+Impact Studio: Translating Research into Practice
Fall Term Focus: Design Research & Opportunity Identification

Classroom time Monday 9am-12pm, starting in the room: R4020
In the studio ~5 hours per week, research outside the studio ~5 hours per week

Course Description

The +Impact Studio teaches interdisciplinary student teams (e.g., MBAs, MSWs, MPH, MEng) how to use scholarly intellectual capital, business acumen and design methodologies to begin to address a wicked problem. Wicked problems are issues with societal import, that are difficult to understand, and are embedded within complex systems; for example, how might the financially precarious accomplish necessary transactions; how might citizens living with failing infrastructure be better served by their municipality. Such problems and the definition of ‘impact’ for this course are directly inspired by the United Nations 17 Sustainable Develop Goals for 2030. To begin to address such an goal, teams will be seeded with university-generated intellectual capital (e.g., new insights on FinTech or a machine learning algorithm from Marketing research) that may provide a critical piece of the puzzle to making a sustainable, scalable impact. There is a trove of such capital within the University that would otherwise remain disconnected from the pressing problems of our generation. Thus, this course serves as a nexus between this intellectual capital, a wicked problem and design. In the Fall term, this course focuses on identifying the specific “right” problem to address. Specifically, teams will take on the challenge of developing a human-centered and systems-centered understanding of the specific opportunity for making a positive impact at scale. Your work this Fall term will determine and define the problem that will be addressed in the Winter term.

Course Journey
LEARNING OBJECTIVES

The course will provide students an opportunity to learn the foundations of design methodologies generated in anthropology, social psychology, sociology and industrial design. Upon successful completion of this course, students will be able to: apply a systems approach to identifying stakeholders and how they are connected within a network, conduct ethnographic qualitative research, surface implicit emotional and behavioral needs among stakeholders, generate composite personas, set-up and manage analog and digital design studio assets, integrate primary and secondary research to identify a central opportunity statement and conduct bricolage-ideation sessions. These are the same design methodologies increasingly used in many organizations including Amazon, McKinsey, Bank of America-Merrill Lynch and General Motors.

Time Commitment
Applying the Rackham formula of credits to hours (i.e., 4.5 credits = 4.5 classroom hours, 2-3 hours per each credit out of formal class time), the expected time breakdown is as follows: Teams are expected to spend about about 5 hours each week working in the studio facility and be prepared to spend about 5 hours outside the studio for research and other assignments. It is strongly suggested that you schedule studio work times with your teams early on for the rest of the semester.

Digital Collaboration Tools
Teams will be required to maintain all digital assets on the dedicated course ‘Miro’ site (https://miro.com/) and rely on an integrated Slack app (https://slack.com/) for internal team and course communication. Canvas will be used solely for submitting the individual assignments and posting course grades.

Policy on the use of electronic tools in class and in the studio (laptops, tablets, phones).
No electronic devices are allowed during Monday 9-12 class (outside of breaks of course). Phones: In the studio, phones should be set to vibrate or turned off (if you need to message or make a call, do so outside the studio during a break)-no phones are to be used within the studio. Laptops: In the studio, only one laptop may be turned on and only if its screen is projected onto the team display—that is, laptops are to be used when the entire team needs its eyes on a display.

Academic Honor Code
Personal integrity and professionalism are fundamental values of the Ross Business School community. This course will be conducted in strict conformity with the Academic Honor Code. The Code and related procedures can be found at http://www2.bus.umich.edu/MyiMpact/academics/ross-community-values. The site also contains information on what constitutes plagiarizing. Claimed ignorance of the Code and related information appearing on the site will be viewed as irrelevant should a violation take place.

Core Course Values: Intellectual Humility and Relentless Curiosity
Students with Disabilities

If you think you need an accommodation for a disability, please let me know prior to the first class (so that I can adjust accordingly). I will treat information you provide as private and confidential. Here is more from the School’s official policy: Policy on Testing Accommodations for Students with Disabilities

The University of Michigan is committed to providing equal opportunity for participation in all programs, services and activities. Students wishing to receive testing accommodations must register with the UM SSD (Services for Students with Disabilities) as soon as possible. Students must then submit their Verified Individualized Services and Accommodations (VISA) form online as early as possible, but no later than two weeks prior to the first test or exam for which accommodations are requested.

Requests must be sent using the Accommodations Request Form and must include a scanned or photographed copy of the VISA form. This form only needs to be submitted once during your academic career with Ross unless your accommodations eligibility expires. Questions can be directed to the Accommodations Coordinator at RossAccommodationsCoordinator@umich.edu. In rare cases, the need for an accommodation arises after the two-week deadline has passed (for example, a broken wrist). In these cases, students should still contact SSD and the Ross Accommodations Coordinator at RossAccommodationsCoordinator@umich.edu, however, due to logistical constraints we cannot guarantee that an accommodation can be made after the two-week deadline has passed.

DELIVERABLES

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Format</th>
<th>Due Date</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Learning Logs (n=10)</td>
<td>Individual Assignment</td>
<td>Weekly</td>
<td>15%</td>
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<tr>
<td>Team-led discussion of the readings/videos</td>
<td>Team Assignment</td>
<td>Assignment of teams to class session noted in the schedule</td>
<td>15%</td>
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<td>(n=2/team)</td>
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<tr>
<td>Team Mission &amp; Canvas (Analog &amp; Digital)</td>
<td>Team Assignment</td>
<td>Sept. 14</td>
<td>5%</td>
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<tr>
<td>Final Presentation</td>
<td>Team Assignment</td>
<td>Nov 18</td>
<td>15%</td>
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<tr>
<td>Final Portfolio</td>
<td>Team Assignment</td>
<td>Dec 8</td>
<td>25%</td>
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<tr>
<td>Dossier</td>
<td>Team Assignment</td>
<td>Dec 8</td>
<td>15%</td>
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<tr>
<td>Participation/Peer Evaluation</td>
<td>Individual Assignment</td>
<td>Dec 10</td>
<td>10%</td>
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LEARNING LOGS

Individual learning is central to the +Impact Studio. To facilitate, document, and assess this in an on-going fashion, individually, submit an original 1-page bullet point memo each week. A link to the Learning Log Submission page can be found on our course Canvas Homepage. Each memo provides a venue to document how you are thinking differently as a result of (a) class/studio content, (b) discussions, and (c) readings/videos. These should be submitted by the end of each week (i.e., Saturday, 11:59pm).

TEAM-LED DISCUSSION OF THE READINGS/VIDEOS

As noted in the schedule, a specific team will be responsible for leading a discussion in class on the readings. Successful completion of this assignment is to prepare in advance specific questions for the class to consider from the readings/videos as well as raise personal conclusions and implications (no slides). In addition, success entails electing an engaging discussion with students from other teams. This in no way removes responsibility for all students to come prepared having read/watched all of the material. Instead, it provides a student-centered lens on making the most of readings/videos.

TEAM MISSION & TEAM CANVAS

The template for this assignment can be found on our Miro site. Teams are expected to first build an analog representation in their studio space and then digitally capture these on Miro.

FINAL PRESENTATION

The final presentation consists of a 90-minute oral presentation that provides a highly interactive overview of the contents contained in the final portfolio (see below). In addition, teams are expected to be prepared to elaborate, defend, and iterate during the presentation on the team’s analyses, conclusions, and suggestions for next steps. The presentation should contain a slide deck as well as supplementary digital and analog materials. All members of the team are expected to contribute to the development and the delivery of the presentation in a meaningful way.
FINAL PORTFOLIO

The final portfolio is the comprehensive document that provides a coherent and empirically grounded analysis of the semesters work. The report should contain the following:

- **Situation, Complication, Resolution (SCR)**
  - S—shows understanding of the larger context
  - C—shows focus on the particular area of impact within the larger context
  - R— shows a future state where the unanswered needs of today have been resolved.

- **Stakeholder and Contextual Understanding**
  (your team’s evidence-based point of view of the core issues)
  - Research Summary: key primary and secondary research-based insights
  - Users / stakeholders insights
  - System insights (social, political, demographic, technological, economic, cultural, environmental, trends)
  - Your team’s assumptions list
  - Empathetic understanding of stakeholders
    - Journey maps; storyboards; Stakeholder Group Empathy Maps, personas

- **Reframed Central Question**
  - Needs to be wide enough that teams can address all user and systems insights

- **Next steps:**
  - Share your point of view of unresolved questions that would need to be addressed as the project moves to the next stage
Dossier

The dossier contains the complete set of artifacts created during the semester. These artifacts will be submitted in analog and digital format (e.g., google drive). The artifacts include:

- Ecosystem Map final
- List and links to secondary research
- Assumptions list (from Week 2 plus any assumptions the team added)
- List of interviewees (completed research plan)
- Parking lot ideas
- Empathy Maps created from interviews
- Wicked Problem Map
- Context Map
- HMWs (opportunities) derived from Wicked Problem Map
- Documentation of sensemaking process
  - Photos of affinity mapping sessions; journey maps; 4-cornerings;
  - video of bodystormings; storyboards, etc.
- Stakeholder Group Empathy Maps
- Personal 3-min lo-fi ‘advice’ videos on the use of the team’s insights

PARTICIPATION/PEER EVALUATION

Much of the academic work in this course is done in interdisciplinary teams. In addition to the preparing for a weekly team stand up (template provided here: https://docs.google.com/presentation/d/1YQdCukh-H6hNIAd9Hs-LgLvDdBbspDnshqI6f1FMrjU/edit#slide=id.g3cc5f57242_0_25), peer reviews will be collected from team members for all students, and these reviews will be carefully considered in the Professor’s evaluation of a student’s participation. Peer evaluations are confidential. Your honest feedback is valued.

Ross Curve

Where applicable, grade distributions will adhere to the Ross curve.

Bonus

Many additional course resources are provided with the goal of enabling you to teach this material in your next organization.
Additional Information about the +Impact Studio

Mission
The +Impact Studio’s mission is to harness the power of design and business to develop impactful solutions to global challenges and to deploy leaders with a social innovation skill-set. As part of this work, the Studio seeks to translate faculty research insights into applications that address wicked problems.
THE FOLLOWING PAGES LIST THE COURSE SCHEDULE FOR FALL 2019
SEPT. 9 WEEK 1: Introductions, on-boarding and teaming

Learning Goals: Sensemaking; identifying unmet needs, and creating a design team

This week will focus on learning how to engage in sensemaking from multiple perspectives to develop and convey an empathetic understanding of the situation and stakeholders. After forming into teams, your team will learn how use the +Impact studio, the processes we’ll use to construct analog and digital assets, and get an overview of semester’s flow. This will include a description of how we’ll turn research into insights, insights into needs, identify systemic opportunities to address those human needs that, in the following phase, will be expressly linked to ideation and early business model ideation.

Tools
- Course Technology (Miro, Slack, Google, Canvas)

**Teams will also begin to brainstorm potential types of participants to be invited for a +Impact Studio-hosted fireside chat/visit/symposium/etc.. These are intended to enrich team’s access to key individuals and provide a forum for the studio to share with the public insights about the focal issues being tackled this semester Liaise with Haley Philips, Studio Program Coordinator.

READINGS & VIDEOS

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas

ADDITIONAL STUDIO WORK:
- Complete and submit your team’s custom version of this: team charter canvas by end of week
- Assign primary and secondary research leads in the team and post on Miro by end of week
- Assign a digital assets lead and analog assets lead and post on Miro by end of week
SEPT. 16 WEEK 2: Introduction to the Initial Problem Space

Learning Goals: How to develop an initial central question (ie., a “How Might We…”). You will learn how to calibrate this central question by using design tools that include laddering and circling the problem.

Tools
• Laddering the problem activity
• Assumptions List
• How Might We Statements

READINGS & VIDEOS LED BY TEAM: FINTECH_POVERTY_T1
5. Prep for empathy map
• Read: Empathy Mapping: The First Step in Design Thinking
• Read: Updated Empathy Maps (these are the ones you will be using to prepare for interviews and participant observation)

ADDITIONAL STUDIO WORK:
• Create an ‘assumptions about the challenge’ list and post in the studio
• Create an Central Question 1.0 (aka a HMW statement), deliver hardcopy printed in 40-point font to be posted in the studio and revised throughout the semester by end of week
• Update and share secondary research plan
• Assign team leads for primary versus secondary research (rotating leadership acceptable if clearly documented and communicated)

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas

Guest SMEs Bob Dittmar and Eric Schwartz
SEPT. 23 WEEK 3: Stakeholder ID and Ecosystem Mapping

Learning Goals: How to identify and visualize all stakeholders entangled in a problem. In addition, we will learn from prior experiences for how things can go wrong in taking scholarly intellectual capital out into the world.

Tools
- Stakeholder ID
- Ecosystem mapping.
- Analogous situations (list on Miro)
- Extreme Users (list on Miro)

READINGS & VIDEOS LED BY TEAM: ML_H2O_T1

3. Tips for conducting for ethnographic interviews and participant observation
   - Watch: IIT: Getting People to Talk: An Ethnography & Interviewing Primer (30 min)
   - Conducting an interview A: Conducting an Interview B
   - Read: Interview for Empathy
   - Watch: What people are really doing

ADDITIONAL STUDIO WORK:
- Create a HMW 1.1
- Create initial interview list based on ecosystem map and prioritize
- Use this tool to prepare in advance for your interviews Empathy Map Canvas
- Begin scheduling interviews (& field work)
- Continue secondary research

Note: Teams must complete at least 2 interviews before next class.

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas
Due by Saturday 11:59pm https://assess.eameasure.com/research

Guest Juan Carlos Morales
SEPT. 30 WEEK 4: Research - Ethnographic Fieldwork & SME Interviews & Secondary Research

Learning Goals: Learn techniques in ethnographic methodologies, including interviews, participant observation and post field debrief, analysis and synthesis.

Tools
- Affinity Mapping

READINGS LED BY TEAM: FINTECH_POVERTY_T2

ADDITIONAL STUDIO WORK:
- Create a HMW 2.0
- Seek feedback on Interview Protocols
- Stakeholder interviews / field visits
- Continue conducting and scheduling interviews
- Update the ecosystem map
- Continue secondary research
- Use affinity mapping after each interview
- Weekly update for your team to share next session

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas
OCT. 7 WEEK 5: Research - Recalibrate and Elaborate Interviews, Observations, continue secondary research

Learning Goals: How organize a portfolio of analog and digital design artifacts from primary and secondary research. In addition, how to revisit earlier assumptions and iterate on the initial ecosystem and central question.

Tools
- Stakeholder ID-Ecosystem Iterations
- Development of a Empathy Map Canvas Analog Gallery (pre-cursor to persona development) posted in shared area to be used as a communal resource for entire cohort

READINGS & VIDEOS LED BY TEAM: ML_H2O_T2

Additional material on unintended consequences:
- Watch: NYT Meant to Keep Malaria Out, Mosquito Nets Are Used to Haul Fish In (3 min)
- Read: Bain & Co. Tackling AI’s Unintended Consequences

ADDITIONAL STUDIO WORK:
- Create a HMW 2.1
- Provide a brief on interview progress, lack of progress and plan to address any barriers to keeping the required pace.

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas
OCT. 14 WEEK 6: Research Reflection & Persona Development

Learning Goals: An initial research plan requires revisiting. This week, we take stock of our original plan and identify heretofore assumptions that may have biased your sampling methodology or created blindspots. Rather than defend your work thus far, teams will be asked to take a candid review of their plan and articulate what has not been learned thus far and what primary and secondary research must be accomplished this week to get a more complete perspective on the core issues and unmet needs. For example, beyond interviews, what participant observations have been completed. Is there an opportunity for ‘bodystorming’ (see below). What additional analogous situations could be studied, what additional extremes could be sampled? In addition, teams will begin to develop personas based on the themes generated out of their affinity maps. Be sure you analog assets are captured digitally on Miro.

Tools
- Bodystorm
- Empathy Map Canvas
- 4-Cornering
- personas
  - more on personas

READINGS
1. “If I could choose just one persona…” bonus reading posted on Canvas

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas

Note: Only Studio time, no Classroom Monday Meeting the Week of Oct 21 (*Due to Ross Professional Development Week Schedule)
OCT. 28 WEEK 8: SYSTEMS

Learning Goals: As you continue your research looking deeply into the needs and stories of stakeholders, now is a great time to step back, scale out and bring your understanding back to the ecosystem. This time, rather than focusing on stakeholders, we will learn how to focus on the multitude of problems nested within your central question. In week 2, you created a central question by turning the big wicked problem into an opportunity HMW question. We will learn how to convert your key leverage points into opportunity statements — HMW questions within your overarching central question.

Tools
- Wicked Problem Mapping
- Identification of leverage points
  - Read (slide 4): Pathways in Design for Social Innovation (Social Design Pathways matrix)

READINGS & VIDEOS LED BY TEAM: FINTECH_POVERTY_T1
- SMALL INTERVENTION, BIG CHANGE: Trophic Cascade
- Watch: Wicked Problems (1.07 min)
- What can go wrong:
  - Read: “Ban the box” does more harm than good
  - Watch: Systems thinking: a cautionary tale (cats in Borneo) (3 min)
- Read: Max Neef’s Nine Needs
- Read and Watch: IDEO Design Kit - Find Themes
- Read and Watch: IDEO Design Kit - Create Insight Statements


ADDITIONAL STUDIO WORK:
- HMW update
- Make necessary changes to the ecosystem map

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas
Learning Goals: How to take the messiness of primary and secondary discovery artifacts and begin to describe what it all means. It’s a good thing you have been sensemaking after each interview or you’d be buried in data. Instead, you have insightful Empathy Maps to share your understanding of stakeholders, an Ecosystem Map to visualize the interdependencies of those in the system, a Wicked Problem Map to highlight interconnected problems/opportunities and the short list of HMW questions it produced to suggest opportunities for design intervention.

If you start to feel to bogged down in data, step back and turn bits of data back into stories. Storytelling pulls data into context and helps us communicate to each other in ways we have been programmed to understand. What is that cluster all about? Or what’s the larger focus? Use post-its to create an informal linear story (journey map), draw a picture or diagram of what it may mean, tell your team a story (analogous or what that data cluster says to you).

Tools

- Flow Models
- Boords: storyboard templates
- Journey Maps
- Context Maps in use (polished one from Mobility 4EU)

READINGS & VIDEOS LED BY TEAM: ML_H2O_T1


ADDITIONAL STUDIO WORK:

- Review and discuss Empathy Maps that have been generated by the studio now that discovery interviews are coming to a close. Create a strategy to divide the work to create aggregate empathy maps or Stakeholder Group Empathy Maps (can be used as personas).

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas
Learning Goals: How to build a design presentation and portfolio of analyses and artifacts that another design team can use to advance a project to the next stage.

Tools
- “Wabi-Sabi” creative idea huddles

Readings Led by Team: Fintech_Poverty_T2

Additional Studio Work:
- Crucial opportunity to get feedback on artifacts and presentation in rough form
- Finalize synthesis / sensemaking activities and artifacts
- Aggregate Empathy Maps the entire studio can use
- Identify Core Themes
- Insight Statements
- Prepare for final presentation- refer to deliverables for contents

Not Due: Individual learning logs
MEET IN B4584: NOV 18 WEEK 11: Portfolio presentation and Feedback

Learning Goals: How to share, not sell the iteration of a design proposal. How to create engagement and solicit feedback about blind spots but also bright spots.

READINGS LED BY TEAM: ML_H2O_T2

ADDITIONAL STUDIO WORK:
• Portfolio Presentation and Feedback
• Debrief presentation and incorporate feedback into final portfolio and dossier materials

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas
NOV 25 WEEK 12: Ideation + Rapid Iterative Testing and Evaluation

Learning Goals: Acquire and apply techniques grounded in design and social psychology that increase the generation of novel and useful ideas from each team member and the team as a whole. In doing so, teams will develop the building blocks of real world solutions grounded in their deep dive discovery and synthesis conducted earlier in the semester.

Tools
- Bricolage Ideation
- Ad-Lib Value Prop
- BMC 1
- BMC 2
- BMC 3

READINGS & VIDEOS
4. Prep for Needs Clustering and Ideation
   - Read: Rules for Brainstorming
   - Watch: Business Model Canvas - Navigating Your Environment (3.40 min)

Due by Saturday 11:59pm: Individual learning log uploaded to Canvas

**Review jobs to be done for next week**
Dec 2 WEEK 13: Collaborative Dossier Preparation

Learning Goals: Collaborate with the other team focusing on a related topic and deep dive into finalizing a portfolio dossier complete with personal 3-min videos conveying insights, instructions and advice to strangers tasked with making the most of all your team’s work. Videos should be pinned within Miro with link to the video file you place in GoogleDrive. Teams will use their 9-12 Monday time in their team studio.

Note: teams will have the Monday 9-12 time slot to work on building the dossier.

Not Due: Individual learning logs
Dec 9 WEEK 14: Share Out and Semester Reflection

Learning Goals: Deep dive and reflection into the design process completed. How to translate the scholarly grounding of design methodologies to folks in industry.

READINGS

Not Due: Individual learning logs