

BOARD OF GOVERNORS

Strategy & Planning Committee (S&P)

Thursday, March 17, 2022 2:00 p.m. to 3:50 p.m.

<u>Videoconference</u>

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Members: Lynne Zucker (Chair), Eric Agius, Ahmad Barari, Carla Carmichael,

Kevin Chan, Christopher Collins, Mitch Frazer, Matthew Mackenzie,

Steven Murphy, Dietmar Reiner, Joshua Sankarlal, Jim Wilson

Staff: Sarah Cantrell, Becky Dinwoodie, Les Jacobs, Lori Livingston,

Brad MacIsaac, Sue McGovern

AGENDA

No.	Topic	Lead	Allocated Time	Suggested Start Time	
	PUBLIC SESSION				
1	Call to Order	Chair			
2	Agenda (M)	Chair			
3	Conflict of Interest Declaration	Chair			
4	Minutes of Public Session of Meeting of January 13, 2022 (M)	Chair			
5	Chair's Remarks	Chair		2:05 p.m.	
6	President's Remarks	Steven Murphy	5	2:10 p.m.	
7	Strategy				
7.1	Strategic Discussion: Reimagining IT* (D)	Brad MacIsaac	25	2:15 p.m.	
7.2	Research Strategy (U)	Les Jacobs	15	2:40 p.m.	
8	Significant Project & Contract Oversight		10	2:55 p.m.	
8.1	ACE Enhancement* (U)	Brad MacIsaac			
8.2	AVIN* (U)	Les Jacobs			
9	Other Business	Chair			
10	Adjournment (M)	Chair		3:05 p.m.	
	BREAK		10		

No.	Topic	Lead	Allocated Time	Suggested Start Time	
	NON-PUBLIC SESSION			3:15 p.m.	
	(material not publicly available)				
11	Call to Order	Chair			
12	Conflict of Interest Declaration	Chair			
13	Minutes of Non-Public Session of	Chair			
13	Meeting of January 13, 2022* (M)	Criali			
14	President's Remarks	Steven Murphy	5	3:20 p.m.	
15	Advancement	Sue McGovern	15	3:25 p.m.	
15.1	Advancement Update* (U)(P)				
16	Other Business	Chair			
17	In Camera Session	Chair	10	3:40 p.m.	
18	Termination (M)	Chair		3:50 p.m.	

Becky Dinwoodie, Secretary

D - Discussion

M-Motion

P - Presentation

U - Update

* Documents attached



BOARD OF GOVERNORS

Strategy & Planning Committee (S&P)

Minutes of the Public Session of the Meeting of Thursday, January 13, 2022 2:00 p.m. to 3:30 p.m., Videoconference Only

Attendees: Lynne Zucker (Chair), Eric Agius, Ahmad Barari, Carla Carmichael,

Kevin Chan, Christopher Collins, Mitch Frazer, Matthew Mackenzie, Steven

Murphy, Dietmar Reiner, Joshua Sankarlal, Jim Wilson

Staff: Jamie Bruno, Sarah Cantrell, Becky Dinwoodie, Krista Hester, Les Jacobs,

Lori Livingston, Brad MacIsaac, Sue McGovern

Guests: Mike Eklund (FA), Christine McLaughlin

1. Call to Order

The Chair called the meeting to order at 2:02 p.m.

2. Agenda

Upon a motion duly made by M. Mackenzie and seconded by D. Reiner, the Agenda was approved as presented.

3. Conflict of Interest Declaration

There was none.

4. Minutes of Public Session of Meeting of October 7, 2021

Upon a motion duly made by D. Reiner and seconded by M. Mackenzie, the Minutes were approved as presented.

5. Chair's Remarks

The Chair wished the committee a Happy New Year. She hopes everyone had a restful holiday break. The Chair began by congratulating the President on his reappointment for a second term. She noted she had the privilege of serving on the Presidential Renewal Advisory Committee (PRAC) and appreciated all of the feedback she heard during the consultation process. She congratulated D. Reiner and the other members of the PRAC on completing this important process. They are very excited for what lies ahead.

The Chair noted shared that the start to 2022 is not what we had anticipated, but thanked the senior leadership team for their continued efforts to keep the university community safe.

6. President's Remarks

The President thanked the Chair for her comments and also thanked D. Reiner for all of his work throughout the renewal process. The President discussed the university's approach to the most recent COVID wave, which included extending the holiday break until January 10 and starting classes on January 17. The discussions are continuing regarding a safe return to campus. As we look to return, there will be a gradual, stepped approach focusing on student need.

The President discussed the Brilliant Energy Institute and a pan university initiative focused on health care. He acknowledged the great work of the university's CRC Chairs. He emphasized that there are so many things to be excited about as we look to the future. He responded to questions from the committee. D. Reiner commented that it is timely to focus on hospitals and healthcare, as the pandemic has exposed the vulnerabilities of our health and long-term care systems.

7. Strategy

7.1. Strategic Discussion: Blended Learning – Where do we go from here?

L. Livingston discussed the use of technology to support remote learning and the core operations of our programs. Education futurists have long predicted that higher education would be operating in a technologically supported learning environment. While the shift has created challenges for faculty, staff and students, it has also presented opportunities. The key question is: How do we continue to enhance and evolve our efforts in this domain? L. Livingston advised that they are looking for the committee's feedback as employers, parents, and supporters of our students and learners. She asked the committee members to bring their external world perspectives to the discussion. The President added that the key to coming back will be how nimble universities can be and how different modalities can be presented as best we can so that we reinforce each piece. What should be top of mind as we put the model together?

The committee's comments included:

 C. Carmichael shared that her daughter is finishing her law degree at Queen's and participated in an exchange program during the pandemic in Amsterdam. Upon her return, there was some uncertainty about whether students would be returning to campus. This uncertainty can cause financial hardships as it is difficult for students to plan for only a 6 week return to campus. She emphasized the importance of providing flexibility to students as each student has different needs based on their preferences and how they best learn.

- D. Reiner commented that COVID has forced us into a certain world but it is important to keep the vision alive on the university penetrating the student community more broadly. Students have expectations for accommodations and certain learning environments. This applies to students and faculty. He suggested staying the course on the bigger vision of blended learning, which was developed even before COVID. He asked to what degree are fiscal constraints hindering the vision of blended learning?
 - L. Livingston advised that fiscal constraints are on the radar and are being monitored. The reality is we have the technology now to support online learning, which is on par with other education institutes. The cost is not of concern right at this moment. The cost is more of human creativity right now and faculty resources in trying to formulate creative environments. We are in a period of experimentation right now and the intellectual challenge is a bigger obstacle right now.
- E. Agius commented on the context of work. His organization is hearing from employees that they do not want to stay in this environment, but do not want to return to the old normal. It is important to think about the complete employment experience it is more than just doing a job. We must look at how to keep people connected and the social aspects of being an organization. How do they curate inperson activities and make them purposeful, meaningful, and fun? How do we make people feel part of something larger? Is the university taking a broad approach and thinking about the entire experience?
 - L. Livingston advised that as we started to transition back to campus, she routinely walked around campus and it was clear that students were happy to be back and were engaged. It is also an important element for staff and faculty. She confirmed that they are thinking about it for the entire community.
- J. Sankarlal shared that it is difficult to gauge where students are at. Some students thrive in an online learning environment and others do not. Moving forward, we should be thinking about what the entire package looks like and engagement with the student community will be important, as it seems to be a polarizing topic. He suggested that continuing to consult the student community on the future of education would be useful.
 - S. Murphy noted that many people are looking at the future through the lens
 of the suboptimal experience throughout the pandemic. It presents a
 communication challenge that is entirely new and could be exciting for
 everyone.

- K. Chan shared that he feels that the university is moving in the right direction as other institutions are beginning to shift. He anticipates that the direction will be focused on increasingly immersive experiences. He referenced universities in South Korea that are run in an entirely virtual immersive environment.
- A. Barari commented that faculty have been using a hybrid of tools for a long time
 and it is important to use the tools to improve the quality of education. Technology
 is not good enough to be considered a substitute for some of the in-person
 elements. He expressed concern about the need for support for faculty as often
 developing an online course is more time consuming that in person teaching.
 - The Chair added that as things require more effort, it will be important to find a balance. It will be helpful to have more empirical data on the efforts required to develop and deliver online learning.
- J. Wilson discussed the experience of his children who are university students. His
 son is a student in the Ontario Tech Faculty of Education and his experience has
 been very positive. Technology can be used to enhance education (e.g. flipped
 classroom, international classroom). We should also keep in mind the other
 strategic priorities and how this fits. It will be important to ensure we have a robust
 platform and use it to provide an excellent experience.

L. Livingston commented that the discussion has been very helpful. The best thing they can do is to continue to challenge SLT as they move forward. Technology is not where we need it to be today. As it evolves and becomes more user friendly and adaptive, there will be continuing opportunities. We must challenge ourselves to be imaginative and creative. The President commented that the approach is student-centric. The importance of face-to-face learning will remain and we must think about how we enhance it. There will be student expectations that we will have to manage when we return (e.g. lectures recorded and available online). The President emphasized that we must not be afraid to fail.

7.2. Student Recruitment

L. Livingston discussed the increasing challenges of recruiting students. There were few discretionary dollars last year to invest in student recruitment initiatives. Money was invested into international initiatives. L. Livingston highlighted the domestic recruitment efforts over the past few months. She congratulated J. Stokes and the Office of the Registrar Team for their efforts and engagement with potential students and applicants.

Questions and comments from the committee included:

- Any indication as to how the efforts are working?
 - L. Livingston advised that midnight is the deadline for applications and the university will be receiving reports on that next week.

- Microcredentials and shorter terms might also serve as a good recruitment tool, as it provides flexibility and lower cost. These would also assist employers in providing financial support for employees upskilling.
 - L. Livingston advised that discussions have started about how to integrate microcredentials into our programs. She explained that there are two categories of domestic applicants: 101 = right out of high school, and 105 = not coming out of high school. It will be interesting to see how 105 students respond to microcredentials. Further, the availability of OSAP for microcredentials will also be helpful.
- Timing of success of international recruitment efforts?
 - L. Livingston confirmed that the timing is the same as for domestic recruitment.
- Is there a reason why Europe is not included on the international recruitment list?
 - L. Livingston will have to discuss with the Registrar as to why it is not a priority area.
 - Key piece for international markets is diversification.
- Cost for international recruitment agencies?
 - L. Livingston advised that in some cases, the university has partnered with other universities for a recruitment office and the fees are shared with the other institutions. Further, we ensure we are working with reputable recruitment leads in other countries.

8. Planning

8.1. Student Success

L. Livingston noted that this topic aligns well with the topic of recruitment. It is just as important to work at retaining our students in addition to recruiting them. It is also an ethical component. She referred to the accompanying Board report, which provides an outline of the four broad areas of focus:

- Programming For at Risk Students
- Student-Centric Academic Advising Activities
- Student Success and Strategic Enrolment Management Committees
- Leveraging Data

L. Livingston emphasized the importance of evaluating our efforts in this area. It has been less than a year with the newly restructured advising model. Initial reports are that Deans are happy with the restructured advising program. She advised the committee that they will continue to collect and leverage data to better understand and support student success.

Questions from the committee included:

- With high school students joining after two years of high school in a less than optimal learning environment, are there any indicators about the effects on those students?
 - COVID has created "dirty data" (inflated grades coming out of high school)
 incoming GPAs are higher.
 - Grades were just released a couple of days ago and standing is being calculated right now – asked S. Cantrell about possible timeline? S. Cantrell believes she will have more information at the end of the week
- For the 19% of those who did not return to programs after LEAP, any insight?
 - Majority of students who do not succeed in LEAP do not meet the requirements of attending classes, completing assignments, meeting with coaches, etc.
- Comment that PASS and support initiatives not available to smaller programs can it be rolled out to all students?
 - L. Livingston noted that the initiatives often target first year students and not upper year students; she is encouraging the team to expand their reach to upper year students.

8.2. Board Retreat Planning

S. Murphy confirmed that the retreat is planned for the morning of May 12 and the S&P meeting will follow in the afternoon. The focus of the retreat will be on a review and refresh of the strategic plan. He discussed the rolling plan model that has been implemented. The rolling plan model has been beneficial over the past few years. It is important to reassess and refocus as we emerge from the pandemic. A good look and examination of the refreshed strategic plan will be helpful. Aspects of the SMA that relate to where we want to go may be incorporated, as well. The timing is ideal to look at how to refresh the strategic plan.

Comments from the committee:

- D. Reiner expressed support for the approach and agrees the timing is appropriate.
- M. Mackenzie asked whether external speakers are ever brought in. He suggested
 it might be helpful to invite someone external to provide a different perspective.
 - S. Murphy confirmed that in the past, we have brought in futurists and other individuals in the sector (e.g. CIO of Australian University); he invited suggestions from the committee if they come across someone they feel would be a good speaker while being cautious to avoid someone who will bring a sales pitch to the Board.
- The Chair commented that when the Australian CIO was invited to speak, he presented the night before the retreat and it was an effective approach.

 Inviting a speaker is a great idea; suggestion was made to invite an employer in to discuss what they see, which would be an opportunity for the Board to see the link to what employers are looking for from graduates.

9. Significant Project & Contract Oversight

9.1. ACE enhancement

B. MacIsaac advised that the next key deliverable is the ACE shut down between January and February. He confirmed that March would be the unofficial launch. Everything is looking to come in on budget as to what the Board has approved.

9.2. AVIN

- L. Jacobs provided an update. The main focus has been transitioning everything built through AVIN into other initiatives:
 - (a) OVIN coming into effect in the next couple of months; shifting focus from autonomous vehicles to electric vehicles.
 - (b) Project Arrow has significant funding in place from Fed Dev and matching funding from Ontario government.
- L. Jacobs clarified that Project Arrow is a separate project from OVIN OVIN is broader and focused on building capacity for electric vehicles in Ontario.

10. Other Business

None.

11. Adjournment

Upon a motion duly made by M. Mackenzie, the public session adjourned at 3:21 p.m.

Becky Dinwoodie, Secretary



COMMITTEE REPORT

SESSION:		ACTION	REQUESTED:	
Public Non-Public		Decisior Discuss Informat	ion/Direction	
Financial Impact	⊠ Yes □ No	Included in Budget	⊠ Yes □ No	
TO:	Strategy and Planning (Committee		
DATE:	March 17, 2022			
PRESENTED BY:	Brad MacIsaac, VP Adm	ninistration		
SUBJECT:	Reimagining IT – Discus	ssion Paper		

COMMITTEE/BOARD MANDATE:

The Strategy and Planning Committee (S&P) is responsible for overseeing the strategic planning for all aspects of the university and assessment of the plans in the context of the university's vision, mission and values. More specifically, the committee will make recommendations on the implementation plans.

This board report and associated presentation are provided to inform the committee of the current information technology desired outcomes, risks, and the actions being undertaken to enhance the university's position. The intent of this presentation is to provide an overview of the information technology landscape and engage in a discussion on our strategies.

BACKGROUND/CONTEXT & RATIONALE:

Ontario Tech committed in its <u>Integrated Academic-Research Plan 2021-2023</u> to **Learning Reimagined:** co-creating knowledge by adapting to the ever-changing educational landscape through the provision of flexible and dynamic learning and research opportunities. This will be innovative, inclusive, and collaborative by leveraging the best of technology and pedagogy for the benefit of students, partners and the whole world.

To that end, university members began a review of current assets and enhanced a planning framework to outline roadmaps for the institution's IT needs in the short, medium, and long-term with an eye on optimizing the value of all IT systems. In a time of financial strain, it is crucial for universities to make the best use of available resources.

To orchestrate our IT initiatives in a holistic and systematic manner, it is essential to have a plan in place. Under the shared services construct with Durham College, this is even more important.

While the university and college have had a process in place since inception the Integrated Academic-Research Plan provides an opportunity to enhance longer term planning. It also acts as a spring board to more transparent and consultative discussions on the IT plan.

The attached discussion paper refers to "we". It is important to repeat that "we" means the entire university community. IT Services is the body that will collate the ideas, track the plans and help deliver on the actions. IT Services will work collaboratively with all stakeholders on campus (faculty, staff and students) realizing that sometimes there will be competing demands where choices will need to be made. The decisions will be guided by the Integrated Academic-Research Plan.

RESOURCES REQUIRED:

The paper outlines a plan for net new spend of over \$3 million a year for the next three years. While this is highly unlikely given the fact the fiscal blueprint that went to A&F in November 2021 indicated the university had \$3.5 million total new dollars to allocate in 2022-2023.

The roadmaps help us work with units to prioritize new funds, examine methods to reallocate funds, and most importantly opens conversations on what is already occurring in areas based on the hard work and innovation of our employees at no to low costs.

CONSULTATION:

It is extremely important to note that this paper has been developed based on years of different discussions with numerous groups. Whether it was during Integrated Planning meetings; or new building discussions; or operational brainstorming sessions with faculties; or focus groups with students; we are tracking what desired outcomes members are looking for. With this we look for IT solutions.

More specifically on this initial draft paper Information Technology and Teaching & Learning Centre representatives started with a few groups to ensure general direction was accepted and we were capturing the right level of details to share:

- Summer 2021 initial conversation with unit leads
- Mid fall 2021 a focus group including university faculty members and our <u>Teaching</u> Scholars in Residence.
- Mid Fall 2021 a focus group including support unit representatives from Registrar's Office, Student Life, academic Advising.
- November 2021 draft paper discussion with unit leads

The roadmap was developed and shared with Durham College's IT Services for discussions related to budget and implementation expectations.

NEXT STEPS:

There are a number of concurrent activities that will be occurring such as:

- Receiving BoG approval on the 2022-2023 budget in April and altering plan as required,
- Revising rolling three-year roadmap and discussion paper over summer 2022,
- Working with Teaching & Learning on enhanced governance process summer 2022,
- Setting meetings with faculties and support units to enhance feedback process fall 2022,
- Continuing with the implementation of the roadmap.

QUESTIONS FOR CONSIDERATION:

- Is the university IT context clear? Do you need more information on the challenges or the potential?
- Is the committee comfortable with the university's IT direction?
- What are the consequences for example: How does this impact faculty, staff, students? How might it influence curriculum planning? What will this do to the budget? How will this help or hinder recruitment?

SUPPORTING REFERENCE MATERIALS:

• presentation entitled "Reimagining IT"

Reimagining Information Technology at Ontario Tech University

1. Context

This discussion paper sets out an aspirational image of how Ontario Tech can become a leader in Information Technology to support the intersection of pedagogy and technology. While it is a high-level document, an illustrative roadmap outlines how we could leverage information technology over the next three years -- a "reimagining" of information technology through the lens of the student experience.

The intended audience for the message will include all university stakeholders - faculty, staff, undergraduate and graduate students. We will start with the desired end goals noting we need to ensure proper supports are in place and current basic deficits are corrected as we move forward. This deliverable represents the start of a collaborative process involving all university stakeholders, guided by the university's vision: Embracing technology with a conscience to advance knowledge and promote sustainability.

The roadmap is centred on the student in accordance with our mission: **We equip future leaders to solve complex problems.** We respond to the needs of students, and the evolving world, by providing superior lifelong learning experiences. To this end, 'what we do' to achieve our mission and to 'tell our story' is guided by a community-focused approach on our strategic priorities:

- **Tech with a conscience:** Innovating to improve lives and the planet by incorporating technology-enhanced learning strategies, and promoting the ethical development and use of technology for good through intensive research and inquiry.
- **Learning re-imagined:** Co-creating knowledge by adapting to the ever-changing educational landscape through the provision of flexible and dynamic learning and research opportunities.
- Creating a sticky campus: Cultivating student- and community-centric engagement opportunities by encouraging an inclusive culture for our institution through online and oncampus activities.
- Partnerships: Uncovering innovative solutions for their most pressing problems through purposeful research and collaboration with industry, community, government and academic partners especially as it relates to all facets of global sustainability and well-being.

The <u>Integrated Academic Research Plan</u> outlines the university's commitments. Specific items that relate to information technology include the following:

- "Differentiate ourselves as an institution committed to using technology in all that we do";
- "Reinvent learning via an intentional commitment to and investment in continuous learning/ upskilling and technological solutions";
- "Provide learners with experiential learning and work integrate learning opportunities";
- "Create new campus spaces and experiences at our downtown and north locations while expanding our virtual campus assets".

2. Information Technology Goals

In support of the institutional priorities, we envision the four goals for Reimagining IT, as outlined below. Each goal is described in terms of aspirations which characterize - but are not intended to limit - the scope. By the same token, the "we will be successful when" statements are broad in nature, but will be refined through consultation with key stakeholders and as projects are created.

It should be noted that "we" means the entire university community. IT Services will work collaboratively with all stakeholders on campus, including faculty, staff and students realizing that sometimes there will be competing demands where choices will need to be made. The overarching goal is to empower the campus as a whole to optimize the experience of all students.

2.1 We will be recognized by our students as leaders in creative application of technology to enhance the learning experience and to provide convenient access to information and services

We are committed to student success and persistence via enhanced and adaptive experiences. The mobile device will be the primary vehicle for delivering new applications and services to students. In addition to the usual information and wayfinding services, a virtual personal assistant will support student satisfaction and success, by

- Embrace and support instructional design to carefully considers how students learn and what materials and methods will most effectively help individuals achieve their academic goals.
- Nudging the student regarding course deadlines/assignments and assisting in finding relevant reference materials;
- Providing Al-based tutorial services, as well as student success tools to increase student success. Enhancing intelligent bot technology, accepting and answering a wide variety of questions that the student may have; and
- Enabling advanced, data-informed navigation of the campus for example, finding quiet study space or investigating food service queues.

Students will access campus buildings and make purchases - both on campus and with off-campus partners - through their digital Ucard. Students will also enjoy convenient access to technology assets and services such as an on-demand, contactless locker system for drop off/pickup of laptops or accessories, as well as access to power recharge stations.

A streamlined, unified portal will give students - as well as faculty and staff - a more integrated, brand-forward digital experience including:

- A personalized experience and one-stop shop;
- A single and secure entry point to access critical information;
- Increased convenience through self-service capabilities.

We will know that we have been successful when:

- Surveys of student satisfaction regarding access to services, as measured internally and externally, signal progress toward technology leadership;
- Through a continuous improvement process, we will see a decreasing volume of questions that our bot technology cannot answer;
- Our services by design support the needs of the broad student community, including accessibility.

2.2 We will create an instructional environment that promotes collaboration and experiential learning

We will support the construction of innovative high-quality pedagogical practices specifically designed for use with new technologies. Our classroom technology has to date offered basic audiovisual capability with the option to record or stream lectures on a limited basis. The pandemic has been the impetus for us to embrace videoconferencing technology on a much broader scale, and has prompted the implementation of flexible hybrid technology, to provide an equitable experience for both in-room and remote cohorts. As we emerge from the pandemic, we will strive to create environments that:

- Promote the sticky campus by providing augmented reality, virtual reality and mixed reality immersive experiences in classrooms and labs;
- Optimize technology in classrooms and other "collision" spaces to enhance group collaboration - e.g. the ability for teams to collaborate and present an outcome to all students in the classroom;
- Include simulated/remote learning environments that allow students to complete laboratory experiments/classes online and without having to step into a physical classroom or lab;
- Enable collaboration with geographically diverse partners via learning object repositories such as Canvas Commons;
- Present an evolving showcase classroom a "living lab" to inform future classroom development.

We know that we have been successful when

- A classroom environment evokes a "Wow, this is cool!" reaction;
- We see adoption of augmented/virtual/mixed reality instruction.
- We have increased the quality and quantity of online and hybrid curricular and course offerings, open-access journals and open educational resources.

2.3 We will create experiential learning opportunities for students in the delivery of information technology services

Collaboration amongst faculty, student-facing service units, and IT Services will result in

- A consistent stream of capstone project opportunities for students(i.e. each term), ideally
 yielding both experiential learning and innovation that can be incorporated into the student
 experience;
- Employment of students by IT Services on a formal co-op program basis;
- Work study assignments, coordinated with the Financial Aid office; that are tailored to student's programs and the needs of the 21st century workplace;
- An ecosystem in which students can contribute to the development of new technology services which can be introduced to the university in a safe and secure manner;
- An interdisciplinary community of practice that examines the issues of the day and works towards long term solutions; and
- Provide a safe environment to test out new technologies, ideas, creations.

The goal is to provide meaningful work experience to the student. We will be successful when we have significantly improved the volume and outcome of course- and employment-related opportunities offered to students - for example:

- Increasing the number of successful capstone projects;
- Increasing the conversion rate of students to employees of the university;
- Influence the employment outcomes for our students.

2.4 We will provide faculty and front-line staff with the quality information required to serve the student, through graduation and beyond.

We will intentionally differentiate ourselves as an institution committed to using technology thoughtfully in all that we do. Per the Integrated Academic and Research plan, we anticipate expanded students, staff and faculty use of digital/virtual platforms governed by robust "Future of Learning" and "Future of Work" policies and processes guided by key principles pertaining to equity, diversity and inclusivity".

Our systems will maintain a comprehensive view of the student over time - from prospective student through to alumnus to support recruitment, persistence, lifelong learning and ultimately partnerships and advancement. As artificial intelligence matures, we will apply this technology to ensure that technical support for many problems is "always available".

A complete student profile will be accessible to students, faculty, Registrar's Office, academic advisors, and Accounts Receivable (including fees, bursaries, holds, adds/drops, refunds, etc.) to support timely decision-making to improve student success and persistence.

Our enterprise applications will evolve to:

• Leverage workflow to streamline processes and thereby enhance the student experience, for example, in the onboarding of work study students and employees;

- Position the Banner enterprise resource planning system to leverage and seamlessly integrate with innovative tools;
- Explore with careful consideration for equity, diversity and inclusion issues the potential for augmented grading;
- Embrace cloud services to achieve agility, interoperability, and adaptation to the changing educational technology landscape; and
- Improve efficiency and speed through re-engineering and enhancing end-to-end processes that serve the student either directly or indirectly.

As a result of our investments in constituent relationship management¹, future, present and past students will have a sense that we know them and are paying attention to them, as each contact we have with them builds upon previous interactions.

We will know that we have been successful when we see

- Dramatic reduction in elapsed time for end-to-end processes as experienced by the student, e.g. reduced time from registration to course access from 24-72 hours to instantaneous;
- Reduced inquiries regarding student accounts;
- Less rekeying from one system to another.

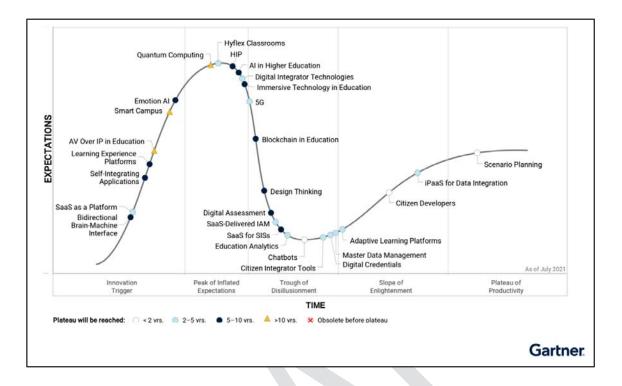
3. Positioning to Implement the Vision

As outlined in the high-level roadmap in the next section of the discussion paper, considerable groundwork has been laid for the implementation of the information technology vision. Some aspects of the roadmap entail straightforward execution - involving requirements definition, solution acquisition and deployment - but others rely on technology that is not yet mature, and which therefore necessitates learning, entails risk and demands a different approach.

Gartner, a world renowned IT research and advisory company, created a Hype Cycle methodology that maps the life cycle of technologies from invention to market acceptance. By evaluating the state, relevance, and time to maturity of a technology, the Hype Cycle aids in determining timing and approach to investments in specific technologies. Gartner's analysis identifies, for example, that Artificial Intelligence in general is years away from maturity (with the exception of Al-powered chatbots), but building a digital transformation team with diverse talent - including student involvement - is recommended. It also identifies that hyflex classrooms should "be seen as an evolving research project to manage risks of overinvestment"; and that the goal of a full cloud implementation of the student information system is elusive while cloud implementation of specific functions is a common strategy.

¹ More commonly referred to in industry as customer relationship management, CRM entails consolidating and managing information about the "customer" so as to support rich and meaningful engagement.

The chart below depicts the Hype Cycle for Higher Education, 2021.²



The Hype Cycle underscores the strategy that we will undertake:

- Implement systems when the underlying technology is mature, relevant and delivers value to the institution;
- Where investment in a non-differentiating technology can be deferred or staged, we will do so, being careful not to impair achievement of the vision or imperil the university's operations;
- Where the technology can be a true differentiator, position the university to understand and explore the technology while it matures, seeking early "wins". This positioning will entail establishing capacity to explore and innovate with new technologies.
- We will be selectively aggressive by making early moves toward innovations that offer a
 potentially high benefit to the university and by waiting to adopt innovations that are lowerimpact until they mature.

4. Information Technology Roadmap

The pages below propose an approach to moving towards this vision over the next three fiscal years. Achieving the vision will be a team effort across many stakeholder groups within the university.

² From <u>Gartner Hype Cycle for Education, 2021</u>, Gartner Inc, 2021. The full 94-page report is available for use within the university upon request to IT Services.

We must ensure that in attempting to enhance the student experience we do not introduce additional barriers. Systems and services should be developed with principles of accessibility at the forefront. Solutions, where possible, should be platform agnostic, and where they cannot be, we need to provide equitable access to that technology on campus. We must be vigilant and proactive in ensuring that technologies such as artificial intelligence do not create equity, diversity or inclusion issues. We must ensure that faculty and front line staff are supported through training and properly paced introduction of change.

For each of the four major vision statements you will see a list of initiatives and their expected impact. In most cases, we will not be starting with a blank slate. The relevant existing groundwork is also identified.

Achieving this vision is predicated on a number of enabling information technology services. A fifth roadmap is included to summarize the evolution required in those enabling services.

4.1 We will be recognized by our students as leaders in creative application of technology to enhance the learning experience and to provide convenient access to information and services

Realizing the promise of emerging technologies will require a fundamental shift in our approach: from a focus on tried and tested technologies to experimentation with new technologies; from incremental as-required extension of existing capabilities to architecting flexible platforms in order to enable services which we cannot yet conceive of; and from reliance on information technology professionals to enabling the entire campus to contribute to the evolution of services.

Small empowered teams with access to the right technology can make a significant contribution to the student's experience. One example is the development, led by Marketing and Communications, of a visually attractive, brand-focused mobile application and evolving it to meet the needs of the institution - such as to provide access to the pandemic screening application. Similarly IT Services' Google support team has leveraged Google Cloud services for data analytics, for hosting the Minecraft camps, and for creation of the "Ridgebot" - a chatbot soft-launched this summer to assist students with their software installation and support questions.

Development of innovative services will ideally be undertaken in an environment where concepts can be tested, and where individuals can get comfortable with new technology and hone solutions before they are made available to the entire university community. An Information Technology Innovation Hub will be defined, funded and established to provide a "collision space" for ideation, development and testing of such services. The Hub will provide a venue for like-minded students, faculty and staff - and potentially technology partners - to explore emerging technologies safely and collaboratively.

Initiative	Impact				
FY22/prior					
Implement and soft-launch "Ridgebot"	Provide a conversational self-service option for students re: software support				
Enable TouchNet Student Account Center to allow more payment options online for students	Allow students to check their balance, make payments via credit card, store a payment method and view payment history.				
Implement new Self Service Banner 9 functionalities	Enhance online experience for students (and for faculty and staff) such as Student Aid, employee profile, and plan ahead for Advisors.				
Implement Ucard solution as multipurpose photo id with animated branding to increase security	Students and employees will access campus buildings, use asset kiosks, and make purchases - from both on campus and off-campus partners - through their digital Ucard				
Develop a new MyCampus Portal using CMS	Resolve internal security modification errors to allow students to access self-service on various browsers				
F23					
Define and establish an Information Technology Innovation Hub	Provide a space and context for students, faculty and IT Services staff to collaborate on new services and exploitation of emerging technology				
Develop a unified portal to modernize and deliver a more integrated brand-forward digital experience for students	A single and secure entry point for students to access critical information; increased convenience through additional self service capabilities				
Exploit Ridgebot in other service units	Deliver an intelligent assistant to both students and faculty				
Evaluate and deploy self-serve asset kiosks	Easy secure access for purchase or loan of personal technology				
F24					
Develop a portal to modernize and deliver a more integrated brand-forward digital experience for applicants	Positively impact conversion rates for applicants; accentuate the university's brand				

4.2 We will create an instructional environment that promotes collaboration and experiential learning

There are two primary dimensions to the roadmap for the classroom environment: the learning management system (LMS) ecosystem and the instructional technology.

Pedagogy must be at the forefront of our decisions on the evolution of the instructional environment. Thoughtful evolution of the instructional environment will be a collaborative effort amongst Teaching and Learning, the Teaching Scholars in Residence, faculty, Facilities and Information Technology Services. Evolution will be driven by the academy; IT Services will need to provide line of sight to new relevant technology.

The transition from Blackboard to Canvas has streamlined the student experience while providing a flexible platform for Continuous Education and Ontario Tech Talent. In advance of the mid-2024 expiration of the agreement with the vendor, IT Services will consult with the stakeholders to examine our experience, future needs and the appropriate direction.

Initiative	Impact					
Learning Management Ecosystem						
FY22/Prior						
Replaced Blackboard with Canvas and Catalog	Provided a simplified, intuitive user interface for students and faculty; provided a streamlined front-end for Continuous Learning and Talent					
Exploit Catalog for internal training needs	Streamlined access for employees to compliance and other training modules					
Set up programs, courses and training modules for Continuous Learning, Talent	Streamlined , simplified access to training; supporting an emerging revenue stream					
FY23						
Streamline Cloud integrated tools into LMS, as approved by Teaching & Learning Centre	Provide enhanced instructional flexibility to faculty					
Explore a more robust front end to Canvas for Continuous Learning	Additional flexibility - e.g. Banner integration, student financial aid, and Tax forms.					
FY24						
Review Canvas support needs and explore vendor (Instructure) support offerings, in concert with LMS contract renewal	Improve student experience throughout their OT journey through 24/7 support for LMS; reduce support costs and streamline business processes to increase efficiencies					
FY25						
Enhance reporting capabilities by using application programming interfaces (APIs) to create custom reports	Support timely decision-making to improve student success and persistence					

Initiative	Impact					
Classroom Technology						
FY22/Prior						
Implement flexible hybrid audio visual technology in selected classrooms	Permit equitable participation by in-room and online cohorts					
FY23						
Consult with key stakeholders re: Classroom of the Future	Establish needs to assist in planning					
Monitor development of, and gain familiarity with XR technology; consult with faculty, TLC re: applicability of augmented, virtual and mixed reality in the classroom or lab setting	Determine the relevance, applicability and timeframe for use in the academic environment					
Establish a sustainable classroom technology refresh program	Position the university to embrace classroom technology as it evolves					
FY24						
Implement "showplace" classroom	Provide a tangible demonstration of intent to be innovative in the classroom					
Implement educational technology lab	Provide a testing and familiarization zone to enable faculty, students, TLC and IT Services to test concepts					
FY25						
Selectively roll out enhanced classroom technology solutions	Create visible proof of intent to be leaders in classroom innovation					

4.3 We will create experiential learning opportunities for students in the delivery of information technology services

By engaging a student in the execution of information technology, we create value for both the student and the university. The student gains employment-specific skills and income, while the IT Service team gains fresh perspectives and insight on new technologies. While IT Services already

employs work study students, and has facilitated the occasional capstone project, we can and should do more, including the potential to engage undergraduates via a co-op work term. It is worthwhile to work through the inherent challenges - such as finding alignment of student schedules with IT Services projects and needs - to our mutual benefit.

Initiative	Impact				
F22/Prior					
Employed Work Study Students in application system support, communications and PC operations	Provide income and meaningful work experience to prepare students for the 21st century workforce				
Provided capstone opportunity to one FBIT	Experiential learning and useful recommendations on process and				
student group	sector comparators				
F23					
Explore opportunities for Ontario Tech co-op hires	Determine feasibility of co-op hire in relevant programs – Information Technology, Computer Science, Software Engineering, Communications				
Define and launch IT Innovation Hub; invite student participation	Provide meaningful participation in requirements definition, software development, software testing				
F24					
Implement grad hiring program, if feasible	Target 1-2 hires from relevant programs				

4.4 We will provide faculty and front-line staff with the quality information required to serve the student, through graduation and beyond

While the initiatives which advance this goal are not flashy, the pursuit of integration and simplicity will make a subtle yet significant contribution to the student experience, while supporting the institution's efficiency and ability to maintain a relationship with a student through their entire life.

We will embrace vendor-provided solutions, favouring "software as a service" (SaaS) solutions wherever possible. By emphasizing configuration of commercial functionality and avoiding customization, we will be better able to embrace new functionality as it becomes available.

This goal entails refinement and automation of workflows, and will require collaboration across business units to manage change. Attention to data definition and data governance will be critical in achieving a lifecycle view of our students and our relationships with partners.

Initiative	Impact
FY22/Prior	
Gather preliminary business requirements for a Constituent Relationship Management (CRM) program	Inform future CRM program work
Implement selected Banner self-serve 9 capabilities	Enhance online experience for students, faculty, and staff - student account center, block registration, advisor module, and employee profile.
Create a Banner process to auto-generate high school applicants decisions and offers within one business day	Improve conversion rate of high school applicants
FY23	
Through focused discussions with all student facing service units, develop an inventory of existing systems and process gaps.	Provide a sound basis for prioritization of specific initiatives.
Implement additional Banner self-serve capabilities	Enhance online experience for students, faculty, and staff - Student Aid, Graduation application, attendance tracking, advisor plan ahead, and transcript request
Identify the current and future needs of the university, and evaluate CRM vendors to select a solution	Increase operational efficiency by equipping staff with an appropriate CRM to support evidence based decision making
Select an enterprise survey toolset	Streamline the look & feel and underlying process for surveys of students, and employees; provide a standard tool to researchers

1.303.03	The state of the s			
Initiative	Impact			
FY24				
	Improve the look and feel and speed of execution of all student			
Exploit Ellucian Workflow	forms; automate processes to increase efficiencies across the			
	institution			
	Increase conversion rates and reduce drop-outs by harnessing data;			
Launch an iterative implementation of CRM	improve student experience throughout their university journey;			
capability	establish a mechanism to maintain connection with the student			
	beyond graduation			
Develop a unified portal to modernize and	Simplify information access and provide a one-stop shop for staff and			
deliver a more integrated brand-forward digital	faculty; support timely decision-making to improve student success			
experience for staff and faculty	and persistence			
FY25				
	Realize the power of data to, for example, improve/personalize			
Integrate Banner ERP and sub-systems with CRM	outreach to prospective students, track and monitor students'			
	academic performance, and consolidate donor information			

4.5 Infrastructure

In addition to executing the Reimagining Information Technology goals outlined above, our technology investments must:

- Manage the lifecycle of a physical asset base that has a replacement cost of approximately \$12M;
- Strengthen our security posture and incident recovery preparedness;
- Tackle the inflexibility in identity management, which decreases agility, exposes us to higher than necessary software costs, and muddles the university's brand.

Deferred investment in the asset base in recent years have left us with a considerable mass of equipment which is already beyond the end of its useful life - 50% of personal computers, 36% of audio visual devices, 36% of servers, 73% of storage units, 21% of network devices and the entire telephony infrastructure. This technical debt is offset - but only in part - by the opportunity to embrace new, more cost effective technology.

Key directions in managing asset lifecycle include:

- Re-investing in personal computer technology for employees and teaching labs to align with existing lifecycle targets - Faculty - 4 years, Administrative staff - 5 years, rental and loaners - 5 years, teaching labs - 7 years;
- Replacing the aging telephony infrastructure with a cloud-based solution;
- Reinvesting in audio-visual technology to adhere to target lifecycles, while streamlining services;
- Continuing to consolidate server infrastructure by maximizing virtualization;
- Evolving the wireless network infrastructure to maintain/enhance service while positioning to support next generation services
- Investing in the wired network to maintain a robust core network, while seeking opportunities to minimize incremental investment in the access network as most usage by students and employees has shifted to wireless.

The investment profile for lifecycle management is summarized in the next section.

Other aspects of infrastructure merit a roadmap. Information Security is critical to our business continuity, financial viability and reputation. Streamlining identity management supports our brand and our agility. Collaboration services underpin personal productivity and the ability to engage productively with external partners. The telephony infrastructure is not only beyond end of life, it also does not support the "work from anywhere" model in which we will continue to operate. These four elements of infrastructure are outlined in the table below.

Initiative	Impact						
	Identity Management						
FY22/Prior							
Established Ontario Tech ADFS environment	Cleaner login branding; ability to deploy future services with greater autonomy						
Initiated ADAP investigation	Determine a path to definitively and accurately identify roles of an individual by institution						
Move Mobile Client authentication from shared ADFS to Ontario Tech ADFS	Support Ontario Tech brand						
FY23							
Install Ellucian ADAP and retire "black box" identity middleware	Establish basis to accurately identify roles of an individual by institution, which enhances workflow automation, provides greater autonomy in service deployment, and leads to cost avoidance on software licensing						
Move applications from shared ADFS or third party authentication to Ontario Tech ADFS	Support Ontario Tech brand; greater autonomy in service deployment						
FY24							
Plan to migrate from Exchange on premise to Exchange 365.	Provide online calendaring, SharePoint Online, enhanced M365 capabilities; increase availability and security; facilitate additional cloud-based services for students						
Leverage ADAP to distinguish between Ontario Tech and Durham College students	Greater agility in both institutions						
FY25							
Migrate to Microsoft Azure AD	Manage hacked accounts; establish self-service password reset; fully replace on premises ADFS / SSO; deploy devices without a visit to campus; manage users identities separately from the college						
	Information Security						
FY22/Prior							
Established information security roadmap	Provides a prioritized, paced plan to strengthen security posture and inform investment decisions						
Launched multi-factor authentication	Protects assets and select applications						
Executed periodic staged phishes and an ongoing awareness campaign	Hardens the weakest link in the security chain: people						
Deployed Microsoft LAPS (Local Administrator Password Solution)	Eliminates the security exposure of a shared password for all devices connected to the domain.						

Initiative	Impact				
	ormation Security (cont'd)				
FY22 (cont'd)					
Deployed SCCM	Enables ability to assess adherence to a security baseline for all university devices				
Endpoint security management uplift - migrate	Provides greater insight into security exploitations and compliance;				
from Fsecure to Windows Defender	reduced license cost				
Achieve Payment Card Industry Data Security	Ensures continued ability to process credit cards and strengthens our				
Standard (PCI DSS) compliance	security posture				
Establish/refine security incident response plans	Ensures ability to mitigate the impact of a cyber attack and optimize				
and "rules of engagement" between the	recovery				
university and the college	recovery				
FY23					
Rollout DUO MFA across all employee groups;					
implement Microsoft Hybrid Modern	By fully protecting email, we effectively prevent account hijacking				
Authentication					
Implement DNS Firewall and Web Access	Provides additional protection against malware, phishing and attacks				
Firewall	on our infrastructure				
Upgrade and test backups	Ensures ability to recover data and systems in a disaster scenario				
FY24					
Procure disaster recovery cloud services;					
Investigate and deploy third party	Support business continuity/recoverability				
monitoring/alerting services					
Implement PC Disk encryption	Protect data from exposure in case of loss or theft				
	Collaboration Services				
FY22/Prior					
Established Ontario Tech M365 tenant;					
Upgraded to SharePoint 2019;	Laid groundwork for further exploitation of Microsoft collaboration				
Established Ontario Tech ADFS	services.				
Convert existing WISC sites to SharePoint 2019	Provide enhanced collaboration features – e.g. live collaboration on documents; enables future hybrid operation and improved availability through SharePoint online in the cloud				
FY23					
Assess and reduce usage of shared drives, and	Provide a more flexible and secure file storage platform for personal				
migrate remainder to WISC	and workgroup use				
	Telephony				
FY22/Prior					
Launched call centre telephony replacement	Address a service support exposure while increasing capacity and flexibility				
FY23					
Complete call centre telephony replacement	Greater capacity and flexibility for call centre operations – e.g. Service Desk, Registrar's office				
Initiate program to convert from legacy	Address a serious service viability exposure – end of support for				
telephony to a cloud based solution	entire telephony platform				
FY24/25	Terran description of processing				
	Address a serious service viability exposure – end of support for				
cloud based solution	entire telephony platform				
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5. Investment Profile

The current view of investments required, relative to the IT Services current fiscal year (FY22) base budget, are summarized below. Figures are indicative, and will be refined as we move through the FY23 budget build process.

Goal/Aspect		Ontario Tech (\$M, relative to FY22 base budget)						
		FY23		FY24		FY25		Total
Creative Application of Technology	\$	0.4	\$	0.7	\$	0.7	\$	1.5
Classroom Environment	\$	0.4	\$	0.7	\$	0.7	\$	1.8
Experiential Learning	\$	-	\$	0.0	\$	0.0	\$	0.1
Quality Information	\$	0.4	\$	0.8	\$	0.8	\$	2.0
Lifecycle Management	\$	1.1	\$	0.8	\$	0.8	\$	2.7
Infrastructure	\$	0.7	\$	0.8	\$	0.7	\$	2.2
Grand Total	\$	2.9	\$	3.8	\$	3.7	\$	10.2
Note: figures are rounded to the nearest \$100K								

As noted above, there are considerable investments to be made in maintaining the current infrastructure - shown below as Lifecycle Management for pure asset replacement, or as Infrastructure for specific projects.

6. Conclusion

A concerted focus on the student experience will support student success, enhance the university's reputation, and improve the productivity of our administrative employees. The program outlined in this paper will, when implemented, move us towards the outlined goals.

There are risks associated with any major undertaking. Appendix 1 - Risk provides a view of those risks and how they can be mitigated.

Consultation and collaboration is fundamental to effecting change of this magnitude. This will entail consultation amongst faculty, staff and students to confirm priorities and identify specific opportunities, and collaboration to realize the goals.

Appendix 1 - Risks

Any substantial undertaking entails risk. The table below summarizes the major risks and the means to mitigate them.

Risk	Mitigation
Insufficient funding	Re-prioritize and recast goals
Insufficient funds in Durham College for co-investment required to maintain shared infrastructure	 Collaborate to ensure that the shared services program implements the highest-impact co-investment programs Determine an independent path, if feasible Reprioritize accordingly Accept residual risk - e.g. security, reliability
Divergence of priorities for the two institutions	 Collaborate to ensure that the shared services program implements the highest-impact joint investments Determine an independent path, if feasible Reprioritize accordingly Accept residual risk - e.g. security, reliability
Inability to attract or retain talent, or to transform the roles of existing staff	 Work with Human Resources to seek alternatives Rely on external consultants Institute Ontario Tech graduate hiring target
Inability to resource major cross- departmental process changes	 Assess and communicate impacts early Confirm executive level buy-in and sponsorship of changes
Reticence to embrace cross- departmental process changes	 Assess and communicate impacts early Confirm executive level buy-in and sponsorship of changes
Lack of alignment across the institution, leading to overlapping or conflicting solutions	 Streamline and strengthen governance mechanisms - e.g. tighter controls on project initiation Ensure visibility into project portfolios across the institution
Lack of time or interest from campus stakeholders for designing solutions or training	Re-prioritize or recast goals accordingly
Identity management approach demonstrated to not be viable	Launch initiative to investigate full separation of college and university identities for all users

Reimagining IT

- 1. Goals
- 2. Roadmap: Components & Relationships
- 3. Roadmap: Conceptual Layout
- 4. Appendix

Strategy & Planning March 17, 2022



Goals

- We will be recognized by our students as leaders in creative application of technology to enhance the learning experience with convenient access to information and services
- We will create an instructional environment that promotes collaboration and experiential learning
- We will create experiential learning opportunities for students in the delivery of information technology
- We will provide faculty & staff with the quality information required to serve the student, through their entire lifecycle.



Roadmap: Components

Improve Classroom Experience

Intelligent Virtual Personal Assistant

Harness Data & Analytics for student success

Engage Students in the execution of IT

Enhance Student Experience through Research & Partnerships

ERP (Banner)
Transformation

LMS Ecosystem

"CRM"

Collaboration Services

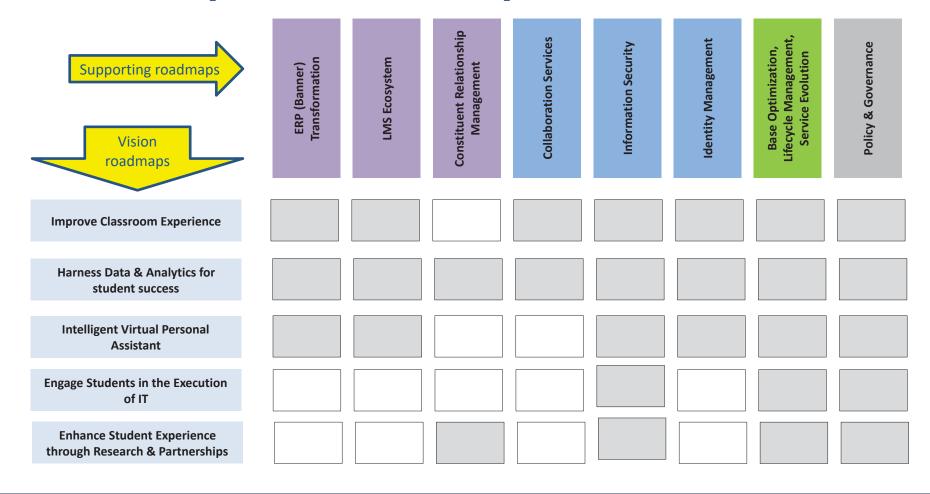
Information Security

Identity Management

Asset Lifecycle Management, Base Optimization, Service Evolution

Policy & Governance

Roadmap: Relationship to Vision





BANNER ERP TRANSFORMATION

VISION

- Transform Banner ERP to provide a student-centric user experience and deliver technology-based value that supports the university's strategic plan
- Position the ERP system to leverage and seamlessly integrate with innovative tools to enable student engagement and higher retention rate

MEASURE OF SUCCESS

- Implement new Banner 9 self-service functionalities for employees and students
- Retire Banner self-service 8
- Streamline financial payment services to promote a cashless university community

RESOURCE REQUIREMENTS

- Communication and Marketing
- DC ITS
- Ontario Tech ITS
- Registrar's Office, Student Life, School of Graduate Studies, Faculty, Finance, HR

RISKS & MITIGATION

- Coordinate with DC to ensure shared functionalities do not inhibit daily operations for DC and Ontario Tech
- Provide training and support to manage any changes to business processes as a result of system transformation



BANNER ERP TRANSFORMATION

	INITIATIVE	GOAL	IMPACT
	Streamline Payment services	Enable Touch Net Student Account center to allow more payment options online for students	 Allow students to check their balance, make payments via credit card, store a payment method and view payment history.
	Self-service enhancements	Implement new SSB 9 functionalities	Enhance online experience for students, faculty, and staff
ТО ВАТЕ	Digital Ucard	Implement Ucard solution as multipurpose photo id with animated branding to increase security	Students will access campus buildings and make purchases - both on campus and off-campus partners - through their digital Ucard
	Automate admissions 101	Create a Banner process to autogenerate high school applicants decisions and offers within one business day	Positively impact conversion rate of high school applicants
	COVID Vaccine Documentation	Update the COVID Pre-screening tool to allow ability to upload and track immunization record.	Supporting to ensure a safe return to campus for faculty, students, staff, and visitors
۲۶	Self-service enhancements	Continue to implement new SSB 9 functionalities	Enhance online experience for students, faculty, and staff
YEAR 1	Banner Modernization Phase 1	Implement newer technology products (Ellucian Experience)	Enhance online student/faculty experience by providing tools to effectively engage and increase performance
3.2	Retire SSB 8	Provide a seamless online experience	Enhance online experience for students, faculty, and staff
YEAR 2	Banner Modernization Phase 2	Implement newer technology products (ILP)	Reduce the customization in the current LMS schedular and have ability to define the data from Banner into Canvas LMS
YEAR 3	Banner Modernization Phase 3	Implement newer technology products (Ellucian Workflow)	Automate business processes to optimize efficiencies across the institution





COMMITTEE/BOARD REPORT

SESSION:		ACTION REQUESTED:				
Public Non-Public		Decision Discussion/Direction Information				
то:	Strategy & Planning					
DATE:	March 17, 2022					
PRESENTED BY:	Brad MacIsaac, VP Administrat	tion				
SUBJECT:	ACE Enhancement Project – Update					

COMMITTEE/BOARD MANDATE:

The Strategy and Planning Committee is responsible for overseeing the strategic planning for all aspects of the university and assessment of the plans in the context of the university's vision, mission and values. More specifically, the committee oversees any major renovation or construction projects.

BACKGROUND/CONTEXT & RATIONALE:

At the October meeting a detailed project summary and timeline was provided. It noted that Phase II: Controls/integration & Debug would occur over Nov/ Dec and Phase III: Commissioning and Acceptance is planned for Jan/ Feb.

At the January meeting we noted the ACE team is on track and planning early March for official opening.

On March 4th ACE finalized the commissioning and had a walk-through with funding agency representatives. The final documentation to close out funding has been submitted.

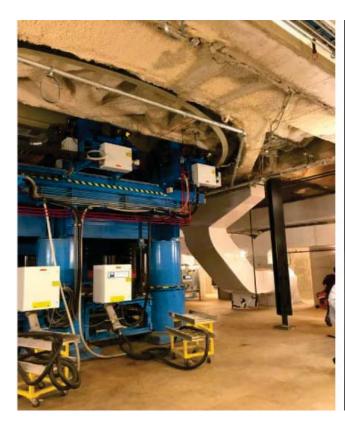
NEXT STEPS:

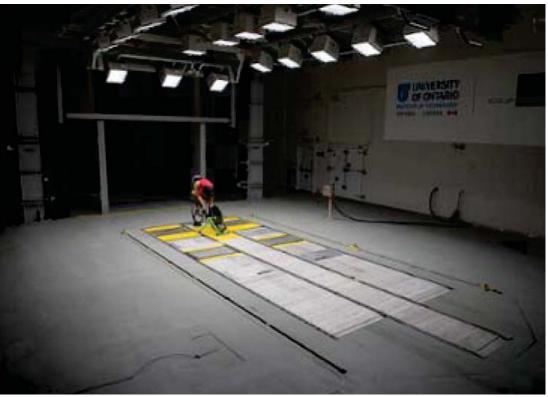
Project close out by March 31, 2022. While we hope to have all invoices in we realize there may be slight delays due to COVID.

SUPPORTING REFERENCE MATERIALS:

ACE MGP update – March 2022

ACE Enhancement Project





Project Monthly Update
7 March 2022





Progress Update (4 March 2022)

This period accomplishment:

- Control integration and commissioning fine tuning and minor adjustments
- Project commissioning and acceptance including Fed Dev witnessing the equipment operation done on 4th March 2022

Next period target:

- Release of holdback funding from Fed Dev and Provincial
- Project Technical documentation closeout
- Warranty period

BoG – Schedule Approval Tracking

Milestones	Nov-18	Nov-19	Apr-21	Actual	Variance Explanation
Building Modification	Jul-19	Aug-19	Aug-19	Aug-19	
Integration Phase I	Dec-19	Mar-20	Mar-21	Mar-21	delayed contract signing & increased turntable upgrades
Integration Phase II	Mar-20	Sep-20	Sep-21	Mar-22	increased engineering requirements

Upcoming Activities

	Description	Begin Date	End Date	Act Begin	Act End	Comments
Phase I	Assembly & functional operation	3-Feb-21	14-Mar-21	15-Feb-21	18-Mar-21	Moved to virtual installation. Late start has no delay on end date
Phase II A	Systems check & validation	3-May-21	21-May-21	10-May-21	14-Aug-21	Assembly completed and base/support system functioning
Phase II B	Controls integration & debug	21-Jun-21	31-Jul-21	14-Jun-21	04-Mar-22	Fine tuning still on going, target completion Mar 4
Phase III	Commissioning/Acceptance	1-Aug-21	7-Aug-21	14-Feb-22	04-Mar-22	Planned acceptance Mar 4

Health & Safety:

Nothing to report this period

Change Control:

Nothing to report this period

Procurement Summary:

Nothing to report this period

Financial Summary:

- Total Actual Cash Flow to date \$16.155M
- Project estimated cost at completion \$16.525M
- Cash flow Breakdown of Sources and Uses of funds next slide.

A&F Roll up Financial Report as of 28 February 2022

ACE ENHANCEMENT PROJECT	FEB	RUARY 2022									
Sources of Funds - Cash Flow											
Description	2019 Nov Funding Actual Total Todate			Feb 2022		Funding at		Balance Funding	Comments		
							- 1	Completion		To date	
FEDDEV	\$	9,465,000	\$	9,228,383	\$	121	\$	9,465,000	\$	236,617	2.5% yet to received on project completion
PROVINCIAL	\$	1,500,000	\$	1,350,000	\$	(5)	\$	1,500,000	\$	150,000	10% to be released upon project completion
MAGNA	\$	1,000,000	\$	1,000,000	\$	-	\$	1,000,000	\$	-	commitment fulfilled
ONTARIO TECH (Announce Contribution)	\$	500,000	\$	500,000	\$	-	\$	500,000	\$	-	commitment fulfilled
ONTARIO TECH (Loan to ACE)	\$	2,510,000	\$	2,510,000	\$	-	\$	2,510,000	\$	-	commitment fulfilled
THE GREENBRIAR FOUNDATION	\$	100,000	\$	100,000	\$	*	\$	100,000	\$	-	commitment fulfilled
GA HAYBALL FOUNDATION			\$	225,000	\$		\$	225,000	\$	-	commitment fulfilled
ACE INTERNAL (ERF/Research Fund)			\$	165,000	\$	128	\$	165,000	\$	-	commitment fulfilled
ONTARIO TECH (Additional Loan to ACE)	- 131		\$	1,077,182	\$	41,065	\$	1,060,595	\$	(16,587)	
				2007	2002						
Totals	\$	15,075,000	\$	16,155,565	\$	41,065	\$	16,525,595	\$	370,030	
Uses of Funds - Cash Flow											
Description	0	riginal Budget	Actual Total Todate		Feb 2022		Estimate at		Variance / Cost		
		T 28		rodate			C	Completion**	800	Increase	Variance Explanation
Moving Ground Plane Integration into CWT	\$	3,350,000	\$	6,065,641	\$	41,065	\$	6,413,396	\$	3,063,396	Obsolete controls, more complex turntable integration design and build. Repair to MGP & Turntable modifications
Aerodynamic Enhancements Required for MGP	\$	2,540,000	\$	2,347,729	\$	121	\$	2,347,729	\$	(192,271)	Value engineered design - ride height simplification
Acoustics	\$	845,000	\$	714,289	\$	1.51	\$	714,289	\$	(130,711)	Competitive market & covid impact from Germany
Precision Measurement Capability	\$	1,850,000	\$	1,091,207	\$	-	\$	1,091,207	\$	(758,793)	In-house design and build
Chamber Modifications	\$	630,000	\$	707,585	\$	(5)	\$	713,848	\$	83,848	System requires more process air and vacuum
Base Building Modifications	\$	3,645,000	\$	3,423,337	\$	-	\$	3,423,337	\$	(221,663)	Competitive market and deletion of Storage Building
Forder and on and Durlant Management	\$	2,000,000	\$	1,805,777	\$		\$	1,821,790	\$	(178,210)	Re-engineering, contigency amount move to MGP Integration, 12 mos extension of Project team
Engineering and Project Management		20	0						-		meg date, a
Engineering and Project Management		252 327					\$	2			meg aton, and a second or respect to an



COMMITTEE/BOARD REPORT

SESSION:		ACTION REQUESTED:
Public Non-Public		Decision
Financial Impact	☐ Yes ⊠ No	Included in Budget $\ igtriangledown$ Yes $\ igcup$ No
TO:	Strategy & Planning Commi	ttee (S&P)
DATE:	March 17, 2022	
PRESENTED BY:	Les Jacobs, VP, Research a	and Innovation
SUBJECT:	Autonomous Vehicle Innova	ation Network (AVIN) Update

COMMITTEE/BOARD MANDATE:

In accordance with its Terms of Reference, the committee is responsible for the oversight of the sale or acquisition of real property, including any major renovation or construction projects, and other significant projects. We are providing the committee with an update on the status of the AVIN Program at Ontario Tech University

BACKGROUND/CONTEXT & RATIONALE:

Announced in the 2017 Ontario Budget, AVIN is an \$80-million, five-year investment, delivered by OCE to support Ontario's continued leadership in Autonomous Vehicle Innovation. The AVIN program concludes March 31, 2022.

The AVIN program is proceeding as planned. All of the planned infrastructure investments were completed in calendar year 2019.

Investments in new Autonomous Vehicle R&D Capabilities through \$5M in AVIN Funding for Technology Development Site:

<u>Infrastructure</u>

- EV Charging/Microgrid Test Bed
- Simulated Automotive Wireless Environment
- Software Validation and Certification
- Data Storage, Real Time Analysis and Visualization

- Fabrication Space
- ACE Innovation Garage

Services

- Business and Technical Advisory Services
- Programming for Entrepreneurs and SMEs
- Full time technical staff

The project remains on track to meet the forecast budget ("Services") for the remaining year of the AVIN project which concludes March 31, 2022.

The Province announced the launch of a new program called the Ontario Vehicle Innovation Network (OVIN) to replace AVIN in their most recent budget announcements. Details of opportunities this new program will be communicated once the Province releases more information and details on the program.

RESOURCES REQUIRED:

No additional resources required. The AVIN Program is nearing conclusion which will occur March 31, 2022.

CONSULTATION:

Ongoing consultations take place with ACE Management, VP Research and Innovation, partners in AVIN's Durham activities (SPARK Centre and Durham College) along with the Ontario Centres of Excellence who administer the AVIN funding program.

NEXT STEPS:

This is expected to be the last update for the AVIN program as all activities have been completed and the program concludes March 31, 2022.

SUPPORTING REFERENCE MATERIALS:

None attached for this update