



Management Curriculum in the Digital Era

Insights from Phase 1

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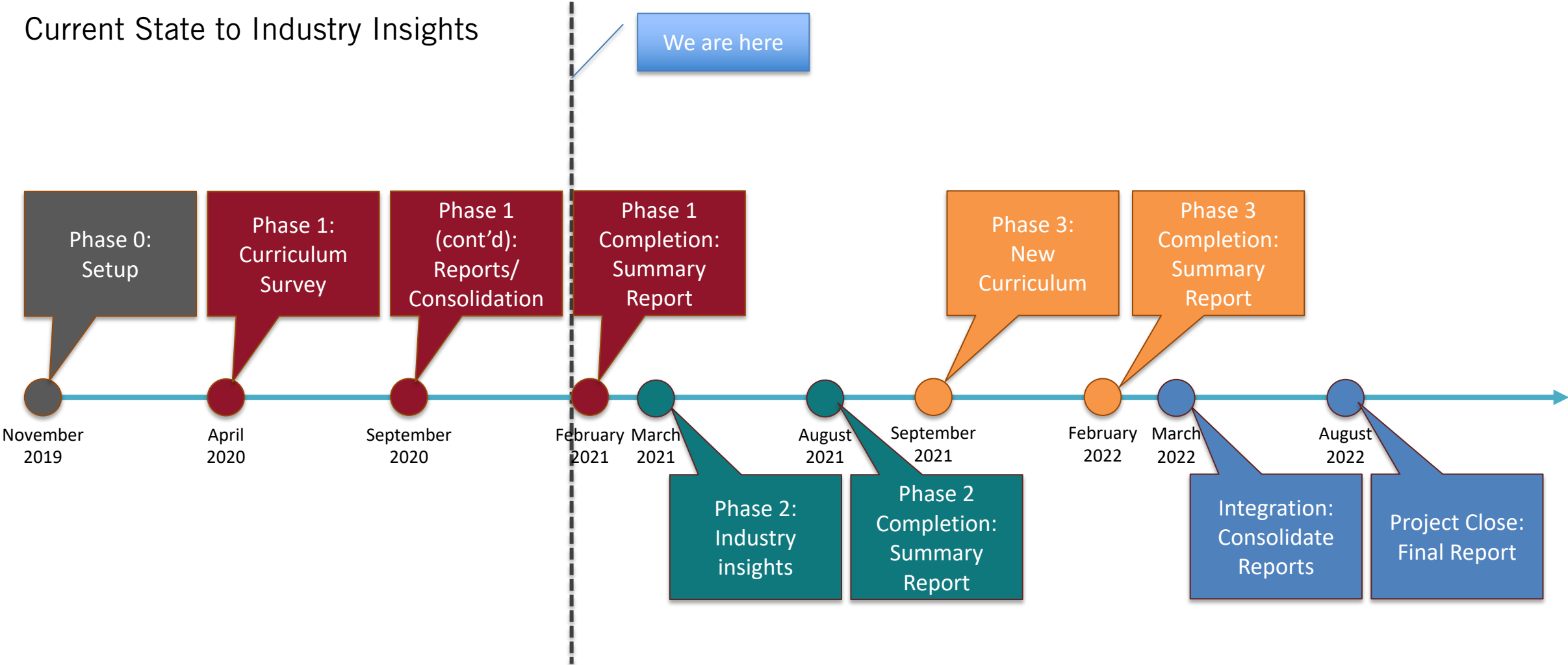
MaCuDE Project

Scope and Outline

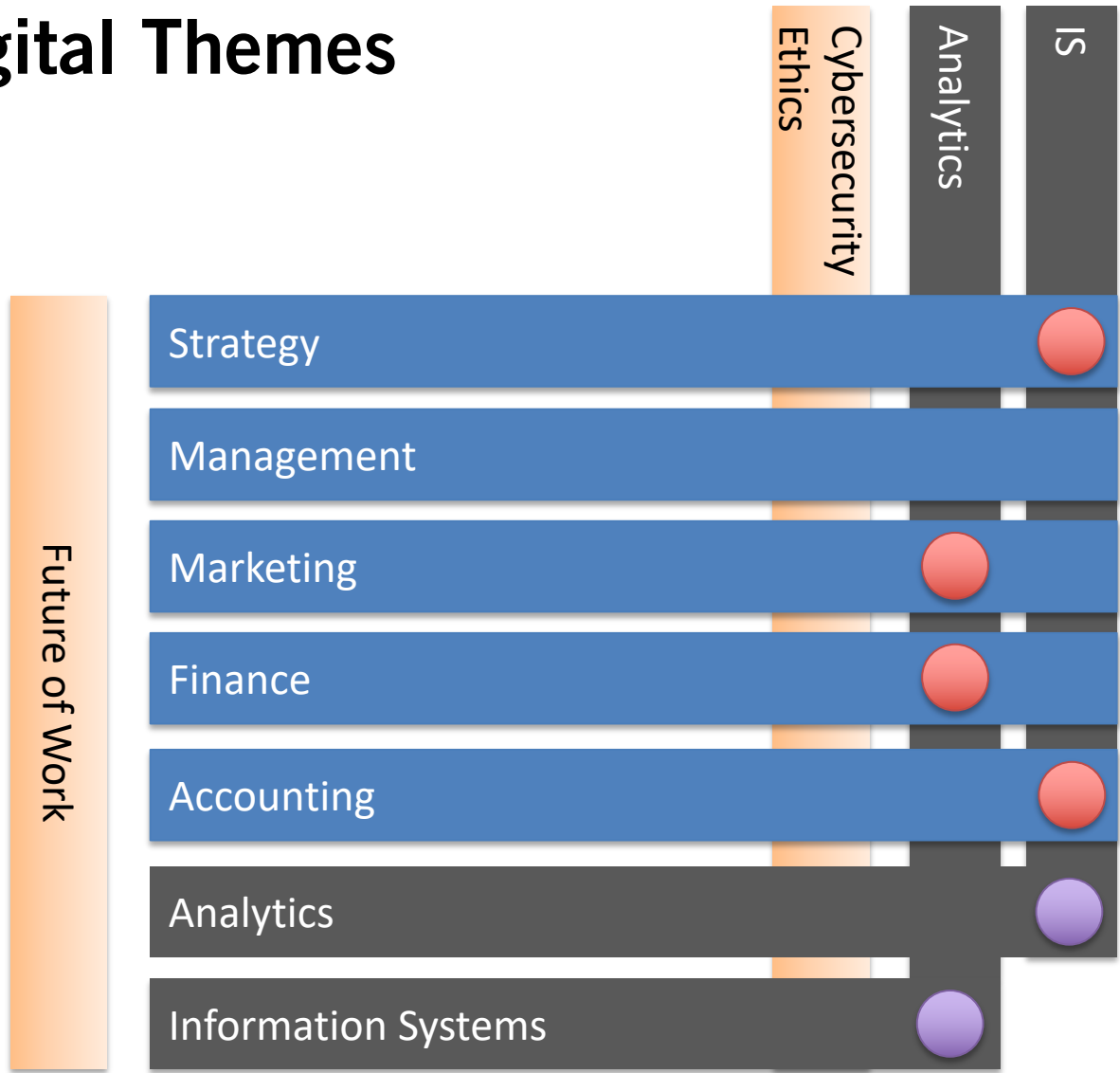
- Launched Fall 2019
- Supported by AACSB and PwC
- Coordinated by Stevens Institute of Technology
- 100+ participating Universities
- 9 Task Forces
- Goals:
 1. Identify the Current State of Digital Themes in Management Education
 2. Develop Recommendations for Future Management Curricula

MaCuDE Project Timeline

Current State to Industry Insights



Domains vs Digital Themes



Themes of the Digital Era

Examples of Tools, Techniques, and Topics that Change established Mechanisms of Work

- **Data-driven Decision Making**

- Ubiquitous Information Literacy
- Big Data Analytics and Visualization Techniques
- Domain-specific Analytics Applications

- **Artificial Intelligence**

- Working with Software Robots
- Learning in the absence of “on-the-job” experiences
- Impact of Machine Learning on Qualitative Decisions

- **New Organizational Forms**

- Platform Businesses and Hyperscaling Enterprises
- Gig Economy and New Labor Markets
- Managing Digital Natives

- **Ethics and Cybersecurity**

- Hyperpersonalization and Surveillance Capitalism
- Regulatory Regimes and the Internet of Things
- Corporate Responsibility for PII and Derivative Data

Depth of Digital Offerings

Embedding of Digital Topics is happening at different levels

- New Degrees
 - Example: MS in Digital Forensics
- New Majors / Minors / Concentrations / Combinations
 - Example: BS in Quantitative Finance, Accounting & Analytics BS + MS dual-degree
- New Courses
 - Example: Digital Innovation & Transformation
- Curricular Redesign
 - Example: IT Strategy as core strategy course in MBA
- Redesign of Courses
 - Addition of Modules/Cases
- Non-Degree/Executive Education Offerings
- Undergraduate Education
 - Management & Digital Innovation (U London)
 - Digital Marketing (many)
- MBA
 - iMBA (Kellogg), Analytics MBA (Stevens), MBA + MS in Digital Tech (Boston U), Tech MBA (NYU)
- Specialty Masters
 - MS in Business Analytics (many)
- Executive Education
 - Master Digital Marketing (Kellogg)
- Dual-Degrees
 - BS in Accounting, MS in Digital Technology (Plattsburgh)

Strategic vs Tactical Digital Topics

Current focus on tactical topics reveals a lack of strategic focus

- Strategy: Explanation of how Value Creation / Articulation / Exchange drives business
- Tactics: Practical application of digital tools and methods in specific areas/domains
- Most surveyed programs bring digital into the curriculum at the tactical level
 - Risk: Topic and technology churn
 - Risk: Helping faculty stay on top of changing tactical landscape
- Need to embed tactical content in larger strategic questions
 - Example: Content Marketing in the context of value articulation
 - Example: Hyperautomation in the context of value exchange
- Need for employability and immediate applicability vs long-term knowledge and skills
- Heterogeneity in learner preparedness: Do we need a digital skills entrance exam?

Underrepresented: Ethics / Cybersecurity

Digital tools accelerate frequency and severity of ethical lapses

- Ethics mostly handled as lectures / cases in individual courses
 - Business Models built on data integration / surveillance
 - Valuation of data-/subscriber-based businesses
 - Benefits/Risks of hyper-personalization and content targeting
 - Organizational impact of managing with data (e.g., radical transparency)
- Cybersecurity as a specialty discipline within CS, but is missing business applications
 - Liability for third-party content
 - Reputational consequences of PII breaches
 - Managing human factors & information security awareness within organizations

Disciplinary Insights

Integration is bottom-up

- Finance: Algorithms trump AI and Automation
- Accounting: CPA requirements create structural boundaries, BS+MS creates unique opportunities
- Marketing: Digital Marketing Tools, Marketing Analytics, Ethics
- Information Systems: Source of Digital Skills by nature, boundary questions
- Analytics: Goldrush, but: who owns it? OR/OM/Statistics vs. Business Applications

Digital Divide

The Future is already here, but it is not evenly distributed


- Assistant Professors bring new skills, but have tenure on their mind
- Software is expensive, Data may be, too. Open-Source Tools change often
- Digital Labels on Degrees & Courses as marketing plays, but where is the substance?
- Systematic revision of undergraduate offerings vs. opportunistic design of graduate offerings
- Covid has forced certain upskilling, but also laid bare deficiencies in digital literacy
- Regional Differences: Asia appears to lag behind Europe and North America, little data from Africa and South America
- Bigger question about changes in educational formats and processes (e.g., Stanford 2025)

Next Steps

- Interviews/Focus Groups with Industry Representatives
 - What are the skill trends in industry?
 - How are post-graduation skill changes handled?
 - Covid-19 has accelerated changes in hiring practices
- Development of Curriculum Recommendations
 - Collaboration with disciplinary bodies, e.g., AIS, INFORMS
- Input/Participation is welcome
 - Email: macude@stevens.edu

Thank You

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