



Programs in
Business Technology Management (BTM)

Presentation – 2023

Stéphane Gagnon, DSA, UQO

stephane.gagnon@uqo.ca

Presentation Outline

Programs in BTM

1. Profession

- Business Technology Management (BTM)
- Profile of positions in BTM
- BTM Body of Knowledge (BOK)

2. Statistics

- Profile of the IT industry and jobs in Quebec

3. Undergraduate Certificate in BTM

- Program
- Structure
- Examples of technologies studied



New!

4. Graduate Diploma in BTM

- Programs
- Structure
- Optional courses



New!

1. Profession

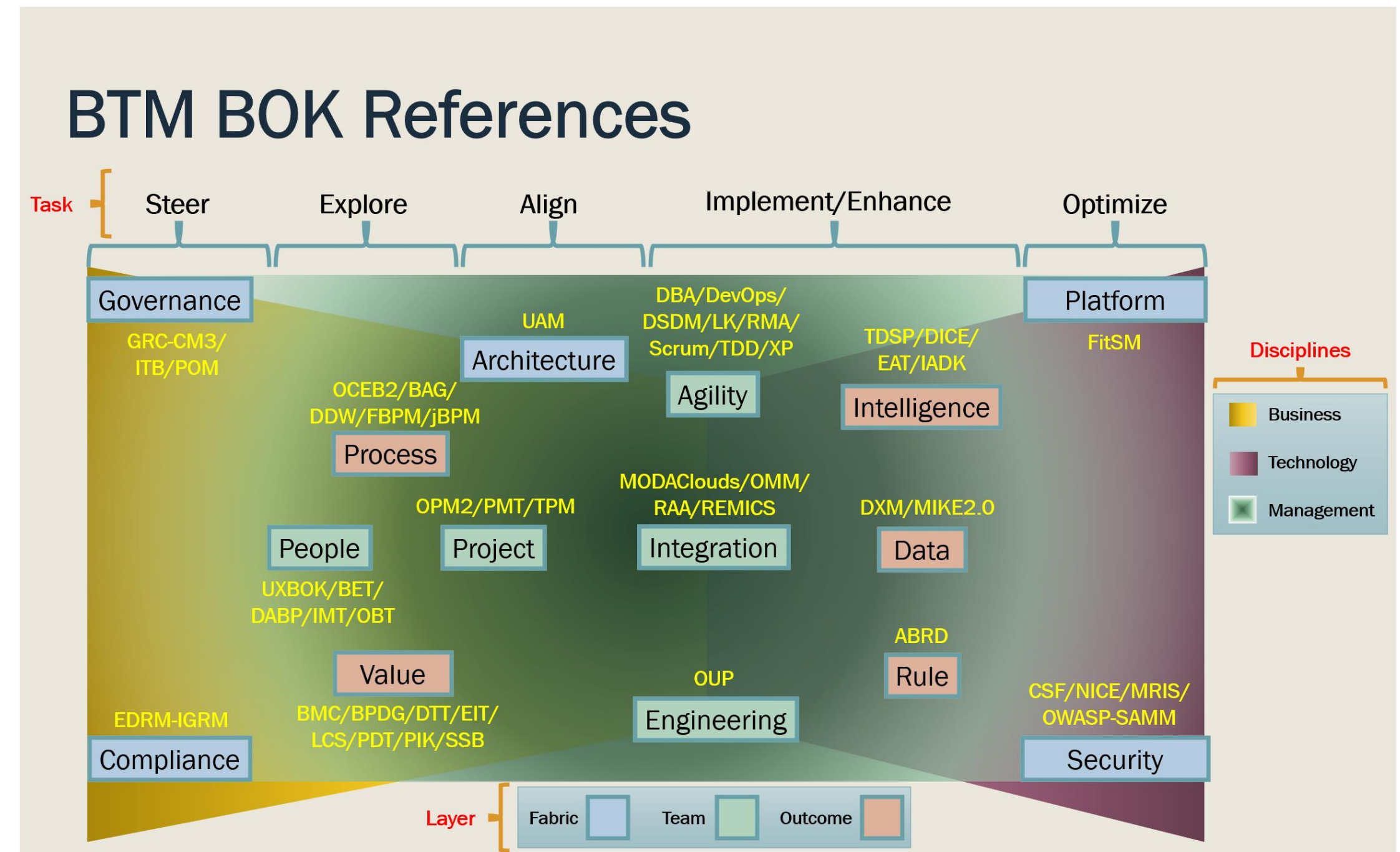
- Business Technology Management (BTM)
- Profile of positions in BTM
- BTM Body of Knowledge (BOK)

Business Technology Management (BTM)

Digital Transformation Leadership

Definition of profession

- **Business Technology Management (BTM)** is a registered trademark ® in Canada and USA.
- **BTM Forum** is a professional association launched in 2016 to bring together the community
- BTM is a **transdisciplinary field** , integrates disciplines in management and computer science
- BTM is the segment **most in demand** of IT jobs
- Expertise focused on **digital transformation**, new business models, digital products and services, value chain integration



Knowledge framework integrating all specializations

BTM Body of Knowledge (BOK)

Standard for Program Accreditation and Professional Certification

<https://btmforum.org> and <https://github.com/Digital-Innovation-Foundation/btmbok>

Profile of positions in BTM

BTM Positions in 6 Sub-Domains and Ratio (%) of Skills Requirement in Business and Technology

Positions with Business Focus

Positions with Technology Focus

IT Function Management <ul style="list-style-type: none">• Chief Digital/Information Officer (CDIO) and Governance• Business Architect and Digital Transformation Manager<ul style="list-style-type: none">• Enterprise Risk and Compliance Manager	90/10	50/50	IT Asset Management <ul style="list-style-type: none">• Chief Data Officer and Chief Data Scientist• Enterprise Architect and IT Integration Program Manager• Business Intelligence and Process Automation Manager
IT Project Management <ul style="list-style-type: none">• Project Manager and Digital Product Manager<ul style="list-style-type: none">• Business Process and Rules Architect• Business Analyst and Requirements Analyst	80/20	40/60	IT Development Management <ul style="list-style-type: none">• Engineering Team Manager and DevOps Manager• Systems Architect and Data Architect• Testing Manager and Quality Assurance Manager
IT Service Management <ul style="list-style-type: none">• Data Center Manager and Service Manager• Cybersecurity Manager and Business Continuity Manager• Technical Support Manager and User Experience Manager	70/30	30/70	IT Application Management <ul style="list-style-type: none">• ERP Module Manager and Systems Maintenance Manager• E-Commerce Manager and E-Marketing Manager• E-Content Manager and Intellectual Property Manager

BTM Body of Knowledge (BOK)

1 - Overview

1.1 - Purpose

- 1.1.1 - Objectives
- 1.1.2 - Profession
- 1.1.3 - Adoption
- 1.1.4 - Customization
- 1.1.5 - Community

1.2 - Contents

- 1.2.1 - Metamodel
- 1.2.2 - Structure
- 1.2.3 - Components
- 1.2.4 - Dependencies
- 1.2.5 - Sources

1.3 - Methodology

- 1.3.1 - Licenses
- 1.3.2 - References
- 1.3.3 - Editing
- 1.3.4 - Contribution
- 1.3.5 - Authors

6 - Career

6.1 - Goal

- 6.1.1 - Specialist
- 6.1.2 - Complement
- 6.1.3 - Generalist
- 6.1.4 - Senior
- 6.1.5 - Occasional

6.2 - Path

- 6.2.1 - Corporate
- 6.2.2 - Embedded
- 6.2.3 - Small
- 6.2.4 - Startup
- 6.2.5 - Consulting

6.3 - Progression

- 6.3.1 - Origin
- 6.3.2 - Certification
- 6.3.3 - Education
- 6.3.4 - Experience
- 6.3.5 - Promotion

5 - Lifecycle

5.1 - Scope

- 5.1.1 - Administration
- 5.1.2 - Solution
- 5.1.3 - Support
- 5.1.4 - Facility
- 5.1.5 - Enterprise

5.2 - Focus

- 5.2.1 - Behavior
- 5.2.2 - Functionality
- 5.2.3 - Reengineering
- 5.2.4 - Optimization
- 5.2.5 - Diversification

5.3 - Sector

- 5.3.1 - Resource
- 5.3.2 - Infrastructure
- 5.3.3 - Product
- 5.3.4 - Service
- 5.3.5 - Public

3 - Practice

3.1 - Fabric

- 3.1.1 - Governance
- 3.1.2 - Compliance
- 3.1.3 - Architecture
- 3.1.4 - Security
- 3.1.5 - Platform

3.2 - Team

- 3.2.1 - People
- 3.2.2 - Project
- 3.2.3 - Agility
- 3.2.4 - Engineering
- 3.2.5 - Integration

3.3 - Outcome

- 3.3.1 - Value
- 3.3.2 - Process
- 3.3.3 - Rule
- 3.3.4 - Data
- 3.3.5 - Intelligence

4 - Discipline

4.1 - Business

- 4.1.1 - Strategy
- 4.1.2 - Marketing
- 4.1.3 - Operation
- 4.1.4 - Innovation
- 4.1.5 - Performance

4.2 - Management

- 4.2.1 - Talent
- 4.2.2 - Learning
- 4.2.3 - Change
- 4.2.4 - Leadership
- 4.2.5 - Entrepreneurship

4.3 - Technology

- 4.3.1 - System
- 4.3.2 - Software
- 4.3.3 - Cloud
- 4.3.4 - IoT
- 4.3.5 - AI

2 - Transformation

2.1 - Opportunity

- 2.1.1 - Scan
- 2.1.2 - Discover
- 2.1.3 - Prioritize
- 2.1.4 - Finance
- 2.1.5 - Benefit

2.2 - Decision

- 2.2.1 - Who
- 2.2.2 - What
- 2.2.3 - Why
- 2.2.4 - Where
- 2.2.5 - How

2.3 - Accountability

- 2.3.1 - Steer
- 2.3.2 - Explore
- 2.3.3 - Align
- 2.3.4 - Implement
- 2.3.5 - Optimize

BTM BOK Core

2. Statistics

- Profile of the IT industry and jobs in Quebec

Profile of the IT industry and jobs in Quebec

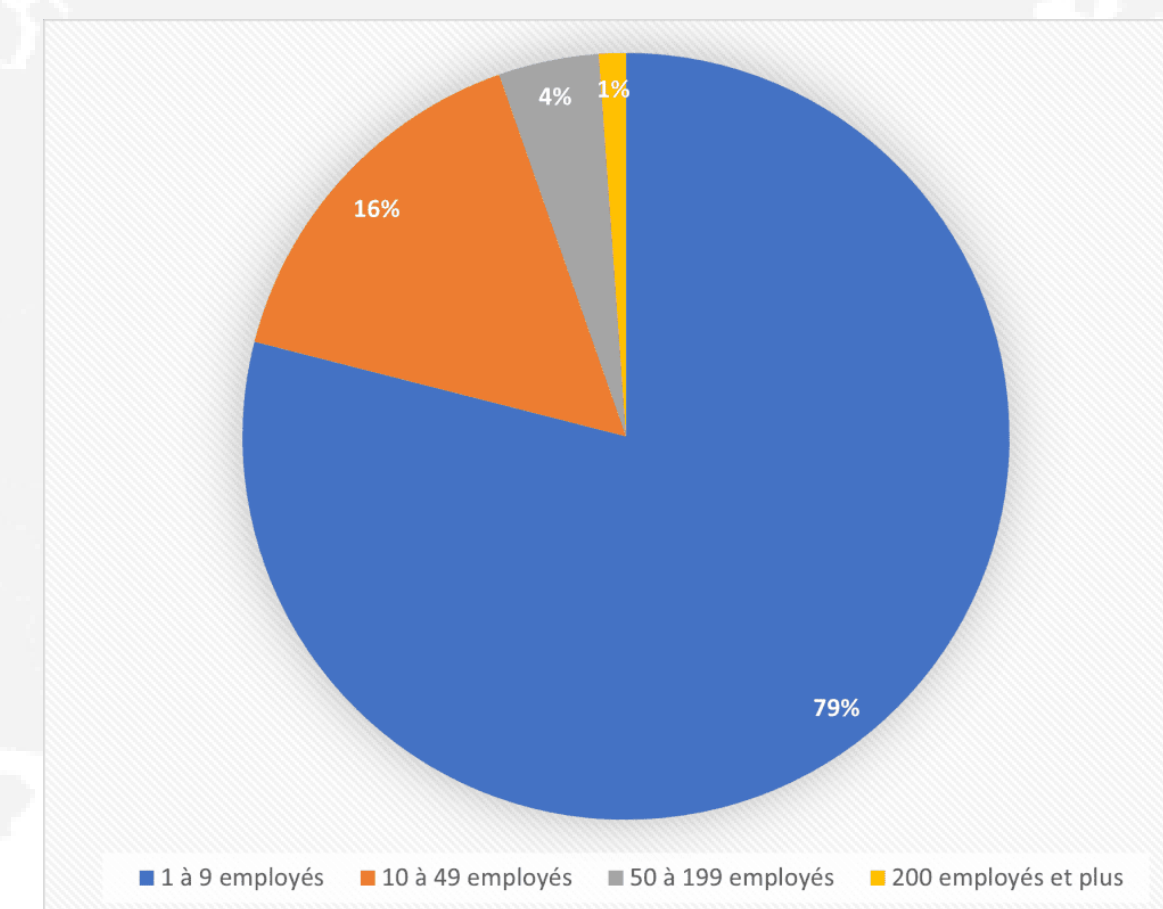
Portrait de l'industrie



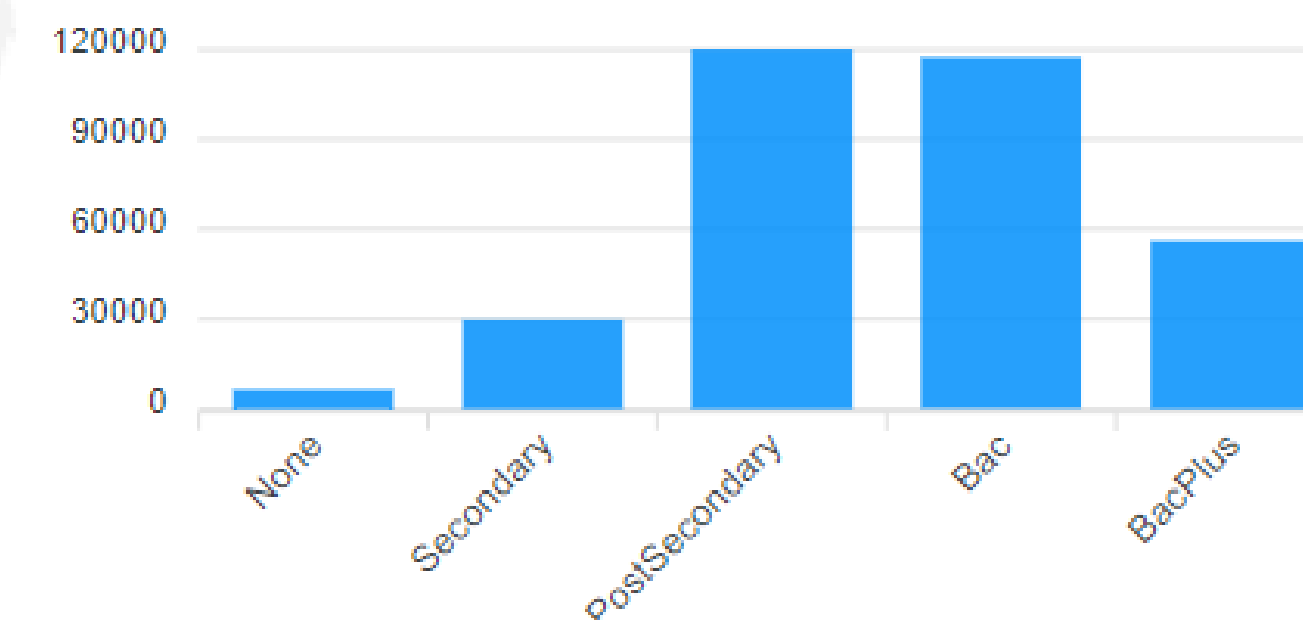
La main-d'oeuvre en TIC



Distribution of ICT companies by employee size



Education level of ICT workers in 2022



3. Certificate in BTM

- Program
- Course
- Examples of technologies studied



New!

New!

Certificate in **Business Technology Management (BTM)**

- 10 lessons including 7 mandatory

Admissions open since January 2023
Courses will be offered in September 2023

<https://uqo.ca/mod/sciences-administration/certificat-gestion-technologies-daffaires>

Program

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UQO Outaouais Laurentides English Mesures d'urgence Liens rapides

FUTURS ÉTUDIANTS PREMIER CYCLE FUTURS ÉTUDIANTS CYCLES SUPÉRIEURS ÉTUDIANTS ACTUELS DIPLÔMÉS EMPLOYÉS GRAND PUBLIC ET EMPLOYEURS

IL Y A TOUT UN MONDE

Module des sciences de l'administration ▾

Futurs étudiants premier cycle ▾

Programmes d'études ▾

Administration ▾

- Baccalauréat en administration
- Certificat en administration
- Certificat en gestion des technologies d'affaires**
- Droit de l'entreprise et du travail
- Innovation numérique
- Gestion et évaluation immobilières
- Gestion et développement de PME
- Relation client et marketing

Accueil ▸ Module des sciences de l'administration ▸ Futurs étudiants premier cycle ▸ Programmes d'études ▸ Administration

Certificat en gestion des technologies d'affaires

Offert à Gatineau et au campus de Saint-Jérôme

Ce certificat a pour objectif de former des gestionnaires spécialisés en **gestion des technologies d'affaires (GTA)**.

Les diplômées et diplômés acquièrent des connaissances et des compétences de pointe en gestion des processus, en innovation et transformation numérique des organisations publiques ou privées, en intelligence d'affaires, en cybersécurité, en architecture de systèmes, ainsi qu'en configuration et utilisation des systèmes intégrés de gestion (Enterprise Resource Planning, ou ERP).

Ce programme combine le développement des connaissances et de compétences en matière d'affaires et de technologies.

Veuillez noter que ce certificat fait partie de la liste prédéfinie de programmes du **Baccalauréat en innovation numérique**.

[Demande d'admission](#) [Description officielle du programme](#)

New!

Structure

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Certificate in **Business Technology Management (BTM)**

**Skills in design and
implementation of digital
solutions through visual
programming**
(low- code / no-code)

<https://etudier.uqo.ca/programmes/4674>

Cours obligatoires

MNG1663 Créativité et innovation en gestion

SIG1003 Systèmes d'information pour gestionnaires

SIG1023 Systèmes intégrés de gestion

SIG1033 Gestion des processus d'affaires Préalables SIG1023

SIG1043 Intelligence d'affaires Préalables SIG1023

SIG1063 Simulation d'une entreprise intégrée Préalables SIG1033 et SIG1043

CYB1003 Introduction à la cybersécurité

Cours optionnels

Choisir 3 cours (9 crédits) parmi la liste de cours optionnels suivante :

MKT1183 Marketing

MKT1263 Commerce et marketing électroniques Préalables MKT1183

CYB1093 Gestion de projets et cybersécurité Préalables CYB1003

CYB1043 Audit des systèmes d'information en comptabilité

SIG1053 Architecture des systèmes d'information Préalables SIG1033 et SIG1043

SIG1073 Étude de faisabilité d'un système d'information Préalables SIG1033 et SIG1043

INF1173 Analyse et gestion des exigences

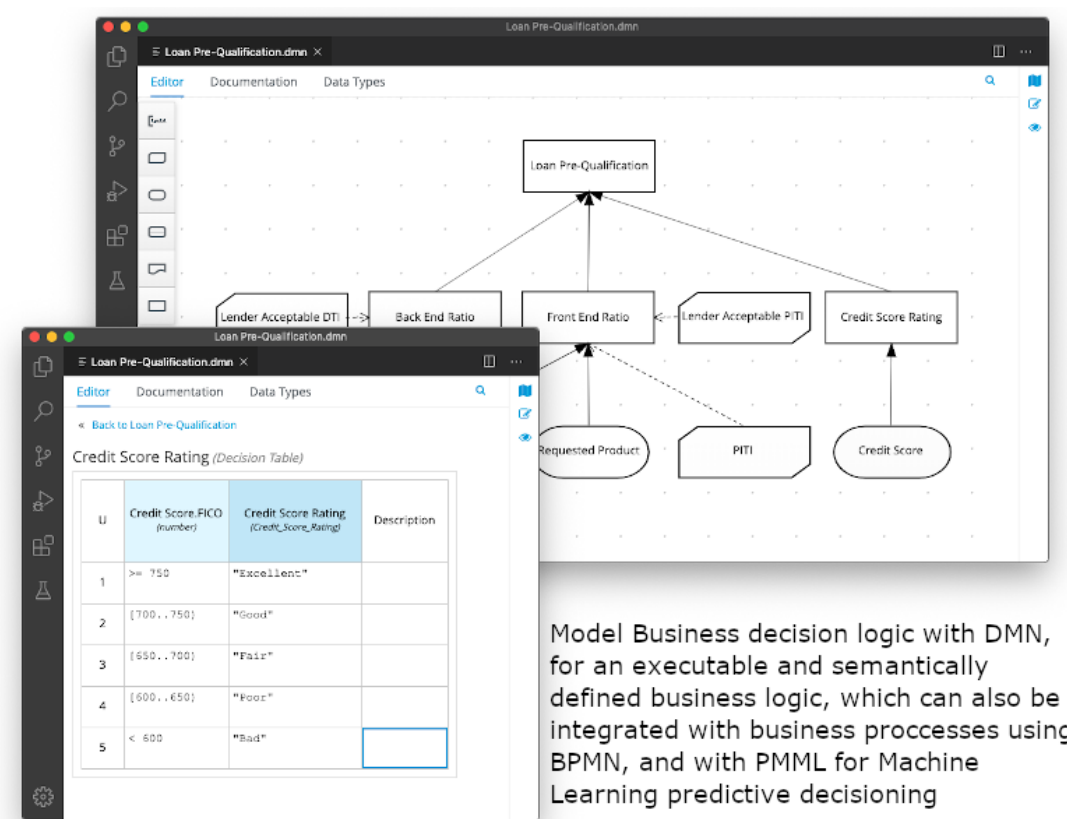
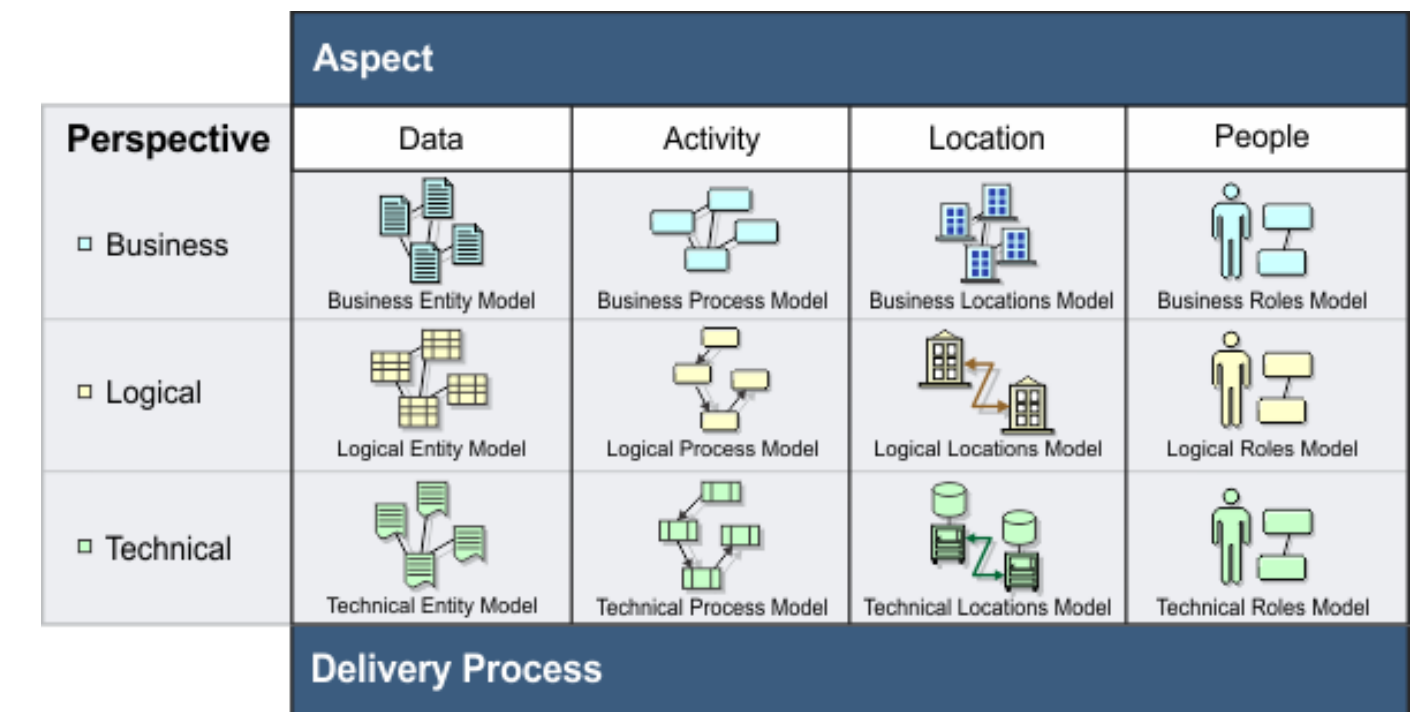
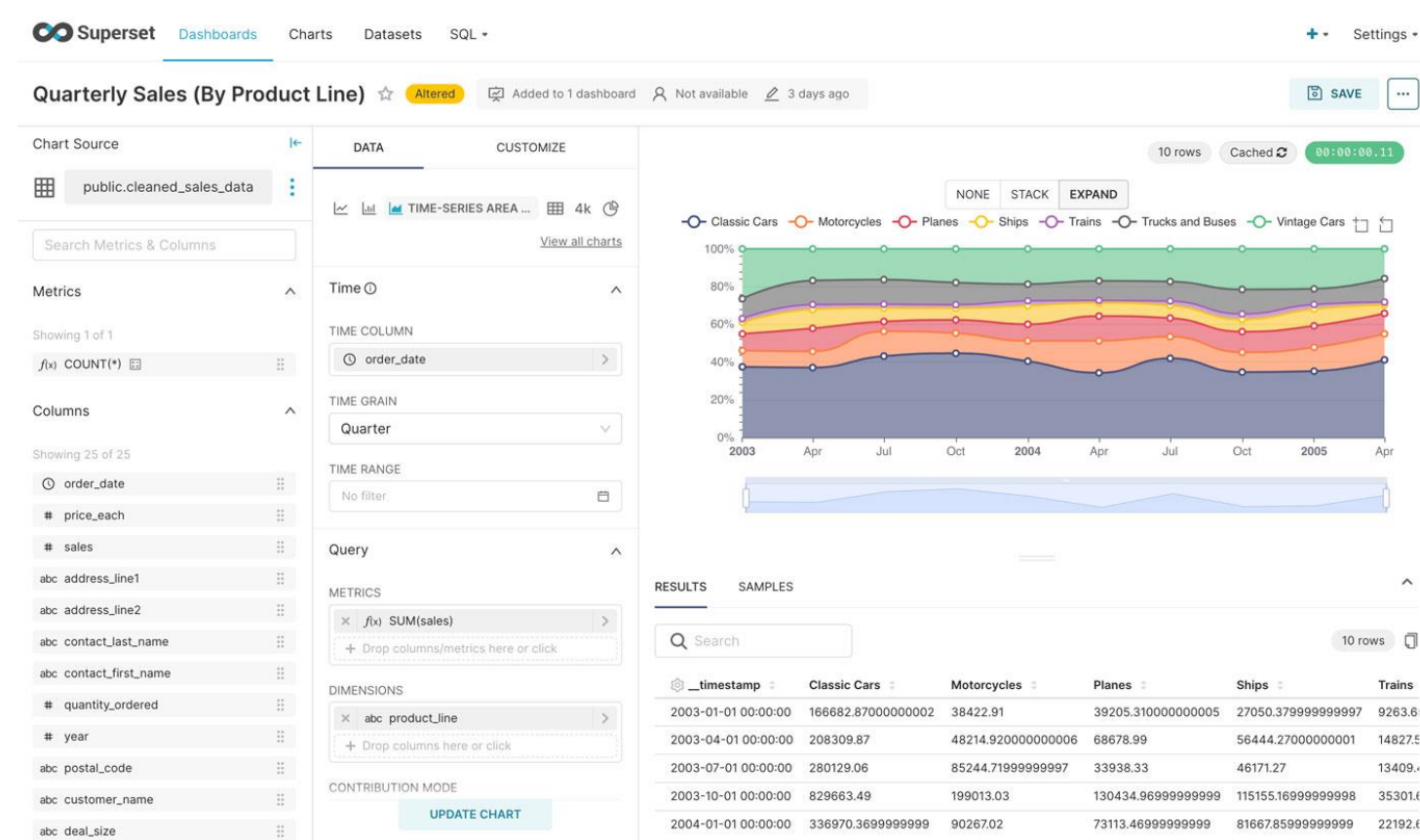
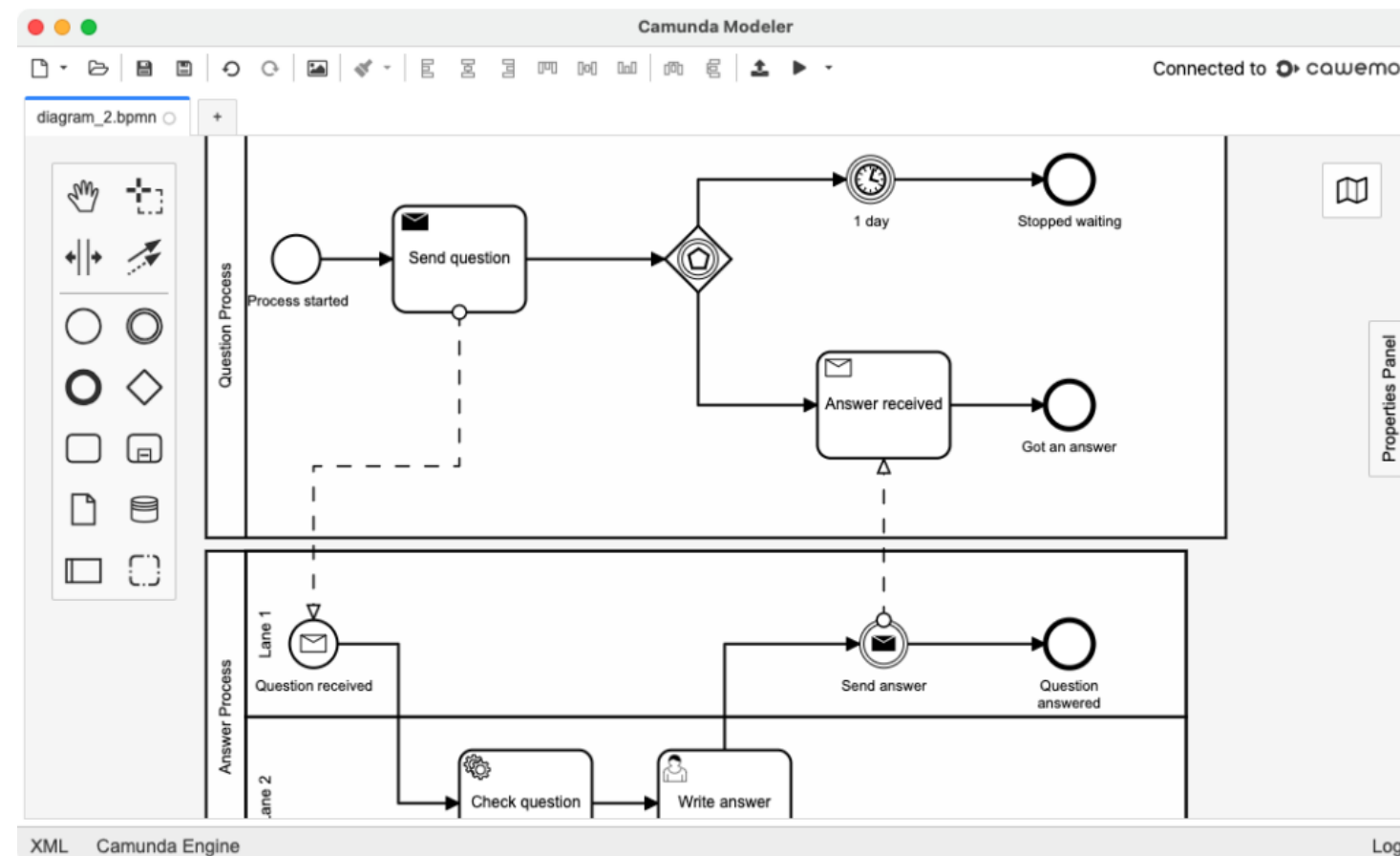
INN1003 Projet intégrateur en innovation numérique (Cours obligatoire pour le baccalauréat par cumul avec appellation (BACCAP) en innovation numérique)

New!

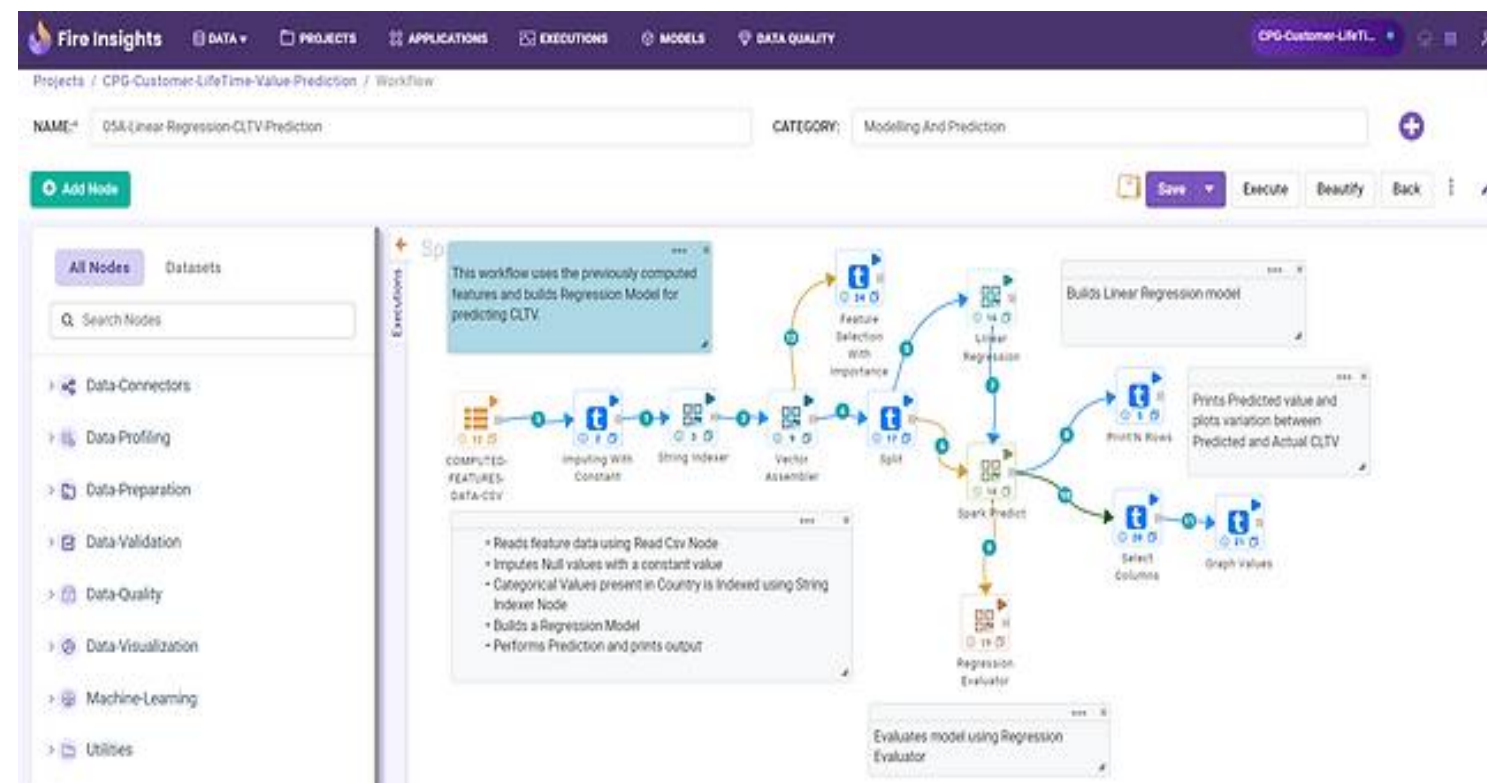
Examples of technologies studied

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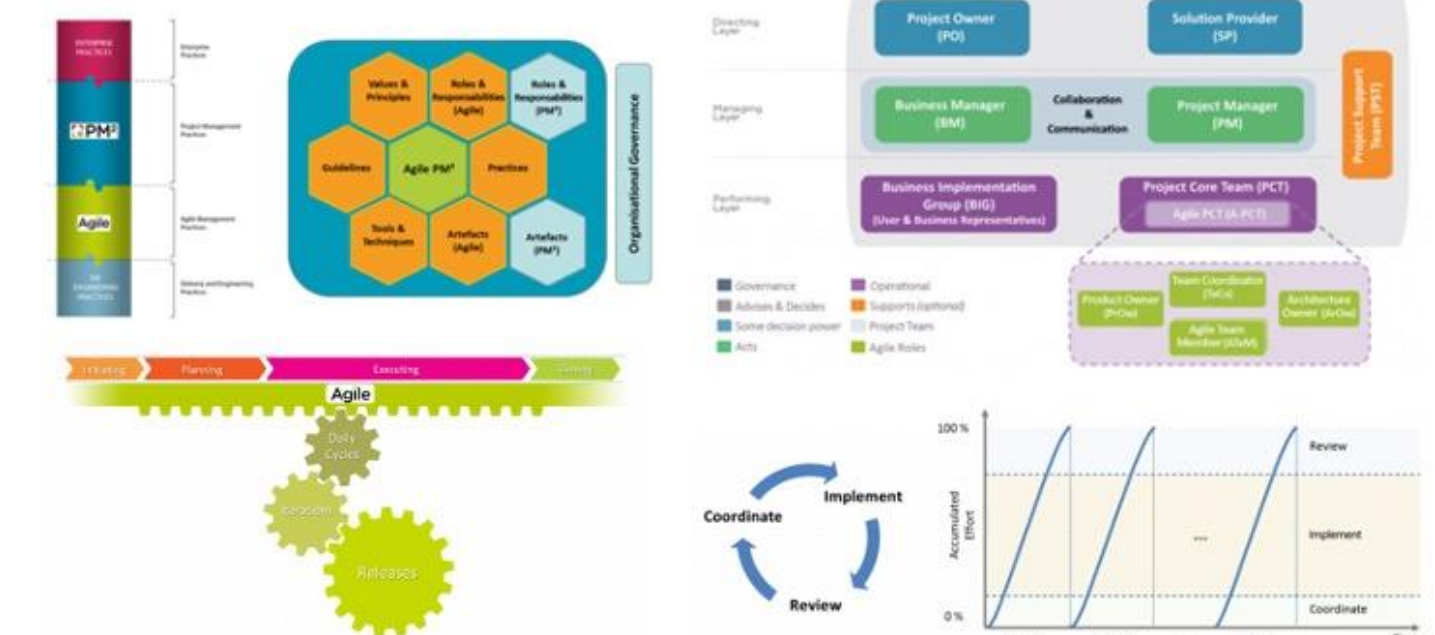
Visual programming platforms (low -code / no-code) taught in BTM courses



Model Business decision logic with DMN, for an executable and semantically defined business logic, which can also be integrated with business processes using BPMN, and with PMML for Machine Learning predictive decisioning



Agile PM²



SIG1033 - Business Process Management

Camunda BPM – modeling, orchestration, microservices

<https://camunda.com/>

Drools and Kogito – rules management system business

<https://www.drools.org/> <https://kogito.kie.org/>

SIG1043 Business Intelligence

Apache Superset – visualization and dashboards

<https://superset.apache.org/>

Sparkflows Fire Insights – big data and intelligence

<https://www.sparkflows.io/>

SIG1053 - Information Systems Architecture

Unified Architecture Method (UAM) – method IT analysis

<https://unified-am.com/UAM>

PM²-Agile – agile project management methodology

https://pm2.europa.eu/pm2-offering/pm2-agile_en

4. Diploma in BTM

- Programs
- Structure
- Optional courses



New!

New!

Diploma in *business technology management* (BTM)

- **10 lessons, 9 of which are compulsory**

Admissions will open Oct 2023
Courses will be offered in January 2024

<https://etudier.uqo.ca/programmes/2037>

Short graduate programs in *digital governance*

- **5 compulsory courses**

Short graduate programs in *digital transformation*

- **5 compulsory courses**

Programs

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Goals

- Understand **emerging digital technologies** and their value for business applications
- Master all **digital governance mechanisms** in organizations of all types
- Lead the entire lifecycle of **digital transformation initiatives** from formulation to completion

Definitions

• **Digital governance**

- Management by executives of key IT decisions
- Especially financial, such as procurement, contracts, etc.
- Tasks focus on risk management, ensuring regulatory compliance, security policies, ethical and legal issues, etc.

• **Digital transformation**

- Management of major organizational transformation programs and projects related to the implementation of innovative IT
- Focused above all on the innovation of products, services, processes , etc.
- Tasks focus on leadership of complex projects, advanced applications such as AI, business and IT strategies, etc.

New!

Structure

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Compulsory courses for the new graduate programs in BTM

Code	Sess.	Title	Short graduate program in Digital Governance	Short graduate program in Digital Transformation	Dip. BTM
GTA6003	Fall	Emerging digital technologies	1	1	1
GTA6023	Fall	Technology governance	1		1
GTA6033	Winter	Cybersecurity and digital identity	1		1
GTA6043	Winter	Digital law	1		1
GTA6053	Summer	Risk management and technology ethics	1		1
GTA6063	Fall	Business Technology Leadership		1	1
GTA6073	Fall	Digital strategy and performance		1	1
GTA6083	Winter	Applications of artificial intelligence in management		1	1
GTA6093	Winter	Innovation and digital transformation		1	1
Optional	A/H/E	An optional 3-credit course			1



Optional course

Diploma BTM requires 1 optional course of 3 credits taken from one of these 4 short programs

Code	Program title
0179	Short graduate program in consultation
0778	Short graduate program in entrepreneurship
0749	Short graduate program in project management
0178	Short graduate program in change management

THANKS

Looking forward to
discussing it

Contact:
Stephane Gagnon, Ph.D.
Associate Professor
Department of Administrative Sciences
University of Quebec in Outaouais
+1-800-567-1283 ext. 1942
stephane.gagnon@uqo.ca
<https://gagnontech.org>