

Spring 2017 Industry Advisory Board Pre-Read

Institute Updates

1. Meeting information

- Thursday, March 30, 2016
- Continental breakfast: 7:30 am
- Meeting 8:00 am 3:15 pm
- Ross School of Business
 - park at Forest Avenue Parking Structure (650 S. Forest Ave. Ann Arbor, MI 48104) and use entrance at 700 E. University Avenue; see p. 8 of this document for map
 - o parking validation will be provided
- Room B-1590 (Corner Commons)

2. IAB Membership

Three new companies were approved to be added to the Industry Advisory Board by the Co-Directors since the Fall meeting including American Industrial Partners (AIP), Here Inc., and Precision Castparts.

3. 2016 Global Operations Conference update

The 2016 Global Operations Conference took place on Thursday and Friday, December 1-2, 2016 focusing on the theme of "New Frontiers in Operations". Keynote speakers for the student-run conference included:

- Dr. Somesh Nigam, VP of Information & Data Governance and Health Informatics in the Global Chief Data Office, IBM
- Jonathan Czaja, VP of Operations for Stitch Fix
- Jeff Tazelaar, Global Supply Chain Visibility Leader, Dow Chemical Company

In addition to the keynote addresses, three panels took place:

Globalization through Operations: An increasingly global economy creates new opportunities and presents new challenges for companies of all shapes and sizes. Creating a supply chain that balances cost, quality, and lead time is an enormous puzzle that leads companies to create intricate, international supply chains. Expert panelists across industries spoke about their approaches to this challenge, critical lessons learned, and where they see the trend of globalization going in the near future.

Moderator: John Branch, Academic Director of Part-Time MBA Programs and Clinical Assistant Professor of Business Administration, Faculty Associate, Center for Russian, East European, & Eurasian Studies Ross School of Business



Panel Members:

- Amazon Fresh: Kunal Vora*, Senior Product Manager
- Dow: Tom Ammerman, Director of Supply Chain
- PwC: Benjamin Ranta*, Senior Associate of Operations
- General Motors: Blair E. Carlson, Laboratory Group Manager / Technical Fellow Manufacturing Systems Research Lab, GM Research & Development

Evolution of Operations in Healthcare: The shift toward value-based care has put an unprecedented level of pressure on the healthcare industry to delivery care efficiently across a population. Operational efficiency within a health system as well as cost-effective supply chains are becoming increasingly important to the stability and success of the industry. Panelists discussed how their organizations are using operations to respond to the biggest trends in healthcare and how their operations will evolve as the industry moves to a population-health model.

Moderator: Paul Resnick, Michael D. Cohen Collegiate Professor, Associate Dean for Research and Faculty Affairs, School of Information

Panel Members:

- Cardinal Health: Jonathan Behm, Vice President of Strategic Sourcing
- · Henry Ford Health: Susan Hawkins, Senior Vice President of Population Health
- Mayo Clinic: Dorothy Larsen, Unit Head of Management Engineering and Internal Consulting
- UM Health System: Dr. John Billi, Associate Vice President for Medical Affairs

Big Data and Predictive Analytics: Big Data is undoubtedly one of the most important trends in operations regardless of industry. The increasing use of devices, end users, and industrial IoT to generate data has made it clear that "Big Analytics" must keep pace with the data being generated. Panelists from a variety of industries discussed trends, tips, best practices, and innovations in data analytics.

Moderator: Sanjeev Kumar, Lecturer of Technology and Operations, Ross School of Business

Panel Members:

- Boeing: Juan D. Lopez*, Senior Manager of Data Analytics
- General Mills: Christine England, Senior Manager of Supply Chain Technology, Analytics & Process, Logistics
- Whirlpool: Paul Seay, Director of Cross-Category, Advanced Manufacturing
- Verizon Wireless: Vedat Akgun, Senior Manager of Supply Chain Analytics

^{*}Tauber alumni



The GOC committee raised \$25,000 in sponsorship funds and awarded \$5,000 in prizes in an operations case competition sponsored by PwC and Strategy&.

4. LeadershipAdvantage update

The following leadership and/or teamwork modules, intended to prepare students for their summer team projects and beyond, were presented during the 2016-17 academic year:

- Leadership Kick-Off with Doug Crandall
- Radrick Challenge Course
- Exceptional Presenter with Tim Koegel
- Value Stream Mapping with Matt Potoff
- Personal Interviewing Skills
- Transformational Leadership with Brian Flanagan
- Escape Room Challenge
- Project Management with Eric Svaan
- Speak So They Listen with Jeneen McNally
- Additionally, the following *optional* training and community-building opportunities were offered to Tauber students this year:
 - o Student Connections Program by Tauber Student Advisory Board (SAB)
 - o Thin Blue Line Strategy Session by Tauber Institute & Thin Blue Line
 - o Dining Etiquette with Diana Crossley
 - o Resume Workshop by Ross Career Services
 - o What is Consulting? by second year Tauber MBA Rob Todd
 - o Full-Time Recruiting Workshop by Ross Career Services
 - o Kresge Library Resources Workshop by Kresge Librarian
 - o Experience Change Managing Operational Change by Izak Duenyas
 - o Multiple Happy Hours by the Tauber Institute andor Tauber SAB

5. Leadership Forum

This year's annual event organized by Tauber Institute students will be held on **Wednesday, March 29 from 6-8 pm**. Moderated by David Hess, Associate Professor of Business Law, the panel discussion will focus on Business Ethics and three chief topics:

- Bribery as a "cost of business" to sustain operations overseas
- Lobbying and the corporate influence on politics
- Sustainability a company's internal push-pull to align long-term vision with shareholder value

Panel Members:

- Derrick Thomas, Divisional Vice President of Supply Chain Great Lakes Division,
 Walmart
- Ed Petkus, Vice President Engineering for Airplane Development, Boeing Commercial Airplanes



- Paul Fessler, Senior Vice President Electric Operations, DTE
- Kent Foster, University Relations Lead, Microsoft
- Andy Hoffman, Holcim Inc. Professor of Sustainable Enterprise, Professor of Management and Organizations, Ross School; Program Director, Graham Sustainability Institute and Professor of Natural Resources and Environment, School of Natural Resources and Environment.

6. Facility Tours

Tauber students were required to attend between three and four facility tours this academic year and prepare Rapid Plant Assessments following each visit. The following tours were available to students:

- Coca Cola Production/Distribution Center, Grand Rapids, MI
- Delta Airlines, Romulus, MI
- DTE Energy, Monroe, MI
- Herman Miller, Grand Rapids, MI
- Meijer Distribution Center, Lansing, MI
- Stryker, Kalamazoo, MI
- Sunset Growers, Coldwater, MI (2x)
- Thomson-Shore, Dexter, MI
- UPS, Maumee, OH
- Zingerman's Mail Order (2x)
- Ford Rouge Plant, Dearborn, MI
- Arbor Brewing Company, Ypsilanti, MI

7. Admissions Update

Tauber Institute admissions strategies have been restructured to address the absence of the MSCM student population (approximately 20% of the Tauber class). Effective tactics include; developing recruitment and retention methods that highlight the diverse career paths within Operations, pre-application coaching sessions that highlight the Institute value and our relevance to student academic and professional goals, and enhanced collaboration with University key stakeholders within the College of Engineering and Ross School of Business. The admissions goal to admit between 70-80 students for Fall 2017 remains consistent with previous years.

8. Team Projects

2016 Team Projects

Tauber teams delivered \$460K in projected cost impact over 3 years from 32 projects.

2016 Spotlight! results

• First Place – Boeing 777X: Alberto Arguello (MBA '17), Susan Biggart (EGL, BSE/MSE Industrial and Operations Engineering '17), and Travis Parsons (MSE in Electrical and Computer Engineering '16).



- Second Place (tie) BorgWarner Transmissions: Kyle Gilbert (EGL, BSE Electrical Engineering/MSE Industrial Operations Engineering '17) and Ryan Kennedy (EGL, BSE/MSE Industrial and Operations Engineering '17)
- Second Place (tie) Fresenius Medical Care: Katie Redman (MBA '17) and Matt Riley (EGL, BSE Chemical Engineering/MSE Industrial and Operations Engineering '17).

In addition, Misaki Nozawa (EGP, MSE-ME) and Nantha Rajendran (MBA) each received\$2500 Alumni Scholarship Awards for service to the Tauber Institute.

2016 Case Studies

One of the goals of Tauber Institute team projects is to develop pedagogical material through the authoring and publishing of case studies. One case study will be published by the Institute based on a 2016 Tauber project for a total of nine case studies published over the years.

2017 Projects

Seventy-four students are participating in 31 Tauber team projects (46 business students and 28 engineering students). In total, 50 Faculty advisors are supporting the student teams, 28 from the College of Engineering and 22 from the Ross School of Business.

Team Project student mix:

Degree Program	Total	US	Int'l	М
MBA/Dual	25	20	5	16
MSCM	21	6	15	14
EGL	18	16	2	9
EGP	10	5	5	8
Total	74	47	27	47
		64%	36%	64%

M	F		
16	9		
14	7		
9	9		
8	2		
47	27		
64%	36%		



The Institute received 35 applications for summer 2017; ultimately 31 projects were staffed across 21 unique companies.

2017 Tauber Team Projects Sponsors

$3M^2$	Boeing BDS	GM Supply Chain ²
AIP ²	Boeing Supplier ²	Microsoft Licensing ²
AM General ¹	BorgWarner ²	Microsoft Procurement
Amazon Cross Dock ²	Cardinal Health ²	Pepsi ²
Amazon FBA MWS	Cummins ¹	Pfizer ²
Amazon ICQA ²	Dell ²	PG&E ²
Amazon Optimization ²	Dow ²	Stanley Black & Decker ²
Amazon RFID	Ford ²	Target ¹
Amazon Trans	Fresenius Value Stream ²	Whirlpool ²
Amazon Truck Utilization ²	General Mills ²	
Boeing 777X ²	GM Engine Quality ²	

¹New (or returning after long absence) sponsor

9. Marketing update

- We are currently scaling down the write-ups for team projects to a format that is more user friendly for faculty, staff, or students for various purposes
- We created a short feature, "Tauber Solutions" in our monthly newsletter to build awareness of student teams' capabilities within the workforce and amplifying Tauber's brand values. These pieces have also been added to our social media sites.
- We listened to the positive feedback about the 2016 Spotlight! book and are planning for an increased page count in the future, highlight the past year and sharing it with a wider audience. The changes will amplify Tauber's brand value.
- December, January, and February newsletters have been published and archived on the Tauber website:
 - Alumni profiles: Andrew Masterman (MBA '93 and MS-IOE '93), Caroline Conway (MBA '08), Rebecca (Brown) Achariyakosol (MBA '00), Ramie Abu-Zahra (EGL BSE-ME/MSE-IOE '99), Holly Myers (MBA & MSE-IOE '99), Chris Robinson EGL (BSE/MSE-IOE '99)
 - Faculty profiles: Lisa Pawlik (Ross) and Prakash Sathe (CoE)
 - Student profiles: Ignacio Estrada Garcia (EGP Dual MSE-ME/MM), Xinyun Tao (MSCM), Elizabeth Ettleson (EGL BSE/MSE-IOE '18), Kiku Yasukawa (MBA '17) and Nathan Estes (EGL BSE/MSE-IOE '18)

²Spotlight! judge or attendee



- Specific team project stories that were assembled and either pitched or requested by the media include: Kostal and Pacific Gas & Electric.
- Tauber continued to be in the news for our involvement with the Time Dealer of the Year Award, speaking engagements (i.e., Ray Muscat's keynote speech at The Assembly Show), and a general overview of the program or specific coverage of a team project in various engineering trade magazines such as Industry Week, Design World, Industry Industry Indust
- Dr. Gene Goodson's Rapid Plant Assessment workbook: *Rate Lean: Fast* is now available on Amazon www.amazon.com/dp/0692765093
- The Institute has been (and will continue to be) represented at Trade Events to broaden and reinforce our visibility:
 - NADA 2017 and Time Dealer of the Year Award
 New Orleans, January 26-27
 Participation: attend Time Dealer of the Year Award ceremony and conference; congratulatory ad
 - INFORMS 2017 Conference on Business Analytics & Operations Research Las Vegas, April 2-4, 2017
 Participation: booth, Platinum Sponsor (Executive Forum); congratulatory ad
 - Integrated Product Development online and live Trade Show
 Stamps Gallery, Ann Arbor, April 5 (with a dedicated night for industry on April 6)
 Participation: host and maintain the backend website for voting
 - Positive Business Conference
 U-M Ross School of Business , May 11-12, 2017
 Participation: booth
 - Institute of Industrial & Systems Engineers (IISE) Annual Conference & Expo 2017
 Pittsburg, May 21-23, 2017
 Location: Participation: booth

10. Alumni Engagement update

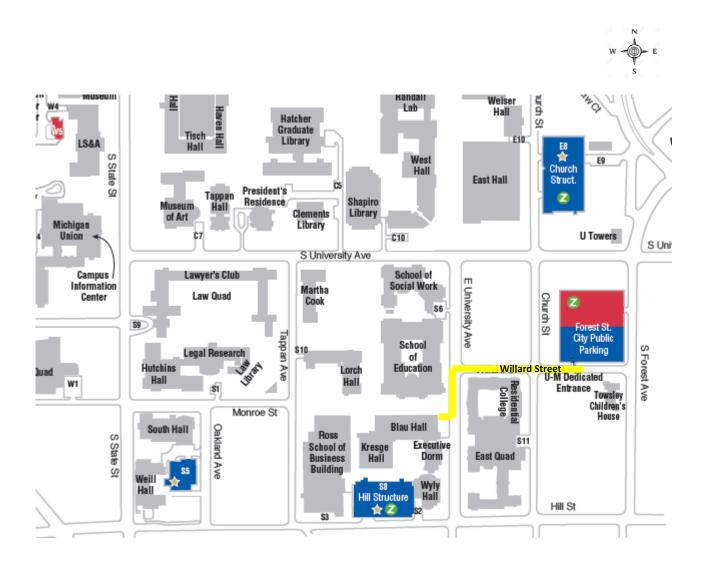
The Tauber alumni engagement vision is for graduates to have a lifelong connection to the Institute and the alumni network. Alumni and student connections remain strong by expanding the Tauber Alumni Connections mentorship program to all 31 team projects this summer as well as engaging select alumni in the admissions process. The Alumni Board will kick off a fundraising campaign this fall in an effort to raise \$70,000 for the Alumni Scholarship fund over the next two years. The campaign effort will allow the fund to become self-sustaining as well as provide student scholarships that have a greater impact.



11. RPA Workbook update

The Tauber Institute has published the 2nd edition of Dr. Gene Goodson's Rapid Plant Assessment workbook, *Rate Lean: Fast.* Goodson is a pioneer of plant assessment and lean manufacturing tools, writing a best-selling Harvard Business Review article ("Read a Plant – Fast") which is used by many companies in their lean transformation journey. The Institute was able to market the book through Amazon and it can be purchased at https://www.amazon.com/dp/0692765093.

Thank you for your attention. We look forward to seeing you at the March 30 IAB Meeting!



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 parking validation will be provided
- Meeting Room: Blau Hall B-1590 (Corner Commons)