

TUCHMAN

# FUTURE TOGETHER

2020 - 2025 STRATEGIC PLAN FOR MARTIN TUCHMAN SCHOOL OF MANAGEMENT



CENTRAL AVENUE BUILDING

# Martin Tuchman School of Management

OFFICE OF THE DEAN

NEW JERSEY INSTITUTE OF TECHNOLOGY





## Future Together

I am pleased to present the *Martin Tuchman School of Management Strategic Plan 2020-2025-Future Together*, a document that will serve us as a roadmap for guiding the school through 2025 and beyond, reflecting our revised mission and compelling new vision. In these pages, you will read about the amazing progress we have made, as well as the energy and dedication of our community of students, staff, faculty, supporters and sponsors that will transform our school to be a leader in technology-focused business education and research.

Our plan builds upon our existing strengths and ambitions and is the result of the rigorous engagement of our faculty, students and the business community. We embrace a startup mentality in the way we expand disruptive thinking and innovation, and the way we build on community and commitment to enrich lives. Our focus continues to be on

delivering a high-quality education to prepare ready-to-go students, and conducting high-quality research consistent with our research-intensive university. Our goal is to establish an identity that fosters economic development through business outreach programs — a shared responsibility to benefit the State of New Jersey.

I am excited to be part of a dynamic, forward-thinking and passionate community of faculty, students and stakeholders, who come together to build our future together and work hard to make a real impact in our backyard and globally.

Oya Tükel  
Dean  
*Martin Tuchman School of Management*



# MARTIN TUCHMAN SCH

## HISTORICAL CONTEXT

During the 2014-15 academic year, the Martin Tuchman School of Management (MTSM) faculty and administrators conducted a comprehensive review of the school's Strategic Plan. The updated vision and mission statements provided the context and framework for guiding the school into the future by delivering differentiated, market-relevant academic programs, aligning and leveraging intellectual capital, and establishing a distinct identity that integrates STEM and business. The five-year mapping of our academic plan, with strategies and initiatives, identified five focus areas: technology-integrated business programs; faculty composition, expansion and resources; a new doctoral program in business data science; enhanced sponsored and interdisciplinary research; and greater collaboration with industry.

The Strategic Plan was shared with faculty and students across the university, sharpened by extensive engagement with the business community through the school's advisory board,

and fully embraced by senior administration. As the 2014-15 five-year planning was being implemented, however, opportunities and challenges impacted the activities and initiatives, thereby prompting the school to begin a process for crafting a new five-year plan. The updated plan will guide MTSM activities and initiatives beginning fall 2020 and continuing beyond 2025, while our goals and objectives remain in focus.

MTSM's focus has always been on developing technology-focused programs that differentiate the school from competitors and impact student success. The establishment of the Ray Cassetta Financial Analysis Lab, the Business Analytics Lab, STEM-enhanced M.S., MBA and B.S. degrees and Salesforce training, as well as an agreement with the IBM Skills Academy and numerous new software licensing agreements, highlight the school's accomplishments, thus enabling MTSM to make excellent progress toward achieving the goal of developing





technology-integrated business programs.

Building on this success, the school's focus shifted to reputation building through sponsored research, collaborations with industry and strategic hiring in business data science and data analytics, as well as the start of a new Ph.D. program in business data science. There was a sense of urgency by faculty for a new strategic direction in faculty support and scholarship. The university's Top 100 Best Business School ranking by *U.S. News & World Report*, as well as the R1 Carnegie Classification® for "Very High Research Activity," reinforced the faculty's mission of achieving equality with the other colleges within NJIT. Successful outcomes, such as the establishment of the Ph.D. program and two new faculty positions in business data science, increased submission of sponsored research proposals, as well as the involvement of the school's advisory board members in creating industry collaborations. This all in turn helped

the school make progress toward meeting our goals of realizing greater faculty composition, expansion and resources, creating a new doctoral program in business data science, enhancing sponsored and interdisciplinary research, and collaborating further with industry.

As indicated in the previous accreditation report, our strategic planning process was rigorous and extensive, with engagement and participation by all internal and external stakeholder groups. The fall MTSM faculty and advisory board meetings included a discussion of the status of the Strategic Plan. In addition, a list of priority actions for the coming year was developed, as was the identification of respective roles of the faculty and board for implementation.

## THE 2020-2025 STRATEGIC PLANNING PROCESS

### I. “Future Together” Summer Retreat

With support and leadership from the new dean, Oya Tukul, in summer 2019, faculty were invited to an off-campus retreat to discuss a new direction for the school built on past successes. The summer retreat also gave us an opportunity to discuss new directions for the school to meet new challenges resulting from changes in market structures, technology and stakeholder expectations. The Business Model Canvas (BMC) template approach was followed during the discussions for visualizing the academic plan, gaining insights about the customers served, reviewing and further understanding the value propositions offered through different academic/nonacademic programs, and understanding ways in which the school is generating revenue/providing funds to NJIT. The BMC was used to reinforce the school’s entrepreneurial spirit and the implementation of a startup mentality with respect to program and economic development.

Faculty working groups were formed and in-depth discussions took place using BMC as a guide. The feedback obtained from the groups was used to organize the ideas into five clusters, and each cluster drilled down to a specific goal. Each working group further elaborated on each of these cluster areas and identified specific action items. A total of 31 ideas were generated and voted on.

Faculty agreed to have a follow-up meeting to build on the ideas generated during the retreat, revise the 2015 Strategic Plan accordingly, and develop a timeline to implement the initiatives.



## II. Jersey City Retreat: Deep-Dive Review

A second retreat took place six months later in early March 2020. The venue was NJIT's newly opened facility in Jersey City. The focus of this retreat was to review the results and progress of the first retreat, review the 2015 Strategic Plan, and make revisions reflecting the current state of MTSM and NJIT, as well as the new dean's aspirations. Invited participants also included the school's EMBA alumni, a student representative and a faculty administrator from NJIT's Newark College of Engineering. A member of the Dean's Advisory Board with extensive experience facilitating corporate strategic sessions facilitated the retreat.

The process to complete the plan was based on work sessions that led to formalization of the considerable discussions with the dean, faculty and staff. Breakout-team reports with recommendations were generated together with the critical success factors and functional priorities. The final result is an updated Strategic Plan with revised vision and mission statements, as well as an updated direction and strategic priorities for the school. Paramount to these priorities for the next 3-5 years are the new strategies for driving growth, among them promoting the MTSM brand with enhanced marketing plans.

## III. Moving Forward

The Jersey City session was very productive. Critical success factors, strategic priorities, sources of competitive advantage and a SWOT analysis emerged from the retreat. The faculty dialogue encouraged the development of the new vision and mission statements for the school, and led to the development of a revised five-year Strategic Plan. As we move forward, we recognize that important social, demographic and technological changes, as well as a changing higher education landscape together with a need for noncredit short skill-based training, will necessitate our continuously updating and integrating technology into our curriculum. As markets become more competitive and saturated, and "traditional" business schools continue to incorporate technology into their curricula and identities, differentiation remains a critical challenge. Hence, we will need to identify and seek new sources of funding to support our initiatives.

The Strategic Plan was reviewed by faculty committees during the fall 2020 semester, followed by an evaluation by the MTSM advisory board members at their fall meeting in October. The plan was finalized for review and approval by the upper administration in December 2020.

The structure of the Strategic Plan addresses basic strategic questions of who we are, where we are going and how we are going to get there.

## 2020-2025 MTSM STRATEGIC PLAN EXECUTIVE SUMMARY

MTSM developed the 2020-2025 Strategic Plan to serve as a roadmap toward the future goals and expectations of the school, in order to clearly differentiate MTSM's programs, leverage strengths across the university, and align directly with the NJIT mission and strategic priorities as articulated in *Building on a Strong Foundation-NJIT 2025*, NJIT's five-year plan.

The plan begins with a revised mission and a compelling vision that established an identity and a clear direction for the school. The mission and vision follow from the prior Strategic Plan and the progress that resulted from it. However, they are neither incremental nor derivative in that the mission and vision capture the shared aspirations of the school's dean, faculty and key stakeholders in defining a new direction that addresses the challenges of the current operating environment.

The mission and vision are followed by a candid, detailed SWOT analysis that crystallizes the school's competencies and opportunities, and identifies weaknesses and threats. Key strengths include diversity (among students, faculty and staff), faculty, online education expertise, externally funded research, technology-focused academic programs, a nationally recognized innovation and entrepreneurship program and a committed advisory board. Weaknesses identified include limited visibility, limited noncredit and corporate outreach and training, limited connections with local industry, weak connections to alumni, limited technology-infused classrooms, aging facilities and faculty size. Threats from the competition and market trends continue to be the main issues. Opportunities identified include advancing activities in the Leir Research Institute, ascertaining and pursuing opportunities in our vibrant metropolitan location, fostering MTSM's position within a technological university through interdisciplinary research, infusing more experiential education into our curricula, providing additional, skills-based technology-focused programs (particularly within our noncredit, executive education and Ph.D. programs), and strengthening relationships with the regional business community.

**Based on the SWOT analysis, our five priority areas are:**

- 1. Program Development**
- 2. Alliances and Partnerships**
- 3. Reputation Building and Visibility**
- 4. Increasing MTSM's Resource Base**
- 5. Enhancing MTSM's Intellectual Capital**

Strategic priorities were distilled in specific goals and targets to assess progress in each area. Goals were distributed over the five-year planning window and structured so that prior successes set the stage for future accomplishments.







# 1. VISION AND MISSION STATEMENT

## 1.1 Overview

Our mission and vision act as guideposts in defining MTSM's purpose and framing our collective aspirations. The mission statement was revised to reflect NJIT's change in status to a research-intensive (R1) university. Accordingly, impactful basic research was given greater emphasis. Changes to the school's vision statement were more extensive. The vision was redrafted to reflect the entrepreneurial spirit of our faculty and our commitment to harnessing the power of technology to transform the transmission and generation of knowledge.

The mission and vision statements were also informed by and grounded in the university's identity, accomplishments and aspirations. A business school embedded in a leading technological university benefits from a knowledge base that can greatly enhance the integration of technology into pedagogy, provide unique and impactful opportunities for collaborative research, and drive economic and community development.

## 1.2 Vision

The vision statement below captures our values and aspirations for the future of Martin Tuchman School of Management. MTSM's vision is not typical, because we aspire to become a business school that is not typical. It is guided by the strategic priorities of the university's *Building on a Strong Foundation-NJIT 2025* and aligns with the overall mission of the university.

### Vision Statement

The Tuchman Way: To apply the disruptive thinking, innovation and collaborative energy of a startup to business education and research to enrich lives.

We have embraced a startup mentality for several reasons. First, startups are small, nimble and innovative. If we are to achieve the level of success and recognition to which we aspire, it is necessary to develop and leverage these qualities. Second, startups are adept at making good use of limited resources, which we also must address to remain competitive. Finally, startups are built on community and commitment, which we see as a key strength and the underpinning of our competitive advantage.

Three domain areas are central to implementing this vision:

- The first area involves the transformative advances in student learning currently taking place. Artificial intelligence, augmented reality and other emerging learning technologies have the potential to change how students learn, grow and develop. These changes go well beyond flipped classes and blended learning to include simulations and augmented reality, so that students can practice management in a virtual world. In making use of these technologies, we seek to build learning environments rather than classes, and experiences rather than courses that prepare students for a new age where innovation and flexibility are necessary for their success.
- The second area concerns how we deploy our intellectual capital. Business schools have spent most of their existence generating and communicating knowledge. We need to do these things, but we need to do more as well. A startup mentality emphasizes action rather than analyzing the actions of others. We need to create, be it new products, new ventures or new educational programs, so that our portfolio of intellectual activities goes beyond an accumulation of academic and scholarly work.
- The third area is inspired by the fluid, interconnections among people and knowledge that characterize startups. Although business schools have emphasized the value of "interdisciplinary research," progress in breaking down silos has been painfully slow. Our size, decentralized structure and diverse skill base set the stage for basic and applied research projects that span established boundaries and open new areas of study. They include, but are not limited to, financial data science, space economy, sustainability and medicine.

None of this is easy, and it will not happen quickly. However, if we wish to make a meaningful difference and not get lost in the clutter of slogans and fads, our path is clear.

## 1.3 Mission

The mission statement below defines our *raison d'être* and identifies how and where we can make a difference — that is, add value for all of our stakeholders. Changes to the mission statement were incremental, because the school was and is well positioned with a clear identity. The mission is aligned with the strategic priorities of the university's *Building on a Strong Foundation-NJIT 2025* and with our revised vision statement. It was developed and refined during our spring 2020 growth, branding and marketing strategy session.

## Mission Statement

Martin Tuchman School of Management creates value by integrating business and technical knowledge to prepare our graduates for career success through their ability to meet the challenges of the data-driven, digital economy. The school delivers high-quality academic programs, produces basic and applied research consistent with a research-intensive university, and fosters economic development through outreach programs focused on new venture formation, innovation and workforce development.

## Defining Characteristics of the Mission

Our focus continues to be delivering high-quality, technology-focused academic programs, producing basic and applied research consistent with a research-intensive university, and fostering economic development. The mission statement has several defining characteristics that provide a framework for guiding the school's future direction, developing differentiated, market-relevant academic programs, aligning and leveraging its intellectual capital, and establishing its identity and value within the university.

In particular:

- The integration of business and technology gives MTSM a unique, compelling identity that drives market differentiation. For example, rather than augmenting finance courses with emerging analytic methods, our financial technology (FinTech) program integrates these two areas to provide deeper levels of knowledge and new opportunities for research. Similarly, our doctoral program in business data science integrates machine learning and emerging analytics with functional business area knowledge to prepare the next generation of scholars for unlocking the value of “big” data.
- Our focus on integrating basic and applied research ensures that our research is impactful. It also establishes the foundation for collaborative research and growth in sponsored research from major granting agencies, including the NSF and NIH.
- Our focus on economic development, new venture formation and workforce development represents a strong commitment to our stakeholders, our immediate and broader communities, and our responsibility to the State of New Jersey. Put simply, the mission statement reinforces our commitment to applying our knowledge and intellectual capital to important social and economic problems.

## 1.4 Core Values

Core values define who we are and how we believe we should meet our responsibilities to our students, colleagues and other constituents, with accountability to the entire university community. NJIT's core values reflect our beliefs, guide our behavior, shape our culture and, in so doing, establish a sense of community, common purpose and student focus. After reviewing NJIT's core values it was determined that ours are aligned with these values. The following core values were agreed upon, consistent with NJIT's values.

**Respect.** We maintain a stimulating environment in which to work, learn and excel professionally — a place that is collegial and supportive, embracing the diversity of our colleagues and valuing everyone's contributions to the school and our programs.

**Candor.** It is important for ideas and opinions to be expressed freely. We realize that passionate people engage in heated debates, but discussions are always collegial and professionally respectful, as constructive discussion is healthy and valued.

**Excellence.** We strive for excellence with the understanding that it will not always be achieved. We know that excellence comes primarily from sustained collaboration and cooperation and not from the efforts of any one person. Our successes are collective, and together we will be accountable to our students and the entire university community to help MTSM realize its full potential.

**Integrity.** Educators and researchers have a responsibility to understand and embrace professional and ethical standards and to meet them at all times. We realize that integrity comes into play when doing the right thing is neither expedient nor easy, and we are committed to acting ethically at all times. Further, we believe that fairness lies at the heart of integrity, and we apply standards uniformly to our students and our colleagues.

**Innovation.** We do new and interesting things in new and interesting ways whenever we can. We also help others to do so. While we find new ways to teach, to learn and to discover new knowledge, we are aware that innovations often fail. We celebrate the process of discovery and must critically evaluate our efforts to make sure they can withstand the scrutiny that distinguishes valuable innovation from fads, superficial thinking and hyperbole.

**Diversity.** We are extremely proud of the rich diversity of our faculty, staff and students and committed to the principle of inclusive excellence, where strength comes from synergy and value is created from the diversity of our colleagues and students.



## 2. SWOT ANALYSIS

### 2.1 Overview

#### Summary of SWOT

##### Strengths

- Diversity (students, faculty and staff)
- Faculty
- Externally funded research
- Online education expertise
- Tech-focused academic programs
- Nationally recognized innovation and entrepreneurship program
- Committed advisory board

##### Weaknesses

- Limited visibility
- Limited noncredit and corporate outreach and training
- Weak connections to alumni
- Limited technology-infused classrooms
- Aging facilities
- Faculty size

##### Opportunities

- Location
- Interdisciplinary research
- Leir Research Institute
- Experiential education
- Skills-based technology-focused programs
- Noncredit and executive education
- Ph.D. program
- Strengthen relationships with the regional business community

##### Threats

- State-funding levels
- Competitive market
- Demographic shifts
- Decreasing international student enrollment
- Rate of technological change

### 2.2 Strengths

#### • Diversity (Students, Faculty and Staff)

We have a superb student body and small-class interactions. MTSM students are diverse, respectful, hardworking and upwardly mobile. NJIT is justifiably proud of our No. 1 national ranking by *Forbes* for student upward economic mobility.

The MTSM student body is among the most diverse in the world. This rich cultural diversity is a source of competitive advantage because it prepares students to work in culturally diverse teams and adapt to environments that are unfamiliar. The MTSM faculty and staff are also diverse, and this diversity exposes students to a wide array of ideas, cultures and individuals.

Given that the diversity of the MTSM student body and the faculty/staff is a characteristic of the school, no effort is required to build this source of competitive advantage. It is, however, necessary to communicate it, both to prospective students and employers, an area in which the school has not done well.

#### • Faculty

Martin Tuchman School of Management has a solid core of experienced and dedicated faculty with a rich history of diversity and commitment to teaching excellence. Our richly diverse faculty has received awards recognizing their contributions to research and teaching.

The MTSM faculty conduct research in a wide variety of areas in business and allied disciplines that supports our focus on the relationship between business and technology. Taken as a whole, the quality of the intellectual contributions of MTSM faculty is consistent with that of a business school embedded in a research-intensive university. Going forward, we plan to build on our achievements by strengthening our research culture, adjusting faculty workloads to reflect their productivity, and leveraging the Leir Research Institute to drive a research agenda that focuses our intellectual capital on important societal problems. Specifically, MTSM has faculty members with expertise in business incubation, new ventures, new product development and innovation strategy, connecting entrepreneurship with marketing, finance and management. In addition, our faculty are well versed in online and basic digital-learning technologies.

#### • Externally Funded Research

Our faculty have demonstrated the ability to bring in grants, something that is uncommon in business schools. These grants help to fund doctoral and outreach programs. Our faculty also conduct basic and applied research, as well as link basic research to applied research, thus engaging in problem-solving to answer real-world issues.

#### • Online Education Expertise

MTSM has been developing and delivering online courses for many years and has a number

of courses that are offered in a fully online format. This online education experience enabled us to successfully adapt to new teaching modes: synchronous online and converged.

- **Technology-Focused Academic Programs**

MTSM is not a traditional business school; our programs are technology-focused. This provides our students with the skills needed for entry-level positions, as well as the basis for continuous, lifelong learning.

- **Nationally Recognized Innovation and Entrepreneurship Program**

NJIT has a strong existing infrastructure that MTSM leverages to support innovation, entrepreneurship and the commercialization of technology. An example is our collaboration with VentureLink. We are fortunate to have faculty members from entrepreneurship, marketing, finance, strategy and organizational behavior who are active teachers and researchers in these areas. We have an opportunity to leverage the Top 50 ranking by *The Princeton Review* of our entrepreneurship program to highlight value and quality. This ranking together with ongoing and growing MTSM initiatives in this area will be helpful to our faculty and student recruitment activities.

- **Committed Advisory Board**

The recently redesigned MTSM advisory board provides an active partnership and connection to today's business community and a clear, broad perspective into future directions and priorities. The board is led by Raymond Cassetta, a dedicated and engaged chair who is committed to MTSM's success in moving the school forward.

## 2.3 Weaknesses

- **Limited Visibility**

Our small size and limited marketing activities mean we have limited visibility within NJIT, as well as in the local community.

- **Limited Noncredit, Corporate Outreach and Training**

Although we have a favorable location, we have not capitalized on it or the needs of the businesses that would benefit from student/faculty consulting and noncredit course offerings. We view this as an area for growth.

- **Weak Connections to Alumni**

Our limited contact with alumni is due partially to the centralized structure of NJIT's support departments. NJIT resources (human and financial) for alumni relationships, which while effective for the institution, are somewhat ineffective for the individual departments and colleges. This is particularly concerning, because we previously relied on that department

to maintain contact information for our EMBA graduates, many of whom have significant positions within corporations located in the metropolitan New York/New Jersey area. These weak connections negatively impact our ability to have increased contact with local industry, influence brand awareness, and identify, initiate and implement strategies for improving NJIT student perspective of MTSM.

- **Limited Technology-Infused Classrooms**

NJIT has been making a great effort to improve classroom technology. Although the converged teaching platforms created after the pandemic accelerated this effort, we still need classrooms to be upgraded in a number of buildings.

- **Aging Facilities**

Although we are aware that MTSM facilities are in need of updating, it is important to note that the upgrade process is in progress. Specifically, during the last two years, NJIT has invested in space for a new Business Analytics Lab and the Ray Cassetta Financial Analysis Lab. In addition to supporting the Leir Research Institute, the university invested \$1.1 million to renovate the entire second floor of the Central Avenue Building. Nonetheless, faculty see the need for improvements in facilities to continue, especially with respect to smarter, technology-enabled classrooms.

- **Faculty Size**

We consistently meet the Association to Advance Collegiate Schools of Business (AACSB) standards in this area; however, we have a limited number of faculty relative to the number of courses we teach. As such, we regularly rely on supporting faculty to supplement our participating faculty.

## 2.4 Opportunities

- **Location**

As was noted in our strengths our location needs to be leveraged. Easy accessibility to global companies and their headquarters in northern New Jersey, Jersey City and New York City ideally position our school to expand our corporate outreach activities.

- **Interdisciplinary Research**

We also see an opportunity to further leverage and strengthen interdisciplinary research collaboration across NJIT. This will increase our visibility and strengthen our research.

- **Leir Research Institute**

The Leir Research Institute (LRI), funded by a generous gift by The Leir Foundation, has been in operation for two years. It is the outcome of a long-term relationship between







The Leir Foundation and MTSM, which has resulted in funding two chaired professors and many seminars and events held at the Leir Conference Center in Ridgefield, Conn.

The LRI is an important component of MTSM's research agenda, as it focuses on leveraging the school's intellectual capital to address important societal problems by integrating basic and applied research and by developing corporate, government and community partnerships. In keeping with MTSM's entrepreneurial orientation, a key mission element of the LRI is to fund faculty seed grants that are targeted toward gaining additional funding from other sources, including government agencies and private foundations.

It is our intention to build on this strength and this relationship by expanding our partnership with The Leir Foundation. High-value areas that integrate business, technology and society include the effect of social media and disinformation on social stability and quality of life; machine learning, artificial intelligence and the future of work; and telemedicine and the quality of patient outcomes.

The LRI can act as an umbrella organization to manage projects across different divisions or sub-units within it. Divisions or sub-units might be managed by a designated expert in the area, who would interact directly with The Leir Foundation with respect to possible funding initiatives.

- **Experiential Education**

Data indicates that students who participate in co-op and internship experiences are more likely to have a job upon graduation. We believe that increasing opportunities for student co-op and internship experiences will increase placement rates and student satisfaction.

- **Skills-Based Technology-Focused Programs**

We are not a traditional business school and need to offer programs that are not available in traditional business schools. As such, our programs must provide clearly recognized value and demonstrated competitive advantage. Further increasing the technology focus within our concentrations will help us in this ongoing effort.

- **Noncredit and Executive Education**

In addition to academic programs, there are increasing opportunities to provide noncredit and executive education for those needing to update their skill base. NJIT has recently launched the human capital division at New Jersey Innovation Institute (NJII, an NJIT corporation) to provide pre-apprenticeship programs, professional development, executive education and continuing education programs. MTSM is seeking to build collaborations with NJII to develop its noncredit and executive education capacity.

- **Ph.D. Program**

The Ph.D. program offers MTSM faculty the opportunity to engage our students in teaching and research activities, thus boosting the school's scholarly accomplishments while providing

students with the opportunities to conduct data science-related research.

- **Strengthen Relationships With the Regional Business Community**

Strengthening relationships with the regional business community will assist us in pursuing a number of other opportunities. Data indicates that our alumni stay local. Therefore, stronger business relationships will help support the local ecosystem as well as provide opportunities for us to leverage these connections by providing opportunities for jobs, partnerships, research and other collaboration. Moreover, reduced state funding can be mitigated by the revenue we would be able to produce through these efforts.

## 2.5 Threats

- **State-Funding Levels**

There is a continued reduction to state funding, which has been magnified by the current pandemic.

- **Competitive Market**

Our small size makes it difficult to have the brand recognition of larger schools. There is a lack of prominence outside of NJIT, since there has been minimal branding of NJIT and even less for MTSM. Moreover, an increasing focus on noncredit courses/programs, together with increased competition and lower demand for Executive MBAs makes it difficult to stay on the leading edge and keep up with changing and challenging business technologies.

- **Demographic Shifts**

The undergraduate market in New Jersey is characterized by intense competition in a large market with stable but declining interest in a business major. Hence, there is a threat of declining undergraduate enrollment.

- **Decreasing International Student Enrollments**

Of great concern is the decline in international student applications to colleges and universities throughout the United States.

- **Rate of Technological Change**

Staying ahead of rapid technological changes and maintaining our leading edge with respect to technology has become more challenging. This is particularly threatening because of declining state financial support coupled with the significant expense associated with technology investments.

### 3. STRATEGIC PRIORITIES

The SWOT analysis provides the basis for building on strengths and eliminating weaknesses, so that MTSM can take advantage of its opportunities and minimize threats. This rationale underlies the structure of the Strategic Plan and the five fundamental strategic priorities and related initiatives and metrics to be implemented. These strategies are directly related to the strategic priorities articulated in the NJIT five-year plan, *Building on a Strong Foundation-NJIT 2025*. We understand that all stakeholders must live the vision to apply the disruptive thinking, innovation and collaborative energy of a startup to address these concerns.

The strategic priorities for Martin Tuchman School of Management include:

#### SP1. Program Development

Program development falls into two broad areas, both of which are directly related to enrollment growth. The first area is concerned with enhancing the quality and student experience of existing academic programs. The second area is centered on new programs, including degree programs, certificate programs and noncredit programs.

There is no question that technology will significantly change teaching and learning for the foreseeable future. The recent alumni survey results attest to technology skills needed to navigate today's business demands. Technological developments are broad-based and include new analytical methods and associated software, learning technologies that foster communication skills and critical thinking, and simulations and augmented reality that bring business environments into the classroom. Effective deployment of these new technologies will create learning environments that enhance student experiences, while building the skills needed to be competitive in the labor market. In building this learning environment, we believe that curricula must be developed holistically, such that business and technical knowledge are systematically integrated across courses to provide an educational experience that prepares graduates to develop and deploy technology to meet business objectives.

With regard to new programs, our focus is broad and includes differentiated degree programs in FinTech, a new MBA specialization in sales analytics, a new approach to executive education based on certificate programs that track to an MBA, new graduate certificates in IT sales analytics and business analytics, and a new focus on noncredit, skill-based courses. All new programs integrate emerging technologies with fundamental business knowledge to both reinforce our identity and pursue market opportunities.

#### SP1 Strategic Initiatives

- Implement a suite of advanced analytics software across all relevant courses in the baccalaureate program that includes SPSS, MiniTab, SAS, JMP and Tableau, to provide students with an integrated experience that systematically builds basic statistical skills,

expertise in data visualization and expertise in machine learning to define, analyze and solve business problems.

- Design and implement a governance model to assess new learning technologies to be presented to faculty curriculum clusters for assessment and recommendations, and to the full faculty for approval.
- Augment curricula with learning technologies that are systematically integrated into courses and course modules. Each degree program will include a statement of the role that learning technologies play in meeting the program's vision, as well as an analysis of how and where learning technologies fit into the curriculum.
- Enhance the quality of the undergraduate and graduate programs and the overall learning environment by updating curricula and course delivery with assessment-driven improvements to assure that students are business-educated and technologically skilled.
- Develop initiatives to support the student experience and engagement. This involves ensuring active clubs provide opportunities that include networking and self-promotion activities, and courses that develop student skills in entrepreneurship, business and innovation.
- Focus on ensuring all undergraduates participate in at least one experiential learning opportunity such as cooperative education, internships, research experiences, innovation projects, hands-on laboratory environments and student competitions. We will do this by promoting and facilitating experiential learning, providing research opportunities, supporting innovative curricular experiences that engage students by extending instruction beyond the classroom, and increasing focus on hands-on learning through project-based experiences and lab-based courses.
- Develop noncredit courses and programs to address the gap in our offerings and the demands of the community.
- Encourage our faculty and instructional staff to develop at least one joint assignment each year with someone within their cluster, especially an assignment that involves the use of new technology.

#### SP1 Metrics

- Number of courses with integrated analytics software
- Number of differentiated degree programs launched
- Number of students enrolled in differentiated degree programs
- Number of new graduate certificates launched
- Number of students enrolled in new graduate certificates
- Number of new noncredit, skill-based courses developed
- Number of students enrolled in noncredit courses
- Number of engagement activities offered
- Number of students participating in internships and co-ops
- Student satisfaction and retention scores using survey from NJIT's Student Senate
- Employer satisfaction score provided by Career Development Services



0.92 Bai  BIDU 124.95 ↑3.06 biogen idec BIIB 291.22 ↑4.35 BIOMARIN

Ray Cassella  
Financial Analysis Laboratory

Martin Tuchman  
School of Management





## SP2. Alliances and Partnerships

Alliances and partnerships will provide opportunities to expand our research through collaboration within the school, the university and the community. Strengthening relationships with corporate partners will provide additional experiential learning and employment opportunities for students. These partnerships will also expand the opportunities for other program offerings. Partnerships with high schools and county colleges will help to increase enrollment.

### SP2 Strategic Initiatives

- Support research collaboration where we can encourage our tenured faculty to work with at least one nontenured faculty or instructional staff member on a research project (at least once every two years).
- Leverage the Leir Research Institute to integrate basic and applied research.
- Increase our grant-based research, through the efforts of the Associate Dean of Research and the Program Development Manager, by researching opportunities and identifying several research topics that span theory and applications around each topic.
- Develop noncredit management education based on the needs of the business community.
- Develop a plan to leverage and strengthen interdisciplinary research collaboration across NJIT.
- Launch an outreach campaign with tech-based industries in New Jersey, with an emphasis on pharmaceuticals, telecommunication and financial services to identify gaps in the noncredit market that can be exploited.
- Launch outreach campaign to increase connections with the local industry to provide opportunities for internships, co-ops and full-time employment opportunities.
- Enhance our alumni connections to increase contact with local industry and influence brand awareness.
- Focus on external presentations by our faculty (two per year per faculty member) to high schools, community colleges and corporate and governmental partners. These could be structured as “lunch and learns,” where faculty speak about relevant research or training.

### SP2 Metrics

- Number workforce training programs offered
- Number of interdisciplinary papers published
- Number of research grants received
- Number of new internship programs established
- Number of articulation agreements signed

## SP3. Improve Reputation Building and Visibility

The goal of visibility depends on the reality of achievements; therefore, all stakeholders

must live the vision to apply the disruptive thinking, innovation and collaborative energy of a startup to business education and research in all aspects of MTSM activities. MTSM must capitalize on the sources of its competitive advantage and value proposition, including diversity, educational technology, integrated and comprehensive research and noncredit management education. MTSM must achieve equality with the other colleges within NJIT. This will require a comprehensive effort from the board of advisors, dean, faculty, staff and students.

### SP3 Strategic Initiatives

- Implement a branding, marketing and recruitment strategy that focuses on MTSM strengths and competitive advantages. MTSM must establish its own brand, both internally and externally. A clear and compelling message must be developed and consistently communicated.
- Initiate an awareness campaign that emphasizes the value of diversity as a component of the MTSM educational experience. Bragging and storytelling from all stakeholders will be the driving force of this strategic priority. MTSM must focus on our greatest strengths: location, students and faculty expertise.
- Develop a plan with Admissions to increase awareness of MTSM in high schools (including linkage with top high schools) and community colleges.
- Develop a plan to attract graduate students from within the university, alumni and the community.
- Work with Strategic Communications to develop new ways to communicate with potential students and partners. This includes using podcasts, our website and social media.
- Connect with alumni and the local community to increase our outreach. Organize community events to increase the visibility of the school.
- Further the recognition of MTSM faculty, by nominating them to appropriate academy and professional organization standings.
- Support faculty to increase the quality and quantity of scholarly work that is publishable in highly prestigious academic outlets.
- Initiate an executive-in-residence program to strengthen relationships with corporate partners and provide experiential learning opportunities for students.

### SP3 Metrics

- Increase in enrollment
- Size of MTSM social network
- Number of attendants in community events
- Number of corporations sponsoring MTSM events
- Number of inquiries and website visits
- Number of faculty holding fellowships in prestigious institutes
- Number of faculty with research recognitions
- Number of faculty interviews with media
- Number of faculty conference chairs and organizers

#### **SP4. Increase MTSM's Resource Base**

In order to continue the necessary growth and improved performance in MTSM, identification of additional sources of revenue is needed. Currently, with the exception of external grants and dedicated donations, all revenue for MTSM is from the university budget allocation. As new staff and faculty positions were added and the organizational strategy has been transformed, the funding structure of MTSM lagged behind in supporting the efficient flow of operations. The execution of a new Strategic Plan, with a vision and mission focused around driving growth, developing the MTSM brand and marketing it, requires additional funding for new strategic initiatives that the current centralized budgeting does not address.

##### **SP4 Strategic Initiatives**

- Create incentive-based budget models for executive programs, corporate training programs and noncredit certificate programs.
- Regularly create fundraising campaigns.
- Seek funding from foundation grants and local government resources.
- Share resources with other colleges, universities and community colleges, such as space, labs and memberships to reduce cost.
- Seek directed-donations from alumni to support licensing fees and memberships.
- Develop a strategic enrollment management plan. Some ideas include 1) working closely with the Office of University Admissions to strengthen enrollment using admissions tools and analytics, and updating Admissions with our current offerings; 2) taking a more active role in outreach, recruitment and the creation of promotional material; 3) requiring the MTSM board of advisors to participate with the programs and research; 4) conducting joint visits to New Jersey schools with the Admissions staff to recruit students and speak with counselors; 5) enhancing the overall student experience, from recruitment, freshmen advisement and continuous mentorship, to experiential opportunities and graduation within a collegial and professional environment driven by a commitment to continuous improvement through student engagement.

##### **SP4 Metrics**

- Increase in endowment dollars
- Increase in scholarships
- Increase in discretionary funds
- Number and amount of grant funding received
- Number of professorships/fellowships

#### **SP5. Enhance MTSM's Intellectual Capital and Strengthen Its Research Culture and Scholarship**

In order to effectively fulfill our mission and realize our vision, MTSM requires an intellectual capital base that integrates functional-area knowledge with mission-specific expertise. Alignment of intellectual capital refers to adding functional-area experts with teaching and research interests related to technology-based firms. To continue the necessary growth and improved performance at MTSM, identification of faculty resources is needed. Not only do we need to focus on growth areas, we need to be aware of faculty who are nearing retirement.

Over the past decade, MTSM has developed a strong research culture, which is manifested in increased quantity, and most notably, quality of scholarly research. It is important for this progress to continue at a rapid pace to support our doctoral program and to be consistent with NJIT's status as an R1 university. To meet these objectives, it is necessary to communicate and maintain high standards for reappointment, tenure and promotion, as measured by publications in top-tier journals, high-impact research with h indices consistent with faculty rank (i.e., h index of 15 for promotion to full professor) and editorships and editorial board memberships on top-tier journals. Faculty research profiles should be consistent with those at our peer and aspirant schools.

##### **SP5 Strategic Initiatives**

- Develop a five-year hiring plan.
- Hire faculty in critical areas of FinTech and business analytics.
- Provide professional development opportunities to faculty and staff for continuous improvement.

##### **SP5 Metrics**

- Number of SA (scholarly academic) faculty
- Ratio of participating faculty to supporting faculty
- Number of research-active faculty in strategic growth areas









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