GTMI Strategic Planning Report (SPC):
...Accelerating Innovation to Deployment

GTMI Strategic Planning
“The Committee will:
1) provide key “operating characteristics and imperatives” for the next version of the GTMI strategic plan,
2) help effectively communicate the principles of GTMI strategic plan to the GTMI EAB at its November meeting and GTMI IAB, and
3) receive feedback from the EAB and IAB to modify the characteristics and imperatives, as necessary”.
   Dr. Ben Wang

Committee
- Rick Cowan (GTMI)
- Diana Hicks (IAB)
- Bill Kessler (Chair & EAB)
- Mike McGrath (EAB)
- Ben Wang (GTMI)
- Chip White (IAB)

July August September October November December

7 July 11 August 10 Sept Draft 10 Oct 6 Nov

Review, Discuss Draft Feedback Revise, Conclude

GT Input GT Vision and Strategy

11/11/14
Committee Report

- Georgia Tech’s Vision and Strategy
- GTMI Strategy and Operating Approach
- GTMI Strategy Execution
- Summary and Next Steps

Georgia Tech’s Vision

Georgia Tech will define the technological research university of the 21st century. As a result, we will be leaders in influencing major technological, social, and policy decisions that address critical global challenges.
GT Research and Innovation Strategy

Pursue Transformative Research

Discover Curiosity

Apply Experimentation

Deploy

Enhance Economic & Societal Impact

Grand Challenge

Strengthen Collaborative Partnerships

GT Organizational Construct to Align with Strategy

President
EVP (Academic Affairs) & Provost
EVP (Administration & Finance)
EVP (Research)

President's Office

Academic Education & Research
Colleges
Architecture, Business, Computing, Engineering Sciences, and Ivan Allen Liberal Arts

Applied Research
Georgia Tech Research Institute (GTRI)

Economic Development
Enterprise Innovation Institute (EII)
Advanced Technology Development Center (ATDC)
Georgia MEP

Professional & Continuing Education
Global Learning Center (GLC) in Tech Square

International Locations
China, Costa Rica, France, Panama, Singapore

Institutional Focus on Translational Research and Industry Impact

Interdisciplinary Research Institutes — e.g. biotech, manufacturing, materials, nanotechnology, ...

Georgia Tech Research Corp & GTARC — holds IP, conducts contract/license negotiations

Georgia Tech Foundation — fosters and manages gifts in support of Georgia Tech
Committee Report

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GTMI Vision
GTMI will be the world’s premier institution anticipating needs and providing solutions on the frontiers of manufacturing research, application, and deployment.

GTMI Mission
To pursue knowledge and skills that accelerate the translation of manufacturing-related research into high impact products and manufacturing systems.

A Major Outcome
As a result, we will be leaders in major technological, social, and policy decisions that address critical manufacturing challenges.
GTMI Strategic Imperatives
...Mission-Driven

- **Engage partners** to foster and sustain manufacturing capabilities networks aligned with opportunities to address high-impact manufacturing challenges.
- **Leverage and champion** Georgia Tech’s tradition of excellence in across-campus manufacturing-related knowledge, basic research and interdisciplinary applied research.
- **Accelerate application and deployment** of manufacturing innovation by collaboratively, concurrently, and aggressively maturing technology, manufacturing and business case readiness.

GTMI Operating Approach
...Illustration including Acceleration Levers

GTMI will be the world's premier institution anticipating needs and providing solutions on the frontiers of manufacturing research, application and deployment.

1. Engage partners
   - Identify Manufacturing challenges
   - Impact & opportunity
   - Priorities, gaps & risk mitigation
   - Required knowledge and research

2. Leverage knowledge & research
   - Analysis of Manufacturing Challenges
   - Identify & fill Gaps
   - Build Relationships
   - Mentor Stakeholders

3. Accelerate deployment
   - Technology deployment
   - Maturation
   - Experimentation
   - Interdisciplinary research

11/11/14
Agenda for Committee Report

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Executing the GTMI Operating Approach
...E-L-A Processes, Process Owners, Advisory Boards, and Stakeholders

Chief Mfg. Officer
Mission and E-L-A Process Owner

GTMI
Lead the execution of the E-L-A Processes

Engage partners
- Identify Manufacturing challenges
- Priorities, gaps & risk mitigation
- Impact & opportunity
- Required knowledge and research

Leverage knowledge & research

Outcomes
- Technology deployment
- Maturity
- Accelerated deployment
- Experimentation
- Interdisciplinary research

GTMI E-L Strategy
- GTMI SAP
- GTMI IAS
- GTMI IAB
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GTMI Strategic Planning Committee

...Summary and Next Steps

- SPC Report Summary
  - GTMI vision, mission, strategy and operating approach are aligned with GT’s vision of a 21st Century technological research Institute
  - GTMI mission success will provide new offerings to GT customers and catalyze new knowledge, skills and thought leadership among our stakeholders, faculty and students
  - Execution of the GTMI operating approach, including 12 initial acceleration levers, is in early deployment

- Recommended Next Step
  - “Alpha-test” the execution of the GTMI operating approach, with its 12 initial acceleration levers, at the November EAB
GTMI Internal Advisory Board (IAB)
Strategy Execution Roles

INTENDED ROLES
Advise and assist the GTMI Executive Director in:

- establishing an inventory of GT leaders and their across-campus manufacturing-related research (on-going effort).
- the execution of the GTMI mission and strategy, including:
  1. Analyzing and prioritizing Manufacturing Challenges.
  2. Identifying existing skills, capabilities and gaps in knowledge and resources needed to address each challenge.
  3. Building relationships with other institutions having capabilities that fill key gaps.
  4. Mentoring GTMI stakeholders to enable accelerated technology deployment.
  5. Working with the GTMI EAB in evaluating what is needed to address each challenge (including external capabilities and potential sponsors).

MEMBERSHIP

The IAB shall consist of 8-12 members. To be a GTMI IAB member, eligible to serve on the IAB, one must share and embrace the idea of conducting collaborative research and support the vision, mission and strategic imperatives of GTMI.

GTMI External Advisory Board (EAB)
Strategy Execution Roles

INTENDED ROLES
Advise and assist the GTMI Executive Director in:

- assuring the EAB skill sets are aligned with the scope of GTMI needs (on going)
- the execution of the GTMI mission and strategy, including:
  1. Identifying and prioritizing Manufacturing Challenges.
  2. Clarifying the impacts and risks associated with addressing each challenge.
  3. Structuring partnerships and skill sets consistent with the GTMI Strategy.
  4. Building external relationships with other institutions having capabilities that fill key gaps.
  5. Working with the GTMI IAB in evaluating what is needed to address each challenge (including external capabilities and potential sponsors).

MEMBERSHIP

The GTMI EAB shall consist of 10-15 members. To be an EAB member one must share and embrace the ideas of viewing manufacturing as a system, and identifying high impact manufacturing challenges that drive collaborative and concurrent technology development in support of the GTMI vision, mission and strategy.