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Future of Technology
Office Hour - Ryan Liu (September 13, 2021)

Agenda

01 **OFFICE HOUR OVERVIEW**
What to Expect

02 **COURSE JOURNEY**
What's Happened
What's Ahead
What's Trending

03 **DEEP(ER) DIVE**
Capstone Preview
Integrating Frameworks
FLP IT Practice

04 **OPEN FORUM Q&A**
Burning Questions

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01 Office Hour Overview | What to Expect

Weekly Office Hours will be focused on the current open module and will have 3 general parts:

Course Journey	Deep(er) Dive	Open Forum Q&A
Recap of module, **reminder** of what's coming, and **sharing** of what's trending (i.e., externally in the news, from the Module Polls, Discussion Boards, etc.)	Focused **learning activities** comprised of interactive exercises, discussions, and information sharing tailored to the Module facilitated in plenary or breakouts	Opportunity for course participants to ask questions and seek further **learning enrichment** from the learning facilitator and fellow peers

Office Hour structure will be flexible and adjusted based on week-over-week student feedback

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02 Course Journey | What's Happened

Module	Activity Type	Assignment Name (Graded Components)	Release Date	Due Date
1	Drag & Drop	Five Steps of the Gartner's Hype Cycle	2021-09-09	2021-09-16
	Discussion	Applying Gartner's Hype Cycle to Leverage a Technology in Your Organization		
	Drag & Drop	Strategic Implications Based on S-Curve		
	Discussion	Uncovering New Opportunities by Merging Technologies		
	Assignment	Assignment 1.1: Analyzing the Evolution, Colliding Trends, and Strategic Implications of a Technology		

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Looking ahead at what's next between weekly Office Hours with a few reminders:

* See Canvas Course Calendar for specifics

** Assignment can still be submitted for course completion until the program end date (Nov. 11) but may not receive feedback

Live Session Webinars

- Wednesday, Sep. 15, 8 AM PDT / 3 PM UTC:
  Faculty Webinar 1 (Deep-Dive on Disruption Forces and Logic)

- Friday, Sep. 17, 12 PM PDT / 7 PM UTC:
  Networking Session (Only formal one of the course!)

- Monday, Sep. 20, 8:30 AM PDT / 3:30 PM UTC:
  Office Hour 2

Modules 1 → 2 Transition

- Complete Module 1 **Topic Discussion (x2)** postings and **Drag & Drop (x2)** activities*

- Complete Module 1 **Assignment 1.1** by Sep. 16 for feedback**

- **Module 2 Content** released Sep. 16, 9 AM PDT / 4 PM UTC

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Poll 1.1: High-Impact Technologies for the Next Decade

Reflect on your current understanding of these technologies and how they may evolve in the future. Which technology do you think will have the highest impact in the next decade?
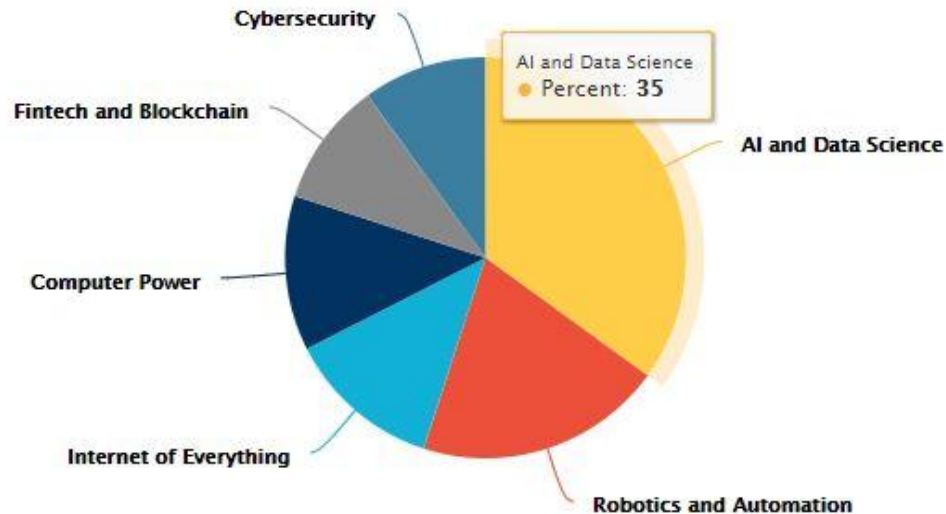
(As of Sep. 12)

Discussion 1.1: Applying Gartner's Hype Cycle to Leverage a Technology in Your Organization

Technologies course participants selected (As of Sep. 12):

- AR/VR
- Embedded AI Data Fabric
- 2-way Brain Machine Interface (BMI)
- Multiexperience (MX)
- Health Passport
- Generative Adversarial Networks (GANs)
- Digital Twin of the Person
- Composable Enterprise
- Explainable AI

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Submission Details

The submission will apply the FLP IT framework to refine your technology portfolio by leveraging emerging technologies and must cover the following:

1. **Background** : Describe the background of your business and its current technology portfolio.

2. **Forces** : Select some dominant tech forces discussed during the program that have high impact, high uncertainty, and high relevance to your field and industry.

3. **Logic** : Collide the tech forces identified above with other STEEPLEM (social, technological, economic, environmental, political, legal, ethical, and military) forces and determine whether any new or altered competitive logic arises.

4. **Phenomena** : Identify phenomena and patterns arising from the logic that will shape how different futures might unfold.

5. **Impact** : Diagnose the impact and implications of those new phenomena on your business and ecosystem, and identify opportunity spaces you can innovate in.

6. **Triage** : Outline any new opportunities you can capitalize on and create an upgraded technology portfolio for your business.

7. **Next Steps** : Describe the next steps you can take to build this upgraded technology portfolio.

Key Dates

- Capstone Project Instructions release together with Module 2, so that participants can start thinking and working on Capstone
- Capstone Project Submission opens on Module 8 launch date
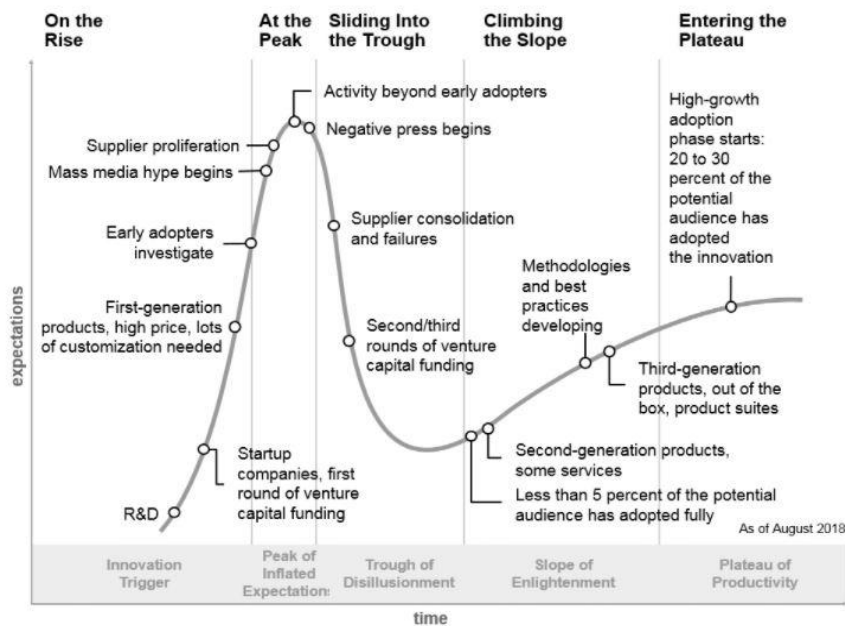- Capstone Due Date is 2 weeks after Module 8 launch date

Submission Format

- Self-recorded video of 5–10 minutes (.mp4 or a URL link)
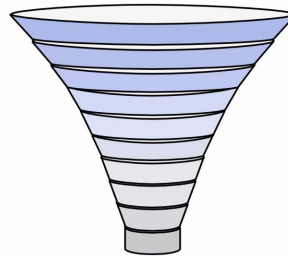- Slide deck of about seven slides (.pptx or .pdf)

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03 Deep(er) Dive | Integrating Frameworks

"Macro": Hype Cycle (How Technologies Emerge)

"Micro": S-Curve (Organizational Efforts in Time vs. Money)

+

FLP IT

Innovation Portfolio
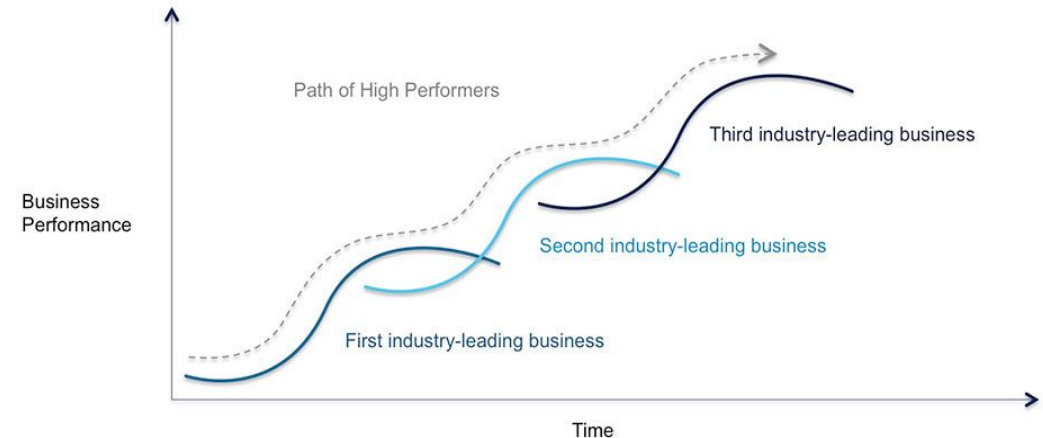
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03 Deep(er) Dive | FLP IT Practice

Practice Mode: We're going to apply your learnings in the form of an exercise focused on **Forces** and **Logic** of the FLP IT model.

Working individually or as a team, we will breakout with the following steps:

- Revisit the STEEPLEM forces, and address the **global semiconductor shortage (automotive lens)**
- Choose **highest impact** and **highest uncertainty** forces to form a 2x2 matrix
- In **one phrase** per quadrant, develop a future scenario (max of 4)
- Come back together to **recap** 1-2 scenarios per person or team
- Goal is **not to predict** which scenario will play out, but to anticipate ideal positions given multiple scenario considerations

Thank You!

Looking Forward to Next Time!!!

Appendix A | Course Overview

Key Dates:

- Start Date: September 2, 2021
- End Date: November 11, 2021
- Last Day for Refunds: September 16, 2021 [Module 2, Day 1]
- Last Day for Deferrals: September 30, 2021 [Module 4, Day 1]

Program Details:

- Duration: 9 Weeks
- Modules release: Every Thursday
- Canvas Live Course ID: 3412
  - Modules will be released on a weekly basis based on schedule on the right

Live Session Details:

- Faculty Webinars: 4
- Learning Facilitators Webinar: 1, Intro Webinar
- Office Hours: 1 Per Week
- Networking Session: 1, Virtual Networking (September 17, 2021)

Program Outline & Schedule:

Module #	Module Name	Release Date
-	Program Orientation	2021-09-02
Module 1	Introduction to Tech Futures	2021-09-09
Module 2	Artificial Intelligence and Data Science	2021-09-16
Module 3	Compute Power	2021-09-23
Module 4	Internet of Everything	2021-09-30
Module 5	Robotics and Automation	2021-10-07
Module 6	Cybersecurity	2021-10-14
Module 7	Fintech and Blockchain	2021-10-21
Module 8	Portfolio Strategy	2021-10-28

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Appendix B | Course Calendar

Module	Activity Type	Assignment Name	Release Date	Due Date
1	Drag & Drop	Five Steps of the Gartner's Hype Cycle	2021-09-09	2021-09-16
	Discussion	Applying Gartner's Hype Cycle to Leverage a Technology in Your Organization		
	Drag & Drop	Strategic Implications Based on S-Curve		
	Discussion	Uncovering New Opportunities by Merging Technologies		
	Assignment	**Assignment 1.1: Analyzing the Evolution, Colliding Trends, and Strategic Implications of a Technology**		
2	Drag & Drop	Drag-and-Drop Activity 2.1: Differences Between Machine Learning and Deep Learning	2021-09-16	2021-09-23
	Discussion	Discussion 2.1: Applying Machine Learning and Deep Learning to Your Organization		
	Drag & Drop	Drag-and-Drop Activity 2.2: Four Options to Approach the Build-or-Buy Choice		
	Discussion	Discussion 2.2: Improving AI Readiness For Organizations in Your Industry		
	Peer reviewed	**Peer Review Assignment 2.1: Creating a Data-Driven Culture in Your Organization**		
3	Drag & Drop	Drag-and-Drop Activity 3.1: Three Types of Computing	2021-09-23	2021-09-30
	Discussion	Discussion 3.1: Deciding Between a Public or a Private Cloud in Your Industry		
	Discussion	Discussion 3.2: Creating Compute Power Resilience in Your Organization		
	Peer reviewed	**Peer Review Assignment 3.1: Addressing a Problem Using Compute Power**		
4	Drag & Drop	Drag-and-Drop Activity 4.1: Four Levers of Data Generation	2021-09-30	2021-10-07
	Discussion	Discussion 4.1: Potential Applications of IoE in Your Industry		
	Drag & Drop	Drag-and-Drop Activity 4.2: Augmented Reality vs. Virtual Reality		
	Discussion	Discussion 4.2: Leveraging Colliding Trends of IoE in Your Organization		
	Drag & Drop	Drag-and-Drop Activity 4.3: Three Approaches for Safeguarding Data		
	Assignment	**Assignment 4.1: Leveraging IoE Ecosystem to Build a Multi-Sided Platform**		

Module	Activity Type	Assignment Name	Release Date	Due Date
5	Drag & Drop	Drag-and-Drop Activity 5.1: Four Dimensions of Industrial Robots	2021-10-07	2021-10-14
	Discussion	Discussion 5.1: Applications of Robotics in Your Industry		
	Drag & Drop	Drag-and-Drop Activity 5.2: Four Views for the Future of Work		
	Discussion	Discussion 5.2: Planning for Symbio-Intelligence for Your Organization's Future		
	Peer reviewed	**Peer Review Assignment 5.1: Enabling Human-Machine Productivity in Your Organization**		
6	Drag & Drop	Drag-and-Drop Activity 6.1: Four Types of Cyber Threats	2021-10-14	2021-10-21
	Discussion	Discussion 6.1: Strategies to Reduce Potential Risk in Cybersecurity		
	Drag & Drop	Drag-and-Drop Activity 6.2: Steps in the NIST Incident Response Framework		
	Discussion	Discussion 6.2: Rethinking Cybersecurity in Your Organization		
	Assignment	**Assignment 6.1: Creating a Plan to Ensure Cybersecurity**		
7	Drag & Drop	Drag-and-Drop Activity 7.1: Six Core Functions of the Financial Industry	2021-10-21	2021-10-28
	Discussion	Discussion 7.1: Disrupting Financial Industry Using Cryptocurrencies		
	Discussion	Discussion 7.2: Analyzing a Fintech Regulation		
	Drag & Drop	Drag-and-Drop Activity 7.2: Three Categories of Blockchain		
	Peer reviewed	**Peer Review Assignment 7.1: Applying Digital Ledger to a Business Transaction**		
8	Drag & Drop	Drag-and-Drop Activity 8.1: Understanding Four Stages of Technology	2021-10-28	2021-11-04
	Discussion	Discussion 8.1: Investing in Pacing and Key Technologies in Your Industry		
	Drag & Drop	Drag-and-Drop Activity 8.2: Managing Adjacent vs. Transformational Innovation		
	Discussion	Discussion 8.2: Key Takeaways from This Program		
	Assignment	**Assignment 8.1: Improving on Your Business Portfolio**		

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Appendix C | Completion Requirements

To successfully complete the program and get a certification of completion, participants must:

Earn
80/100
points

&

Complete
Capstone
Project

Assignments
- 8 Assignments (4 Peer Review Graded, 4 LF Graded)
- Each Assignment: 4 Points; _**32 Points in Total**_

Drag & Drop
- 16 Activities (Completion tracked in Canvas)
- Each Drag & Drop: 1 Point; _**16 Points in Total**_

Topic Discussions
- 16 Topics (Emeritus Program Support Graded)
- Each Topic Discussion: 2 Points; _**32 Points in Total**_

Capstone Project

- Capstone will be graded by Learning Facilitator (LF)
- Capstone Total Points: _**20 Points**_

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