IT Strategic Planning: Storytelling the University's Digital Future

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Background

Both new to our institutions in 2017
IT Strategic Planning process started in spring 2018
McMaster in March
UofT in June
Common process and facilitation by Meghan Kirwin, The KirwinGroup
Steering Committees and Project Teams
Community activities
  Engagement sessions targeted at various constituents
  Story telling to envision the future of IT on our campuses
  Driven by Digital Moments
Method of ‘Story Telling’

Gartner:

“A method for building plausible future scenarios that create business opportunities and then determining required preparation for realization”

A "digital moment" is an event that triggers a series of cascading actions and data exchange across a network of people, businesses, organizations and things to achieve a singular objective...provides instant value to the involved parties.”
Digital Education Moment: The Outdoor Laboratory

1. Maya gets a reminder tweet from her LMS about the assignment for the environmental sustainability class, but she already has a plan.

2. Maya had already searched the EU database for local farmers and got approval to work on a couple of fields.

3. Maya is sampling soil pH and nitrogen saturation with her smartphone sensors, feeding the data directly into the school LabL5.

4. By taking photos of the growing crops, weeds and animals, she builds an inventory of the local flora and fauna — 90% are automatically identified.

5. Comparisons with data from apps such as iGeology and mySoil allow her to build a mashup of data on Google Earth.

6. Seeing all the data, she formulates theory of the most sustainable crops for the local biotope, records a video and posts it to YouTube.

7. Maya's professor gets a tweet about Maya's postings, assesses it and awards a badge for the assignment and another for the creative presentation of her data and theory.

8. Maya displays her badges with a link to the YouTube video and Google Earth mashup with a real sense of pride and accomplishment.

9. Maya gets "likes" for the video from a potential employer that is following her, which got an alert that she got a new badge. A potential internship?

 STORY: Promote and demonstrate real learning (to many stakeholders)

Elapsed time: 10 hours

Not all technologies or services in these digital moments exist, but have been used to envision a possible future state.

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How we explained it

A digital moment is a story in time that illustrates our environment in the future state.

The story can come from any perspective: Student, Researcher, Faculty and Staff.

Focus on three years into the future.

The story needs to be realistic, specific and clear about what is happening in the environment in 3 years.
### Describe the digital moment

<table>
<thead>
<tr>
<th>1 Saraya is a PhD student. Saraya communicates her research project to prospective and current Mac students via smartphones.</th>
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</thead>
<tbody>
<tr>
<td>2 Potential research participants are informed about the study via video and optional live chat. Participants can inform friends about the study on social media.</td>
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<tr>
<td>3 Online consent is provided via smartphones, with an option to allow GPS tracking to monitor gym usage etc.</td>
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<td>4 Study participants receive a daily ping to check their mood, drinking patterns, risk factors etc.</td>
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<tr>
<td>5 Study includes links to online games (or apps on phones) to measure attention, memory etc.</td>
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<tr>
<td>6 Participants get regular feedback, graphing their moods, alcohol consumption, cognition on smartphones</td>
</tr>
<tr>
<td>7 Saraya uploads her data daily in real time. Parallel computing cluster analyzes the data, keeps it anonymous, stores info securely.</td>
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<tr>
<td>8 Data also gets uploaded to public health network data repository</td>
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<tr>
<td>9 Some study participants are recruited as ‘coaches’ for next cohort of participants</td>
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</tbody>
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**Story:**

Optimizing research to promote healthy lifestyles for McMaster students during university years and beyond.
**Describe the digital moment**

1) On his first day on campus, Ned opens up an app that helps guide him through his first day.

2) Ned has a clear welcome on the app and an easy navigation to help him with all his needs.

3) The app provides a map to classes, presents club opportunities, access to learning materials, the varsity schedule and other campus events.

4) A notice for lunch comes in which includes meal plans, menu, locations, coupons, wait times/volume and geolocating friends.

5) The app allows Ned to navigate campus with a virtual walking tour and the neighbourhoods too. There are different tours based on Ned’s profiles and interests.

6) The app notifies Ned of the bookstore traffic, showing where there are shorter wait times for him to get his required books.

7) Ned starts to populate his interactive calendar that outlines what his upcoming week will look like.

8) Ned asks the app questions that pop up during the day and gets accurate answers about information needed related to his school experience.

9) It is time for sleep and he reviews his schedule for the next day so he is ready to go bright and early!

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**Story:**

Ned is a 1st year student at the University of Toronto. Enabling the discovery of the full breadth of the University experience.
Your Turn

Think three years into the future ... create a ‘story’ that outlines an experience that you or a chosen constituent (student, researcher, staff, faculty) will have while undertaking daily activities, describing the delightful interactions with technology, and how it will help you to work better, smarter, faster, easier, with more joy, engagement, ... etc.

Work in your tables and be prepared to present back
Collaboration Supports Research

Dr. David Vladnovsky is a research stream faculty member who is a leading expert in paleontology. He is writing a grant application to explore the evolution of brontosaurus DNA for an international study. As the deadline approaches, he knows he has to prepare a budget and needs to plan for efficient server space that will be reliable and secure.

He recalls that he and his local IT team can contact ITS for support on costing out the server infrastructure and planning for secure data transfer methods. He uses a one-stop online support service to initiate the consultation process regarding shared hosting on the enterprise server and is provided with written confirmation of the available security provisions for his research data, which he is able to use to prepare an ethics protocol for submission to the review committee.

A few months later, after hearing the exciting news that the funding council has approved his research project, he is ready to take advantage of the recommended server hosting option. In collaboration with both ITS and his local unit staff, he is ready to successfully clone a brontosaurus!
Student Time Savers

John takes a few minutes between all the excitement of Welcome Week to sit down on a bench behind University Hall to take care of some of the tasks that will set him up for success this semester. Last year he had to stand in line multiple times to get some key things done. Luckily, there is a new way to do things this year, thanks to the new McMaster app.

John downloads the McMaster app on his smartphone and accesses the Office of the Registrar’s “Virtual Kiosk.” John decides to confirm his OSAP requirements through the Virtual Kiosk rather than in person. It walks him through the necessary clicks. He will get a mobile alert when the money is transferred into his bank account.

Next, John uses the McMaster app to access the Student Services ‘shopping cart’ to choose other services he needs to support him this year.

Before he knows it, all of John’s tasks are completed and he can head back over to the quad where he will be meeting up with other students. It feels great to know that his semester will be off to a smooth start with a few fast and easy clicks on his smartphone.

NAME
John

PROGRAM
2nd year Humanities

GOAL
Make the most of student time

WHEN
September 2020

WHERE
University Hall, McMaster University
Contact Information

Gayleen.Gray@mcmaster.ca
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Welcome to U of T
Andrei is a skilled software developer who has recently been hired at ITS for an important new project.

When he arrives, he is pleased to discover that a single account and password has already been provisioned, with all of the roles and access permissions in place to allow access to the HR systems and Finance Information System services he needs.

As part of his onboarding process he is referred to a comprehensive resource that includes a checklist of tasks and HR forms to be completed as well as links to information about university services that he may want to learn more about.

Andrei is particularly interested in professional development opportunities and sees there is an outline of potential broad career paths that he might pursue, including training and qualification details and recommended Organizational Development and Learning Centre (ODLC) programs.

He is off to a good start and will continue to receive notifications and updates as his role and opportunities in ITS continue to evolve.
Supporting Student Success

Jenaya is a first-year student with a learning disability who is about to take a mid-term test online on her laptop and is anxious for the process to go smoothly. She requires technological supports as an accommodation.

She has some questions about the compatibility of her text-to-speech software with the Quercus testing tools and the lab browser lockdown environment accessed via single sign-on.

While consulting with a coordinator at Accessibility Services, Jenaya uses the new Enterprise Service Centre (ServiceNow) to get advice and they are able to test and confirm the software is compatible.

Exploring further, she finds additional integrated supports to help her prepare, including exam details in the Course Information System and new study aid apps in the Academic Toolbox.
Classroom Connections

Professor Anaya Patel explores several new learning technologies now available to her students through Quercus and the Academic Toolbox. She also wants to share data visualization software to support active learning and is pleased to learn of improvements to wireless technology integrated into the next generation teaching station.

She posts a quick query to a one-stop online support service that auto-populates her profile information and stored user preferences. Her question is promptly triaged and she receives a quick start guide immediately to help quickly connect with the system.

As Physical Geography 101 begins, the professor launches a new webinar-streaming platform to broadcast and record the class, allowing students to log in remotely and also to accommodate those with accessibility needs. The system prompts her to post the recording in a shared U of T video repository, automatically linked to the course in Quercus.

Pleased that her students are engaged and that their accommodation needs are met, she shares her success in using technologies with peers in the Geography department.
Streamlined Workflow

Elizabeth receives a notification reminder that the deadline for an upcoming budget presentation.

She logs into the central data portal using two-factor authentication. Based on her staff role and department affiliation, she’s given access to appropriate information sourced from a variety of integrated systems, including financial, human resources and student data. The portal allows Elizabeth to view historical records and predict project scenarios and trends for the next fiscal year.

Once the draft presentation has been created, Elizabeth creates an online working group and shares the file with her team via Office 365.

During the presentation, Elizabeth makes some additional edits in real-time based on feedback from the dean and uploads the report to the financial system following the meeting.

By using available business intelligence and collaboration tools, Elizabeth was able to complete the budget report in record time and, with contributions from her team, share a financial forecast for the next fiscal year.