

# Government Assistance & The Higher Education Market

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Canadian universities serve a significant role in society as pivotal engines of social mobility and drivers of economic advancement. Their role in critical areas such as vaccine research and medical training for healthcare professionals gained greater prominence amid the transformative impact of Covid-19 on our way of life.

The unwavering excellence and leadership of research facilities not only solidify Canada's standing on the global stage but also attracts international enterprises to invest and recruit from our nation. Moreover, they act as a magnet for international students, who in turn enrich the economic landscape of their host communities. Beyond their academic functions, these institutions stand as crucial pillars of growth within towns and cities. They foster innovation and entrepreneurial spirit but also contribute as major investors in infrastructure, with campus (re)/developments generating employment opportunities, reshaping skylines, and fostering civic identities by creating accessible spaces.

Despite their pivotal role, Canadian universities find themselves in need of more robust support from government entities. The research and innovation initiatives undertaken by these institutions are integral to advancing the national agenda of promoting equitable development and establishing Canada as a leader in global progress. Nevertheless, the backing they have received thus far has been fragmented and sporadic. As quoted in a news release, Paul Davidson, president of Universities Canada, indicated a "lack of significant [government] support for Canadian research" which is "urgently needed to keep Canada competitive".[1]

A clear divergence exists between the tangible impact of universities at the ground level—where their contributions are evident—and the narrative propagated by the government. This divide is exacerbated by a policy approach that frequently appears focused on short-term objectives, influenced by electoral cycles rather than enduring strategic planning.



## **The Mounting Challenges**

Outside of fluctuating government assistance, other pressures on universities are mounting and multiplying as well, making financial sustainability harder to achieve. The obvious includes the Covid-19 pandemic, which has had a significant financial impact on the sector. However, the challenges these institutions face are wider-reaching:

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## INCREASING COSTS & SHIFTING FUNDING STREAMS

Inflationary pressures on wages, coupled with the federal government's decision to cut funding from \$5.26b in 2020/21 to \$4.56b in 2021/22.

2.

### INCREASING STUDENT EXPECTATIONS

The expectation of the university experience is increasing, in terms of both the quality of teaching and the facilities on offer. Driven partly by the rise in tuition fees, which has led students to expect a higher standard of education, but also by the growth of the international student market meaning that universities are now competing with institutions from around the world.

3.

### SUSTAINABLE RESEARCH

Universities need to ensure that their research is sustainable in the long term. This means finding ways to attract and retain the best academic staff, as well as ensuring that research funding is spent effectively. In addition, universities need to be able to adapt their research programs to the changing needs of industry and society.

4.

## ATTRACTING AND RETAINING THE BEST TALENT

This is becoming increasingly difficult as salaries in other sectors, such as the financial sector, continue to rise.



## DEMAND AND NEED FOR NEW EQUIPMENT

This is particularly true in the field of research, where new equipment is constantly being developed. Universities need to ensure that they have the facilities and expertise to keep up with these changes.

6.

## LINKING ESTATES, ACADEMIC STRATEGY AND THE STUDENT

Ensuring that their estates are fit for purpose and support academic strategy is becoming increasingly difficult to align, as the needs of students change and universities expand their operations into new areas.

7.

#### OPERATING IN A GLOBAL MARKET

As education access becomes increasingly global it particularly impacts research-intensive institutions, which need to be able to compete with their counterparts from around the world. Universities also need to be able to attract students from a global market, as well as staff.

8.

## THE CHANGING NATURE OF WORK

The impact on universities, in particular, the growth of the gig economy is making it harder for universities to attract and retain academic staff. The rise of automation is making it necessary for universities to rethink the way they deliver education.

9.

#### THE ROLE OF TECHNOLOGY

Technology is having a major impact on the way universities operate. In particular, the growth of online learning is making it easier for students to study from anywhere in the world. New technologies make it possible for universities to offer more flexible and responsive programmes if they can take advantage of this opportunity.



#### MANAGING BIG DATA

As their data sources complexify, and in turn their pool of data grows, Universities increasingly need to find ways to store, manage and analyse large amounts of data more easily and more effectively. They also need to find ways to transform their data into information, to improve the quality of their teaching and research and internally, their decision making and strategic actions.



## THE ROLE OF ARTIFICIAL INTELLIGENCE

Artificial intelligence is changing the way that research is conducted, as well as the way that teaching is delivered. Universities need to find ways to ensure that their students are prepared for a future in which artificial intelligence plays a significant role.



## **Increasing Financial Pressures**

Published financial metrics support the increased challenges. Some Key Financial Indicators (KFIs) from Statistics Canada highlight some concerning changes in financial performance between FY 20/21 and FY 21/22. These include [2]:

- Total income is down 12.08% in 21/22 compared to FY 20/21
- Expenditures increased by 0.7% in 21/22 compared to FY 20/21 even with reductions in salaries and wages in real terms
- Surplus from total income is down 80.61% in 21/22 compared to FY 20/21

While these statistics clearly don't tell the whole story, they do support the rhetoric of challenging times ahead.

Despite these challenges, there are many reasons to be optimistic about the future of universities. They are increasingly recognized as being crucial to economic success, as an example, a report by the University of Alberta finds that every \$1 spent in university research at the institution generates \$4.80 for the Albertan economy. [3]



Higher Education organizations have typically been slow-moving and not particularly dynamic. Having for years held the power and control over who they let in. COVID-19 has compounded other factors empowering more students to vote with their feet, transforming their mindsets on where and how to study.



## Relying on the Government or Becoming More Self Reliant?

There is a definite role for the government in supporting universities in these challenges and it needs to be done in a way that reflects the true value of these institutions to society and the economy.

While institutions wait for change to come from the government, they must become more resilient, cost-effective and responsive to change. They must protect their income streams, continue to effectively fund their faculties and deliver value back into the economy and their local and regional communities

There is a great need for universities to change their approach in managing their institutions. They need to be proactive and not just reactive in times of crisis, they should be thinking long-term about their strategies instead of focusing on ad hoc changes. Only then can they hope to maintain their social license to operate.

Strategic planning initiatives backed by the administration are critical to ensure Canadian universities remain competitive and ahead of the fluctuations in funding.

Financial sustainability is crucial; working to Profit & Loss, rather than Income & Expenditure. This means optimizing income streams without solely relying on government funding or student fees.

It is also essential that universities have a clear understanding of their costs and revenues. This information should be used to inform decisions about how to generate income and where to allocate resources. Only with this knowledge can universities hope to achieve financial sustainability.



One of the most important things universities can do is ensure they are financially sustainable.



## **The Role Finance Can Play**

Underpinning the ability to understand finances is the need for sound financial data intelligence and robust data structures; an increasingly important requirement that transcends public and private sectors, but is still delivering inadequate information and insight for most organizations.

Almost all universities are under immense pressure to do more with fewer resources, which in turn impacts their ability to function well, this too remains a challenge at large.

There is also a need for more transparency around university finances. This would help to build trust between universities and their stakeholders, as well as improve decision-making.

Only Finance holds the keys to all the information necessary to effectively plan expenditures, student numbers, course profitability and faculty growth. Empowering Finance is pivotal for universities to succeed.

# So then, why are Universities still struggling to deliver effective management information and financial insight?

The mindset of finance teams needs to shift from cost control to value creation for universities to become more sustainable and have a better impact on society.

Ageing technology infrastructure means too much data is held at the source level, without the ability to easily and consistently turn it into information that can be used by decision-makers in a timely manner. This lack of insight prevents good decision-making and the ability to see the financial consequences of decisions, which in turn creates more risk.

As an example, from our experience working with higher education institutions, it is quite plausible for General Ledger systems to hold more than 30,000 account codes. Typically, institutions rely on spreadsheets to be able to manage their finances or run analysis on specific areas.

With the complexity that exists within a university, spreadsheets proliferate as a result and a raft of risks come with them, from data quality issues to a lack of audit trails and uncontrolled sprawl.



Finance teams tend to be small and overstretched, meaning they are unable to provide the level of analysis and insight required by the business, especially without the tools & technology to create efficiencies. This is partly because finance functions are often seen as a cost to be cut, rather than an investment.

Consequently, there is often a lack of investment in the people and systems that would enable finance functions to provide the insight and decision support they are capable of. Investments such as new technologies that create efficiencies, as well as more training and development for finance staff, will ensure they have the skills, knowledge and systems required to provide the level of insight that will benefit the institutions.

Finance plays an indispensable role within universities for several compelling reasons. At the heart of this importance lies the critical function of financial planning, a process that can sometimes be facilitated by a dedicated Financial Planning and Analysis (FP&A) team. This function serves as the linchpin for various university operations and decision-making processes.

First and foremost, finance is the compass that guides student planning. It encompasses the delicate task of determining the financial aspects of student enrolment, course offerings, and tuition structures.

The significance of this role cannot be overstated, as any misstep in these calculations can have far-reaching consequences, potentially disrupting the entire income model of the university, which is the lifeblood of the institution, as it dictates how resources are allocated and utilized.

Moreover, universities are confronted with a multitude of complexities that finance must deftly navigate. These complexities include understanding and forecasting faculty headcount, securing faculty funding, and integrating research grants into the financial fabric of the institution.

The diversity of courses, each with its unique characteristics and durations, poses additional challenges.

Finance also extends to the student body itself, which is composed of individuals from various backgrounds, including national and international students, each subject to distinct tuition structures.



In this complex and multifaceted environment, finance emerges as the university's steward, holding a treasure trove of information on costs and income. When universities contemplate important decisions, such as adding new staff members or embarking on major initiatives, they invariably turn to finance for insight and guidance.

In essence, finance is not just a department within a university; it is a linchpin that ensures the institution's financial stability, operational efficiency, and strategic direction. It is pivotal in navigating the intricate and ever-evolving landscape of higher education.

# The Intricate Embedded Complexities.

A priority focus area for institutions must be investing in the financial planning process in order to reduce the number of manual tasks that currently burden finance teams.

Addressing the challenges within higher education necessitates moving beyond spreadsheets as the primary method for financial management within universities.

Instead, a multi-dimensional planning tool emerges as a critical and necessary solution for efficiently managing the vast volumes of data and the intricate complexities embedded within it.

Athabasca University serves as a compelling example of the transformative power of such tools. By adopting IBM's Planning Analytics and a multi-dimensional and integrated planning approach, they transitioned to a more proactive stance, shifting from data gathering & compiling to thoughtful, strategic thinking enabled by integrated resource planning.

Spreadsheets, in contrast, have proved insufficient for handling these multifaceted challenges. They perpetuated data silos, exacerbated version control issues, introduced errors, and demanded laborious manual efforts for data collation and consolidation.

The adoption of Planning Analytics not only addresses existing complexities but also paves the way for further growth and the establishment of a trusted platform of data for finance to further interrogate and analyze.



As institutions like Athabasca University expand their financial management capabilities, they can seamlessly integrate additional models into their systems, each with its unique complexities.

These encompass areas such as workforce, student accommodation, resource projects, in-year cash flow forecasting, balance sheet management, capital projects, and even aspects like food, drink, and entertainment.

Planning the costs of a large workforce and incorporating all the variables using spreadsheets is very cumbersome and time-consuming.

What happens when staff move between faculties? What happens when an employee joins or leaves? What happens when someone moves from part-time to full-time, or contractor to permanent?

Changes to headcount through the year result in a variance from what was initially budgeted and spreadsheets cannot, at scale, deliver the necessary insights that identify why and where costs have changed or increased.

#### A planning tool can:

- Roll all staff and salary data into an organizational structure that links staff to faculties, that can model salary increases by year against base salaries by department
- Build an accurate long-range forecast incorporating standard pay rise structures along with any faculty and headcount changes required to align with the strategic plan of the university
- Bring in actuals from payroll to drive a rolling forecast that incorporates overtime, maternity cover, temps and contractors
- Incorporate versions that allow for variances against budget to be highlighted and managed effectively



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Multiple datasets and models can be built into a planning system. As additional models are integrated into the system, an increasingly connected planning platform grows. This system enriches finance with more data, intelligence and information, empowering them to spend more time analyzing, decision making and supporting the organization rather than trying to keep the score.

For universities with a planning tool in their armoury, further insights can quickly be delivered in areas such as:

- · Fees forecasting
- Course profitability
- Resource Allocation
- Student enrolment planning
- Research projects
- Property & capital projects
- In-year cashflow forecasting
- Student services planning

With thousands of account codes, thousands of students, and thousands of course variations, ledgers and spreadsheets grind to a halt with the volume and complexity of their data.

Planning tools deliver far more powerful engines that can crunch more data, housing calculations in the model logic or the cubes, not the cells, eradicating all the time spent checking for errors.

Their interfaces bring to life the data and help steer focus far more effectively, also enabling easier adoption, easier development and more confident collaboration between finance, stakeholders and the organizations.

## **Conclusion**

The current Higher Education landscape is complex and changing. Unable to rely on Government funding and with growing demands from students, universities need to be more surplus-sensitive, more dynamic and agile, with the ability to work with stakeholders to make decisions quickly and accurately.

When investing in planning, a longer-term solution can be delivered, aligning strategic plans with a myriad of student and financial data to deliver financial sustainability and transparency. A Multi-dimensional Planning tool that starts to reduce the dependency on error strewn spreadsheets is a critical success factor.



# **Next Steps**

Where do you go from here? Take a look at the below ActionKPI resources to help you on your integrated planning journey.

<u>Read the Case Study About Athabasca</u> <u>University Published by IBM</u>

**N**? — Contact ActionKPI

Reach out to us to help you understand the potential positive impact of Integrated Resource Planning: brian.liu@actionkpi.com



## **About ActionKPI**

ActionKPI specializes in helping finance teams unlock hidden profit potential within their organization.

The team has served a broad range of higher education institutions for a number of years, helping them navigate the increasing complexities within their data and the demands of their stakeholders and students.

# References

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