

Digital Transformation

ICTC's Digital Transformation e-Learning course provides foundational understanding of the practice of Digital Transformation (DX) within Canadian organizations. DX is a complex phenomenon that synchronizes technology, organizational change, and adaptability. This course is designed to help students learn about the main technologies, processes, and considerations for DX.

Modules		Lessons and Units	Learning Objectives	
Module 1	Introduction to Digital Transformation	<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Introduction to Digital Transformation ○ What Do You Know About Digital Transformation? • The Impact of Digital Transformation <ul style="list-style-type: none"> ○ What is Digital Transformation and Why Does it Matter? ○ Digital Transformation in Practice • Defining Digital Transformation <ul style="list-style-type: none"> ○ The Importance of Digital Transformation Context ○ Characteristics of a Digital Business ○ Digitization, Digitalization, and Digital Transformation • Drivers for Digital Transformation <ul style="list-style-type: none"> ○ The Benefits of Digital Transformation in More Detail ○ Real-life Experience with Digital Transformation 	<ul style="list-style-type: none"> • Compare digitization, digitalization, and Digital Transformation • Recognize the main qualities of a digital organization. • Identify an example of Digital Transformation within a case study. • Refer to examples to demonstrate the benefit of digital transformation for a Canadian business. • Describe the drivers for Digital Transformation within the Canadian economy. • Recognize the business value delivered by examples of Digital Transformation 	Quiz
Module 2	Digital Technologies Overview	<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Introduction to Digital Technologies and Their Role in Disruption • Types of Technology <ul style="list-style-type: none"> ○ Business Applications ○ Cloud Solutions ○ Unified Communications ○ Process Automation ○ 5G ○ Artificial Intelligence ○ Metaverse ○ Internet of Things ○ Fintech and Digital Payment Technology ○ Blockchain ○ Ecommerce ○ API Management 	<ul style="list-style-type: none"> • Describe the main digital technologies used by organizations to compete and thrive. • Identify the key features of the main digital technologies that are providing value to the customer • Recall common uses for each type of digital technology. • Explain the pros and cons of each main type of digital technology • Recognize what technologies are being used based on business need within simple case studies • Identify what type of digital technology was used based on the business needs and outcomes achieved 	Quiz

Module 3	Digital Transformation Journey	<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Introduction to the Digital Transformation Journey • The Digital Transformation Journey <ul style="list-style-type: none"> ○ The Stages in the Digital Transformation Journey ○ The Digital Transformation Process • The Start of the Digital Transformation Project <ul style="list-style-type: none"> ○ Understanding the Current Situation ○ Asking Analysis Questions • Key Considerations for Planning Digital Transformation <ul style="list-style-type: none"> ○ Planning ○ Project Budget ○ Timeline ○ Resources ○ Project Management Approaches ○ Change Management and Communication Strategy • Creating a Successful Business Case <ul style="list-style-type: none"> ○ Components of a Successful Business Case ○ Digital Transformation Journey in Different Sized Organizations • Reasons for Digital Transformation Failing <ul style="list-style-type: none"> ○ Why does Digital Transformation Fail? 	<ul style="list-style-type: none"> • Identify the common stages and key activities in each stage of the Digital Transformation journey • Identify how the processes used to deploy and implement Digital Transformations mitigate problems. • Identify reasons why Digital Transformations fail • Identify questions to understand the problem Digital Transformation intends to solve • Compare business needs with the benefits of digital technologies • Describe the main stages involved in purchasing a digital solution • Describe the software development cycle • Identify the roles commonly involved in Digital Transformation deployment and implementation • List the different project methodologies used in Digital Transformation implementation • Describe the importance of change management and communication strategy within Digital Transformation and implementation • Describe two change management approaches • Explain the most valuable information to include in a Digital Transformation business case • Describe how the Digital Transformation journey differs, depending on the size of an organization • Describe the most common reasons Digital Transformations fail 	Padlet Discussion Quiz
Module 4	Making a Case for Digital Transformation	<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Introduction to Making a Case for Digital Transformation • The Value and Impact of Digital Transformation <ul style="list-style-type: none"> ○ Quantifying the Value of Digital Transformation ○ How Digital Transformation drives value. ○ Develop Revenue Through Innovative Digital Products ○ Create Efficiencies Through Digitally Transforming Business Processes ○ Measuring Return on Investment • Recognizing The Impact of Digital Transformation <ul style="list-style-type: none"> ○ The Impact of Digital Transformation • Digital Transformation Business Cases <ul style="list-style-type: none"> ○ Steps to Building a Digital Transformation Business Case ○ Comparing Two Potential Digital Transformation Solutions 	<ul style="list-style-type: none"> • Discuss how functions within an organization are impacted by Digital Transformation projects • Explain the impact of Digital Transformation on the environment • Explain the impact and value of main digital technologies • Explain the main ways Digital Transformation delivers organizational value • Compare options where Digital Transformation can enhance organizational value through simple use cases 	Quiz

Module 5	Building Data Analytics Capabilities	<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ◦ Introduction to Data Analytics ◦ What Do You Know About Data Analytics? • Data Modernization <ul style="list-style-type: none"> ◦ Modern Data Architecture • Building a Data Strategy <ul style="list-style-type: none"> ◦ What is a Data Strategy? • Overview of Privacy Legislation <ul style="list-style-type: none"> ◦ Privacy Laws Around in the World • Introduction to Data Inventory Best Practices <ul style="list-style-type: none"> ◦ Components of Data Inventory 	<ul style="list-style-type: none"> • Compare the different types of data analytics • Explain some of the benefits of data analytics for businesses • Describe the key components of data modernization • Identify the key components of a data strategy • Explain the impact of key privacy legislation on data strategies • State data inventory best practices 	Padlet Discussion Quiz
Module 6	The Importance of Cybersecurity	<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ◦ Introduction to Cybersecurity ◦ What is Cybersecurity and its Impact on Canada? ◦ Cyberthreats in Canadian Organizations • Solutions to Manage and Reduce Cybersecurity Risks <ul style="list-style-type: none"> ◦ Cybersecurity Frameworks ◦ Implementing Cybersecurity Strategy ◦ Cybersecurity Incident Detection and Response • How Can I Contribute to My Organization's Cybersecurity Strategy? <ul style="list-style-type: none"> ◦ What Can I do? 	<ul style="list-style-type: none"> • Explain the increased importance of cybersecurity as a result of Digital Transformation • Explain the most common cyberthreats impacting Canadian organizations across a wide range of industries • Explain the impact of a cybersecurity incident on Canadian businesses. • Identify possible cybersecurity risks in mini case studies • Describe common cybersecurity solutions • Describe common cyber insurance products and services • Compare the benefits of cybersecurity solutions and insurance products and services 	Padlet Discussion Quiz
Module 7	Career Opportunities in Digital Transformation	<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ◦ Introduction to Career Opportunities in the Digital Sector ◦ Introduction to Career Action Planning ◦ The Job Market ◦ Researching Digital Job Opportunities ◦ Building a Digital Resume ◦ ICTC Job Skills Matching Tool • Specific Careers in Digital Transformation <ul style="list-style-type: none"> ◦ Specific Roles in Digital Transformation ◦ Digital Transformation Resume and Skill Building • A Closer Look at Careers in Digital Transformation 	<ul style="list-style-type: none"> • Consider career opportunities within Digital Transformation • Articulate the main steps involved in career action planning • Identify ways to search for job postings listed on job boards • Describe how to align transferrable skills with the job requirements • Identify in-demand jobs in the Digital Transformation sector • Describe an action plan for progressing in a career in digital transformation 	Padlet Discussion Quiz

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Case Study</p>	<p>Crafting a Business Case in Digital Transformation</p>	<ul style="list-style-type: none"> • Through this course, students have learned about the benefits and challenges of Digital Transformation (DX), how to create DX solutions for business challenges, and how to pitch to stakeholders. In this case study, students will apply this knowledge to create a business case for a DX solution of your choosing. 	<ul style="list-style-type: none"> • Identify business needs • Propose DX solutions • Estimate costs • Predict timelines and implementation • Identify returns on investment 	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Short Narrated PowerPoint</p>
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Optional

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Section 3

Module 5	Building Data Analytics Capabilities	<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Introduction to Data Analytics ○ What Do You Know About Data Analytics? • Data Modernization <ul style="list-style-type: none"> ○ Modern Data Architecture • Building a Data Strategy <ul style="list-style-type: none"> ○ What is a Data Strategy? • Overview of Privacy Legislation <ul style="list-style-type: none"> ○ Privacy Laws Around in the World • Introduction to Data Inventory Best Practices <ul style="list-style-type: none"> ○ Components of Data Inventory 	<ul style="list-style-type: none"> • Compare the different types of data analytics • Explain some of the benefits of data analytics for businesses • Describe the key components of data modernization • Identify the key components of a data strategy • Explain the impact of key privacy legislation on data strategies • State data inventory best practices 	Padlet Discussion Quiz
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**Section 4:
DX Case Study**

<p>Case Study</p>	<p>Crafting a Business Case in Digital Transformation</p>	<ul style="list-style-type: none"> • Through this course, students have learned about the benefits and challenges of Digital Transformation (DX), how to create DX solutions for business challenges, and how to pitch to stakeholders. In this case study, students will apply this knowledge to create a business case for a DX solution of your choosing. 	<ul style="list-style-type: none"> • Identify business needs • Propose DX solutions • Estimate costs • Predict timelines and implementation • Identify returns on investment 	<p>Short Narrated PowerPoint</p>
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