University of Guelph

Comprehensive Review of the University’s IT Functions

March 2017
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Project Background

Our Understanding of What’s Driving a Comprehensive Review of IT Functions

Strategic Importance
- Growing demand for IT services
- Key enabler to University’s Strategic Renewal Plan
- Pervasive across all program and services – Education, Research and Administration

Internal Factors
- IT is growing in importance to the University

External Factors
- Emerging Technology in Education
  - Digital Learning & Textbooks
  - Adaptive / Personalized Learning
  - Student Analytics
  - Big Data
  - e-Research
  - Consumerized Expectations

Funding Constraints
- Challenged to continue to add resources to meet demand
- Requires new way of thinking about IT service delivery
- What is right balance of central vs. divisional IT?
- How do we best leverage third parties?

Complexity
- Siloed or duplicate IT functions within divisions and colleges
- 15+ year old enterprise applications at end of life
- Large ecosystem of applications for Admin, Education and Research
- Complex inter-divisional funding models

Drivers for University’s IT Functional Review
- Funding constraints require “do more with less” approach
- Complex IT environment creates risk and reduces flexibility

Cloud Computing is changing IT delivery model

Role of IT / CIO is changing
- IT is a leader and business partner in digitizing education institutions
- IT needs to be efficient, agile, visionaries and value-driven
- IT role is evolving to be a broker between client demand and a range of options to deliver services

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Project Objectives

**Institution’s Stated Project Requirements:**

1. Catalogue major enterprise-wide IT functions/processes and core contributions to the University;
2. Analyze the scale and total resources committed to IT across the University;
3. Determine how well best practices are being applied;
4. Identify opportunities to enhance efficiency and effectiveness of service delivery; and
5. Identify any major gaps in IT services, systems, infrastructures or governance.

**Key Questions We Will Address:**

- What is the University’s current IT footprint in terms of services, technologies and maturity?
- How well is the University’s IT running compared to leading practices and other jurisdictions?
- Is IT positioned to be a key enabler to the University’s Strategic Renewal Plan?
- How much is the University investing in IT?
- What are the opportunities to improve the University’s IT services?
- What are the technology trends emerging in Higher Ed?
- What are the best practices for IT investment governance for a University setting?

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## Project Scope (1/2)

### How do we Improve Operations of IT?

**In-Scope**
- **IT focused** on the efficiency and effectiveness of the IT function and its alignment to the business
- High level scan of how technology will impact the future state of the University

**Business Needs**
- Review the University's existing Strategic Plans
- Understand the Business Unit's existing plans (i.e. Academics, Research, Administration)
- Assess alignment of IT goals with the strategies

**Current State IT Review**
- Gather a high-level inventory of the University's current state IT environment
  - IT organizational functions and processes
  - Major applications
  - IT infrastructure
  - IT governance
  - Projects
- Analyze total resources, costs and allocations committed to IT, both in central facilities/systems, as well as in colleges/divisions (incl. funding source, budget allocations, etc.)
  - On-going labour effort and costs
  - On-going non-labour costs
  - Project costs

### How do we Transform the University through IT?

**Out-of-Scope**
- **Business focused** on the future state of the University, including a roadmap of how technology will enable the vision of the University

**Business Needs**
- Define technology strategy for the University, e.g.:
  - Target experience of students, researchers, etc.
  - Business and technology capabilities required
  - Roadmap to implement these capabilities

**Current State IT Review**
- Detailed inventory of processes, applications, and infrastructure
- Workforce review of staff capabilities and skills
- Validate the accuracy of the data collected / provided by the University

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### How do we Transform the University through IT?

<table>
<thead>
<tr>
<th>In-Scope</th>
<th>Out-of-Scope</th>
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<tbody>
<tr>
<td><strong>Env. Scan</strong></td>
<td><strong>Gap Analysis</strong></td>
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<tr>
<td>● Conduct a <strong>high level environmental scan</strong> of IT practices in similar size public and private sector organizations</td>
<td>● Conduct detailed interviews with peer organizations to better understand their business and IT vision ○ The University can identify peer organizations to be included in interviews for a more targeted environment scan</td>
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<tr>
<td>● Identify <strong>trends and leading practices</strong> for the management of IT services, especially in the education sector</td>
<td>● Conduct a detailed scan of technology led business innovation within peer organizations (e.g. classroom technologies, etc.)</td>
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<tr>
<td>● Conduct a high level <strong>technology scan</strong> of available future state technology recommendations. (e.g. Cloud, Human Capital Management systems, etc.)</td>
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<tr>
<td><strong>Gap Analysis</strong></td>
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<tr>
<td>● Assess <strong>maturity</strong> (strengths and challenges) of the IT environment</td>
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<td>● Determine to what extent <strong>leading practices</strong> are currently applied at the University</td>
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<td>● Identify any <strong>major “gaps”</strong> in IT services, systems, infrastructures, resources or governance</td>
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<td>● Assess <strong>alignment of IT goals</strong> with the University strategies / plans</td>
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<tr>
<td><strong>Final Report</strong></td>
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<td>● Identify <strong>opportunities</strong> for the University to enhance the efficiency and effectiveness of service delivery</td>
<td>● <strong>Future state design of IT</strong> (vision, services, operating model, governance, business plan)</td>
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<td>● Evaluate opportunities and make <strong>recommendations</strong> based on the feasibility, risk and potential benefit of each opportunity</td>
<td>● <strong>Quantified cost-benefit</strong> analysis or business cases of each opportunity</td>
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<td>● Define next steps for the University to undertake</td>
<td>● <strong>Recommend specific technologies</strong> / products to be implemented</td>
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<td>● Develop <strong>detailed implementation roadmap</strong> for each opportunity</td>
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