Understanding the cost to teach

Tackling the challenge of university course costing
Australian universities have an imperative to understand their cost to deliver education

The breadth and complexity of university operations make it difficult to analyse the cost of delivering courses (subjects). However, as the higher education funding landscape shifts, universities face a greater imperative to take action and forge a deeper understanding of their cost base.

Universities face growing challenges

The pressure on universities to maintain and grow the quality of education is increasing. The market for domestic and international students is becoming more competitive and attrition rates are growing. In addition, universities are constantly under threat of funding cuts and regulatory changes as successive federal governments instigate sector reform.

The international student market is highly susceptible to fluctuations, influenced by macro factors such as the strength of the Australian dollar and the perception of Australia as a desirable place to live and study.

In recent years, universities have had to innovate to remain competitive, strengthening their value propositions by incorporating technology, forging high value partnerships, and developing more sophisticated marketing approaches.

It is within this environment that the vast majority of universities provide their core services with little more than a sense for what it costs truly costs to deliver it.

With deeper insights into course and research cost and profitability, institutions will be better prepared to meet the challenges of the future.

Greater awareness of cost improves transparency and paves the way for efficiency

For several years, overall University costs have grown faster than government funding. Although some would argue that the cost of capital in a University is low, the impact of cost growth has led in many cases to financial stress.

To continue to deliver quality education and generate surplus to support research activities, unprofitable courses must be detected and addressed. Action will need to be taken to improve profitability of individual courses and the overall course portfolio. It is important that action in this use be interpreted broadly, and with a focus on improving quality.

Understanding the true costs of education delivery can be used to:

- Better understand profitability, at a course level, to enable better decisions to be made on the course and program suite
Inefficient delivery of courses must be detected and addressed.

Although the “end goal” of costing is an integrated financial management system generating insights, developing course costing and profitability capability is a journey that takes time

Developing course costing and profitability capability is a journey, and generally requires a different approach to data collection and manipulation compared to the traditional cost and revenue allocation used in university financial management.

Developing the methodology and mechanisms to collect meaningful data, automating systems, and integrating business intelligence requires an iterative approach, grounded in the decision lens of the academic management.

The journey extends from discovery through to operation of a fully integrated financial management system. Main phases include:

- **Discovery:** In this phase data is inconsistently captured, low quality, or missing. Processing involves extensive manual rework, with little or no analysis of outputs. Data is not used to inform strategic decisions, multiple systems and tools used.
- **Transition to implementation:** Data is captured across high level areas only. There is some degree of cost allocation and use of cost drivers, but mainly for budgetary purposes. There is minimal use of data to inform strategic decisions.
- **Reengineering systems and processes:** Cost data is captured across high level categories and consolidated into an organisational view. Data is regularly analysed and used to inform strategic decisions, some integrated systems in place with manual process for generating reports.
- **Integrated financial management system:** The process of cost drivers and allocation is highly visible and transparent. Strategic decisions are supported by a clear view of course profitability. Robust, integrated systems are in place.

There is no ‘right’ approach

*Australian universities are taking quite different approaches to course costing*

There are three main approaches to course costing:

- **Activity Based Costing (ABC)** focuses on assigning cost to activities and allows you to develop a picture of the true profitability of different courses
- **‘Top down’ costing** estimates course costs using total university costs as a starting point
- **Integrated costing** combines a ‘top down’ costing approach with a ‘bottom up’ actuals approach

Each approach has its own strengths and weaknesses. The key for any university embarking on this challenge is to be clear about what it wants to achieve and where it’s capability currently lies.
SPP has identified three common challenges universities encounter in costing their courses:

1. **Data variability:** Cost data and cost driver data is not captured consistently across academic areas. There are different levels of data integrity, and reliance on different systems.

2. **Lack of acceptance and understanding of the approach:** It can be difficult to get buy-in to the approach from non-finance stakeholders, as faculties can perceive the approach as being driven by finance rather than business requirements, and cannot see clear alignment between profitability results and budgets.

3. **Varying workforce models:** Workforce models often vary between academic area, making it difficult to understand how staff spend their time and allocate salary costs appropriately.

Course costing technology ranges from highly manual to fully integrated

The best technology for a university depends on its stage on the capability development journey and its objectives

- **Bespoke internal model (MS Excel):** Excel based model tailored to the university’s needs, highly manual, provides a first pass understanding of course costs and profitability
- **Integrated internal model (SAS, SAP):** managed in-house by the finance team, underpinned by a range of internal systems and highly manual, provides a more detailed understanding of costs
- **Off-the-shelf external model (ACE):** off-the-shelf tool managed by an external service provider, data manipulated to fit the system, enables the university to understand costs and monitor change

Universities typically commence the journey with a bespoke internal model and then progress to a more integrated and automated model.

**Critical success factors for improving course efficiency and profitability**

*While course costing is appropriately led by the Finance team, it is critical that the approach be grounded within the faculties*

- Ensure ownership resides with senior leadership, to ensure the approach is built around a University-wide vision
- Engage early and often with university leadership and decision makers on methodology and results
- Finance should lead the process, but the methodology should address the information needs of decision makers
- The course costing approach must be grounded within the faculties
- Start small and simple, and build capability over time
- Understand information needs, goals and principles before launching into a technology solution
- Recognise the point at which more effort and analysis does not provide more value
- Be transparent about data limitations and course costing assumptions
- Recognise that course costing is a significant decision driver, but other factors including course quality must also be considered.
SPP’s tailored course costing approach delivers real outcomes.

SPP recently delivered a major course costing assignment for an Australian university.

Detailed course costing uncovered valuable insights

Using our course costing approach we were able to dispel a few myths about profitability drivers and cost inputs

- The overall cost associated with international students is higher than expected
- Core courses tend to be more profitable than electives
- Loss making courses have a relatively small impact on total profit
- Unprofitable courses typically have a low equivalent full-time student load (EFTSL)
- Higher degree by research (HDR) courses are largely unprofitable for reasons well-known, and the approach to allocating HDR costs varies substantially between institutions
- The relationship between profitability and sessional teaching is weak.

About the authors

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