Rising like a Phoenix: Emerging from the
Pandemic and Reshaping Human Endeavors
with Digital Technologies ICIS 2023

Professional Development Workshops

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Architecture Strategy and Business Technology Management for Digital Leaders

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Abstract

We invite Information Systems (IS) educators, program chairs, and school executives to discuss and explore how to best prepare the next generation of digital leaders, in particular architecture strategy as enabler of digital transformation and innovation. Global companies proceed with Digital Transformation as a strategy to improve their business model with digital platforms efficiency to enhance competitive. Previous research has identified leadership as one critical success factor for Digital Transformation strategy. To stimulate this discussion, they will discover the Architecture Strategy of Digital Transformation with Adaptive Integrated Digital Architecture Framework (AIDAF) and Business Technology Management (BTM), a Canadian program accreditation standard, as well as a Body of Knowledge (BOK) outlining a vision for future digital leadership competencies. This workshop will allow for a review of various digital leadership competency frameworks and engage participants to become active contributors in their development, reuse, and adoption by IS programs internationally.

Introduction

Existing trends in IS education are noticeable globally: programs are becoming more specialized, learning outcomes are assessed with more micro criteria, theoretical advances figure prominently in learning materials, etc. In essence, the discipline seeks greater integration of academic and professional dimensions in preparing future IS managers, but is also distancing IS programs from practice with a lack of innovative capabilities (Somers 2010).

In contrast, many programs attempt to model digital leadership within an integrative perspective, where numerous facets that are typically addressed separately are instead fully connected. More experiential approaches help focus learners on the emerging nature of digital projects and the need to develop indigenous leadership competencies customized to every organization and sector. Finally, as opposed to traditional learning materials, many learners want to rely on existing competency frameworks, but surgically edit-reuse parts as needed in their context, especially collaboratively in communities of practice.

Furthermore, enterprises and organizations proceed with Digital Transformation as an enterprise architecture strategy to improve their business model with digital platforms efficiency in order to stay competitive. However, several failure cases in global companies for Digital Transformation have been reported (Masuda and Viswanathan 2019; Masuda et al. 2021). Existing leadership skillsets need to be enhanced to new global leadership capabilities to drive the digital transformation to cope with the diversities and in global societies and ecosystems (Gundling et al. 2011). Previous research has identified leadership as one critical success factor for Digital Transformation.

Educational practitioners may feel the need for a more open and alternative discussion, to go beyond IS curricula standards and guidelines, and take responsibility for developing innovative IS educational offerings. To stimulate this discussion, workshop participants will discover Business Technology Management (BTM), a Canadian program accreditation standard, as well as a Body of Knowledge (BOK) outlining a vision for future digital leadership competencies.

This workshop presents findings of a systematic research methodology on the role of leadership in Digital Transformation Process in the alignment with Digital IT Strategy and Enterprise Architecture, based on the Adaptive Integrated Digital Architecture Framework (AIDAF) (Masuda and Viswanathan 2019; Masuda et al. 2021), and the workshop will allow for a review of various digital leadership competency frameworks and engage participants to become active contributors in their development, reuse, and adoption by IS programs internationally. The purpose is to stimulate discussion and explore how IS educators, program chairs, and executive coaches can better prepare the next generation of digital leaders.

Business Technology Management

To overcome Talent Management (TM) challenges, in 2009 a non-profit organization in Canada, Canadian Coalition for Tomorrow's ICT Skills (CCICT), later merged within the IT Association of Canada (ITAC 2014), developed the Business Technology Management (BTM) initiative (Gagnon 2022b). Funded by the Government of Canada, it brought together IT executives at leading corporations with faculty at 20+ colleges and universities throughout the country. Its goals were to revitalize interest in the IS/IT profession, to ensure relevance to practice, and to overcome the talent gap in management ranks.

Among other deliverables, the BTM initiative led to Learning Outcomes and Accreditation Criteria to help schools align with industry requirements. The first edition of 32 criteria was published by CCICT in 2009, later expanded into 75 criteria under ITAC in 2016 (Gagnon 2020). Its purpose is to serve as a simpler guidance in curriculum development, while ensuring it is fully aligned with professional requirements vetted by industry leaders, based on 100+ consultations across Canada. BTM follows essentially the "as-practice" perspective where digital leadership competencies are viewed as emerging from the field, while being molded through learning between practitioners in digital strategies and projects (Gagnon 2022a).

BTM now serves as the new professional designation for IS education in Canada, with trademarks registered in Canada and the United States. It has been adopted by several Canadian business schools as the new title for degrees or concentrations that had been named Management Information Systems (MIS) and Information Technology Management (ITM).

In 2021, ITAC transferred the BTM trademarks to the Digital Innovation Foundation (DIF), responsible to promote the program globally (https://digitalinnovation.site), and to grow the BTM Forum into an open global community (https://btmforum.org). With more countries expected to follow Canada, each joining the new BTM Forum Global Council, the initial BTM team joined in 2022 the Canadian Information Processing Society (CIPS), responsible for future BTM accreditations in Canada, with the national Council Chair joining the Global Council as country delegate (https://cips.ca/accreditation-criteria-and-policies).

The BTM accreditation standard is supported by a unified Body of Knowledge (BOK) developed to improve Talent Management (TM) accuracy, breadth, and flexibility. It serves as a common language to integrate several Free, Libre, Open Standards (FLOS), and is configured with flexibility in mind. Its primary purpose is to help digital leaders best match talents to projects, and optimize learning paths (Gagnon 2021).

This initiative reflects the modernization of IS programs, and the shift beyond information and toward broader business concerns. It follows in the steps of prior IS curriculum guidelines, seeking to transform both undergraduate (Martz et al. 2011) and graduate (Ramesh and Gerth 2015) IS education, by offering accreditation services that align curricula with industry needs. Helping to overcome obstacles in adopting reference frameworks, BTM is introduced to these programs and builds upon their experience in adapting and following IS curriculum guidelines (Leidig and Anderson 2020; Topi et al. 2010).

Logistics

We propose a half-day workshop, preferably late afternoon to facilitate participation by other time zones, i.e., 3:30pm to 6:30pm IST. We are grateful to ISACA for considering sponsoring ICIS, allowing them to integrate this workshop within their sponsorship agreement.

The discussion seeks to merge viewpoints from several perspectives, whether academic educators, business leaders, and professional associations, all equally concerned by the renewal of digital leader training.

- Yoshimasa Masuda, Tokyo University of Science, Japan / Carnegie Mellon University, USA
- Jeff Angle, Senior Director of Academic and Workforce, ISACA, Chicago, USA
- Stéphane Gagnon, Université du Québec en Outaouais (UQO), QC, Canada
- Rashmi Jain, Montclair State University, NJ, USA
- <CIO or CDO, will be invited by ISACA as Sponsor>

The topics of each speaker will seek to stimulate discussion with participants and lead to clarify expectations for training next generation digital leaders. The following issues will be covered throughout the session:

- 3:30pm - Welcome (Masuda)
- 3:35pm - Professional Associations and Future of Leadership Development (Angle)
- 4:00pm - Business Technology Management (BTM) & Competency Frameworks (Gagnon, virtual)
- 4:30pm - Digital Leadership in Global Context and for Successful Architecture Practice (Masuda)

- 5:00pm - Break
- 5:15pm - Curriculum Renewal and Fusion of Disciplines in Digital Competencies (Jain)
- 5:45pm - Digital Executives Role in Coaching Transformation Project Leaders (CIO or CDO)
- 6:15pm - Synthesis and Future Direction (Masuda)
- 6:30pm - Closure (Masuda)

Outcomes

Engaging participants will allow viewpoints to emerge that would normally not be raised. It is essential to create a forum for free exchange of opinions about where IS education is heading. Critical thinking must be encouraged, and deviation from norms should be facilitated for faculty groups willing to take risks.

The future of digital innovation and transformation, and how to successfully lead such projects, is not as well-defined as theoretical constructs purport to present it, while digital strategy and enterprise architecture should be able to contribute to the above definitions. Contexts vary tremendously, and no one can yet claim to have found "the science" of digital leadership. Nor is the initial and continuous learning process to be frozen in time as our curriculum standards recommend. Neither should experience and programs from educational institutions in one country be dominant and preclude other countries from innovating.

One key outcome from this workshop shall therefore be to create a community and rally grassroot innovative efforts toward distinctive and replicable practices in digital leadership educational offerings. As Canada has started such a process, and ISACA is equally concerned about the renewal of academic and workforce development, the purpose of the workshop is also to enable free and open discussion about these experiences and ensure that participants can join these efforts as contributors after.

Conclusion

This workshop aims to create an open, diverse, and alternative community of educators who share a common goal of developing innovative educational offerings serving digital leaders. The recruitment of innovative and talented individuals, and their effective integration in complex digital transformation efforts, requires developing new career anchors and competency development guidelines (Cabot and Gagnon 2021). It also points to the challenges of developing new organizational innovation capabilities, which need to go beyond information and technology management, and toward digital strategy (Montreuil et al. 2020).

The findings explain the leadership styles and skills within different stages of a Digital Transformation lifecycle with key activities and show interrelationships between skills and actions (Masuda and Viswanathan 2019; Masuda et al. 2021).

A new TM tool will be presented entitled BTM BOK to improve TM accuracy, breadth, and flexibility. The adoption of BTM BOK has the potential to revitalize TM research toward more advanced methods for managing IS-IT professionals and teams. It also calls upon scholars in several disciplines to unite around a common language for action, whether from business, computing, or engineering schools. Transdisciplinary research efforts will help redefine the nature of the profession and its impact, emphasizing distinctive professional abilities for digital leadership, and creating a renewed momentum with three broad objectives:

- Focusing on innovation and digital value, in addition to leading traditional IS-IT services,
- Helping leaders to accelerate digital transformation, in addition to improving IS-IT management,
- Ensuring digital leaders share a distinctively hybrid business-technology-management acumen.

Future iterations of BTM BOK research, as a broad "knowledge initiative", will help harmonize many facets of how professionals lead their community learning dynamics. Academic research communities will work more closely with professionals for theory-practice development. It will help transforming IS-IT into an Evidence-Based Profession (EBP) with seamless integration of knowledge development, testing, validation, learning, practice, and feedback.

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