26,

Finance - 23 Management Information Systems - 109, Industrial Marketing and Management -

70 and Undeclared - 102. Additionally, the SBE houses 87 Dual Degree majors not included in the 340 total above.

Diversity

- 5 percent of student are minorities.
- 11 percent are international students.
- 45 percent are women.

Faculty and Faculty Performance

Faculty Composition

- Full time faculty currently include ten professors, six associate professors, nine assistant professors and two lecturers.
- Twenty-four percent of faculty are women and 14 percent are ethnic minorities.
- Currently, the faculty consists of 6 persons who joined the SBE in the 1970s, 8 who joined the SBE in the 1980s, and 13 who joined the faculty in the 1990s.
- Full time faculty by SBE functional area (1999-2000) are: Accounting (3), Economics (6), Finance (2), Industrial Marketing and Management (12) and Management Information Systems (3). The Dean and Associate Dean are not counted in the above totals. Additionally, 4 part-time and executive-in-residence faculty participated in classroom instructional activities.

Faculty Teaching

SBE teaching loads and credit hour generation based on semesters follow. These data indicate the effect of student growth on teaching efforts in the last five years.

Average Annual Teaching Loads (Semester Credits/Year) for Full-time Faculty, 1995-96 to 1999-2000 by Functional Area

	1995-96	1996-97	1997-98	1998-99	1999-2000
Accounting	13.3	13.3	13.0	15.0	16.9
Finance	13.3	11.7	12.3	11.5	12.0
Marketing	10.3	9.33	11.0	12.2	12.0
Management	12.1	12.1	11.8	13.0	12.9
MIS	11.5	11.3	10.7	13.5	11.1
Economics	11.2	11.1	11.5	13.9	13.3

Student Credit Hour Generation Per Term per FTE, 1995-96 to Winter 1999-2000

BA and Economics Faculty	1995-96	1996-97	1997-98	1998-99	Fall & Winter 1999-2000
FT Business Faculty	166	178	139	211	189
FT Economics Faculty	319	307	362	357	422
All SBE FT Faculty	211	239	199	250	256

Faculty Scholarship

Faculty in the School of Business and Economics have been active in research and publications as indicated in the following table. Plans and processes to allow a continuation of these efforts are discussed in the next section outlining the SBE Plan For 2000-2010.

Total and Average* Annual SBE Faculty Intellectual Contributions by Category and Concentration, 1995-2000

	Articles	Proceedings	Books, Chapters	Other Pubs.	Presentations	Grants	Total	Annual Average
Economics	16	9	4	4	18	4	55	1.72
Accounting	14	4	2	23	13	1	58	3.87
Finance	12	2	0	1	7	2	24	2.67
IM&M	50	51	24	29	45	14	213	3.70
MIS	9	7	1	0	6	10	33	2.75
Total	102	71	31	57	89	31	383	3.05

Facilities and Assets

Technology

- 46 computerized workstations for student use, 41 workstations for faculty and staff and two portable machines and projectors for instructional purposes
- Fully networked Pentium class equipment with the exception of one Mac-based machine used by a faculty member
- Pentium-based servers running the Windows NT Operating System providing file services. Additional access and services are also available from Solaris-based Sun file servers.
- Six shared printers placed throughout the SBE and individual printers housed in faculty members' offices provide network printing services.
- A recent University Research Excellence Fund grant has enabled the SBE to open a research-directed facility for computational finance that is available for use by the SBE's faculty and students. This facility houses its own servers and student workstations.

Building

- The SBE currently shares a building with the Department of Social Sciences, the Department of Education, the Center for Teaching and Faculty Development and the Vice Provost for Instruction.

Endowments

- \$2 million commitment for endowed chair in the business of technology
- \$1 million commitment for endowed distinguished professorship in the area of entrepreneurship
- \$800,000 in commitments to endow the Sam B. Tidwell Center for Business Student Excellence (scholarships, mentoring, study area facility, etc.)

Finances and Budget

The university has provided the General Fund budget allocations required for the SBE to pursue AACSB accreditation. However, General Fund SS&E allocations have by themselves not been sufficient to provide for faculty support and activities at a level commensurate with the SBE mission. Shortfalls in SS&E funds in recent years have primarily been made up with money from unfilled faculty lines. Unless corrective action is taken, the filling of the faculty lines (AACSB plan requirement) will result in insufficient availability of operating funds necessary to provide for faculty support and activities at a level commensurate with the SBE mission.

SBE PLAN FOR 2000 - 2010

Introduction

This strategic plan 2000 - 2010 is based on current vision and mission statements of the SBE, as well as on the analysis of its strengths, weaknesses, opportunities and threats (SWOT). The future SBE goals and respective strategies below are presented in order of their priority within the following categories: Instruction and Learning, Scholarship, Students, and Assets. These goals represent a logical extension of current SBE goals and objectives. The list of prioritized goals by category is presented in Table I.

Table I. SBE Goals

CATEGORIES	GOALS IN ORDER OF PRIORITY
Instruction and Learning (I)	I.1. Develop recognition in the area of technology-based business and entrepreneurship which integrate management and technology. (I.1a.) Expand curricular offerings related to technology-based business (I.1b.) Expand curricular offerings related to technological entrepreneurship I.2. Commitment to quality and personalized instruction I.3. Contribution to interdisciplinary academic programs at MTU I.4. Explore graduate program in business I.5. Develop appropriate strategic alliances with industry and academic partners I.6. Control and focus independent study coursework
Scholarship/Research (R)	R.1. Continuous commitment to research R.2. Instructional research
Students (S)	S.1. Increase enrollment in majors and minors programs S.2. Continuous commitment to diversity
Assets (A)	A.1. Increase the stability and development of financial resources A.2. Continue to support and develop CenTILE (Center for Technological Innovation, Leadership and Entrepreneurship) A.3. Construct a new teaching and research facility

The plan emphasizes the need to maintain excellence of instructional activity (Goals I.2. and S.2.) and, simultaneously, introduces new initiatives leading to positioning of the School as a nationally recognized institution of learning and scholarship in the domain of integrating management and technology with specific emphasis on technology-based business and technological entrepreneurship (Goals I.1, I.4 and A.2). Such positioning will require strengthening of current programs as well as further exploration and development of a program designed to integrate technological innovation, leadership and entrepreneurship. Through this strategy, the School will capitalize on the MTU national recognition in engineering and technology and will achieve its own national visibility as a niche oriented business school.

PROGRAMS/ACTIVITIES WE MUST DO/HAVE TO HAVE

Instruction and Learning (I)

Goal I. 1. I.1. Expand curricular offerings in the area of technology-based business and entrepreneurship which integrate management and technology.

(I.1a.) Expand curricular offerings related to technology-based business

(I.1b.) Expand curricular offerings related to technological entrepreneurship

Strategy: In years 2002 - 2010, the SBE will effectively utilize the new endowed chair and endowed distinguished professorship in the area of entrepreneurship to expand curriculum and to establish research program in this field. Students will have an opportunity to participate in interdisciplinary curriculae (such as the Engineering Enterprise Program) and to experiment with entrepreneurial initiatives. Resources for implementation of this strategy are partly available through endowment (\$3 million commitment); however, additional resources will be required. A goal of the SBE is to acquire through an active external development effort (see Goals A.1., A.2., and R.2.).

Goal I. 2. Commitment to quality and personalized instruction

Strategy: SBE students will have sufficient opportunity to experience personal interaction with faculty in instruction and advising (both within and outside the classroom). Each student will experience at least one course with enrollment not more than 30 students in every term. Student to faculty ratio will not exceed 30 in each concentration. Depending upon enrollments, this will necessitate an increase in the number of faculty, as well as classrooms dedicated to SBE. The SBE will establish a learning center by the year 2002.

Scholarship/Research (R)**Goal R. 1. Continuous commitment to research**

Strategy: The SBE faculty members will maintain an active research program with the goal of regularly publishing refereed articles. In addition, each member of the faculty will participate in conference activities on a regular basis. The SBE will maintain a seminar series in both research and instruction. In order to support these efforts the SBE administration will provide adequate funding, including special funds for pedagogical research. The SBE faculty will demonstrate commitment to research by publishing at the rate consistent with accreditation and university standards.

Students (S)**Goal S. 1. Increased enrollment in majors and minors programs**

Strategy: The SBE will continue to engage in actions designed to increase enrollment of majors and dual degree students at an average rate of 5-10% a year for 10 years. As enrollment increases, the SBE will maintain a student to faculty ratio consistent with AACSB standards and accepted teaching practice, as well as provide adequate classrooms, labs, and other facilities to serve the increased student population. The SBE will achieve enrollment of 400 students by 2004 and 600 students by 2010.

Goal S. 2. Continuous commitment to diversity

Strategy: Current improvement in gender diversity at SBE and experience in core curriculum coverage of international diversity issues constitute a good base for addressing diversity issues. In particular, the SBE will undertake steps toward increasing the number of African-American students.

Assets (A)

Goal A. 1. Increase the stability and development of financial resources

Strategy:

- The Office of the Dean of the SBE will be proactive in maintaining and enhancing appropriate general budget allocations from within the university to accomplish our mission. The SBE will secure endowments and financial support from corporate partners to enhance its ability to support educational and research initiatives. The SBE will achieve the following levels of funding from non-university sources:
 - ◆ Additional endowment to enhance SBE educational and research initiatives: \$250,000 in 2004 and \$750,000 in 2010.
 - ◆ Seek outside financial assistance to support student conferences, visits and internships: \$10,000 per year.

The SBE will also seek outside funding in support of matching grants related to externally funded SBE research initiatives.

PROGRAMS/ACTIVITIES IN WHICH WE HAVE A GOOD BASE THAT COULD BE EXPANDED

Instruction and Learning

Goal I.3. Contribution to interdisciplinary academic programs at MTU

Strategy: The SBE faculty is already actively participating in several university-wide academic programs, including Prism and Engineering Enterprise. This experience will be expanded and the SBE will be involved with other units of the university in establishing and implementing

curriculum and joint programs at both the undergraduate and graduate level. The SBE will have representation and involvement in all university curriculum committees and joint programs that are relevant to the SBE and its mission. The SBE will have representation on graduate school policy and curriculum committees where appropriate, and the SBE faculty with graduate faculty status will establish graduate student interaction in areas of their research interests.

Assets

Goal A.2. Continue to support and develop CenTILE (Center for Technological Innovation, Leadership and Entrepreneurship)

Strategy: CenTILE will serve as an inter-college base for development of multidisciplinary education and research in business, engineering and the sciences. Its business component will evolve on basis of endowed chairs in business/technology and entrepreneurship and will encompass the business part of the Engineering Enterprise Program. Development of the Center will be based on external sponsorship and cooperative arrangements with industry. Start-up phase is planned for 2 -3 years. It will include (in later stages) a support vehicle for innovation/technology incubator and the proposed technology park.

PROGRAMS/ACTIVITIES WITH NO CURRENT BASE THAT OUGHT TO BE STARTED AND BUILT

Instruction and Learning

Goal I. 4. Explore graduate program in business

Strategy: The SBE will explore the demand and feasibility for establishing a graduate program in business e.g. MBA, MSOM, etc. This analysis will be conducted in years 2001 - 2002, to be followed by an appropriate organizational initiative in the following years.

Goal I. 5. Develop appropriate strategic alliances with industry and academic partners

Strategy: The SBE will establish corporate and academic alliances that will improve the students' educational experience, enhance faculty professional development, and support operations and infrastructure. In addition to gaining financial support, the SBE will expand corporate alliances to include: internships for students, research projects, and executive-in-residence program.

Scholarship/Research**Goal R. 2. Instructional research**

Strategy: To support undergraduate educational programs, the SBE faculty will expand its instructional research focus.

Assets**Goal A.3. Construct a new teaching and research facility**

Strategy: The SBE will be located in its own building within 10 years (2010). This building will be equipped with sufficient classrooms, research and computer labs, student study areas, conference rooms, and faculty offices to meet the needs of the projected student enrollment and faculty composition during the following 20-year period (2010-2030). The SBE will establish the building development plan by the year 2004. The plan will include financial sources, location, and architectural design with expanded SBE advancement support. It is the desire of the School to see this time-table accelerated. Estimated cost of this facility is in the \$12-\$15 million range.

AREAS TO BE DE-EMPHASIZED

Instruction and Learning

Goal I. 6. Control and focus independent study coursework

Strategy: Continue to monitor independent coursework within the SBE to assure its relevance. Independent study courses now have to be approved by the curriculum committee. As a result, independent study coursework in the SBE is now limited. The continuation of such monitoring will allow the SBE to more effectively manage increased enrollment and the demand for independent study courses.

SBE Strategic Plan 2000 – 2010 Benchmark Institutions

The following educational institutions have been identified as peer institutions for purposes of benchmarking in conjunction with the 2000 – 2010 Strategic Planning process:

Babson College
 Carnegie Mellon University
 Georgia Institute of Technology
 Lehigh University
 Massachusetts Institute of Technology
 Rensselaer Polytechnic Institute
 Virginia Polytechnic Institute.

Criteria for selection:

- Currently operates an undergraduate business program which uniquely integrates business and technology.
- Generally similar profile of the institution to MTU and its operating environment. (Babson College is the exception; however, they are building a totally new engineering program which would move them closer to the profile of the other institutions on this list.)
- National recognition and ranking for quality by such sources as U.S. News & World Report, Business Week, et al.

