EUA WORKSHOP
MANAGING THE UNIVERSITY COMMUNITY

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INSTITUTIONAL PERFORMANCE INDICATORS:

WHICH ONES ARE NEEDED TO STEER THE INSTITUTION?

Introducing the Balanced Scorecard in the University of Edinburgh

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University of Edinburgh – facts and figures

- Founded in 1582, the fourth University in Scotland
- The largest Scottish University
- Organised into three Colleges (Humanities and Social Sciences [HSS], Medicine and Veterinary Medicine [MVM], and Science and Engineering [SCE]) and three Support Groups

- 24468 students in 2005/06 – 21145 full-time and 3323 part-time. HSS 14438, MVM 2968, and SCE 7062
- 18367 UG/2880 PGT/3440 PGR
- 7691 staff, 5022 in Colleges (1485 teaching/1380 research-only) and 2669 in the three Support Groups

- Technically private institution, but £134M grant funding from Scottish Funding Council
- Total income in 2004/05 of £401M, of which 67% non-formulaic
- Project research funding spend of £104M in 2004/05, with new awards of £113M
- Recent rankings – 33rd in the Higher's world league table, 48th in Newsweek and 52nd in Shanghai Jiao Tong University ranking. Typically in top 10 in Europe/top 5 in UK
- Governing body University Court
- Highest academic decision-making body Senate
- Member of Universitas 21, LERU, Coimbra Group, Russell Group

  University Factsheet at http://www.planning.ed.ac.uk/Profile/Factsheet/home.htm

Introduction

The University of Edinburgh has been using a Balanced Scorecard to measure institutional performance since 2002. This case study explains why the University adopted this approach, and how the Scorecard is used within the University. It outlines the measures initially used, and how these have been revised over time both in response to performance on individual measures and to reflect a more strategic approach now being taken to set institutional targets. It sets out some lessons learned from Edinburgh's experiences, and outlines how the University is further developing its approach.

The University's current Balanced Scorecard, an archive of earlier versions, and background information on our approach are available at http://www.planning.ed.ac.uk/BSC.htm.

Why we undertook the Balanced Scorecard project

There were a number of reasons why the University decided to adopt a Balanced Scorecard in 2002. Externally there was increasing pressure on institutions to adopt better management information in support of institutional governance. The Scottish Higher

Education Funding Council (SHEFC) was encouraging institutions to include SMART[1] targets in their strategic plans, and to provide better management information to members of governing bodies to allow them to fulfil their governance responsibilities. The Committee of University Chairmen was providing guidance to members of governing bodies about how they could measure institutional performance against plans and Key Performance Indicators (KPIs) with appropriate use of national and international benchmarking. The environment was changing in ways which put greater emphasis on institutional accountability. Internally the University's Planning Section felt that there was a need to rationalise the production of management information to support senior managers' role in overall strategic monitoring of the University's performance in a more coherent fashion, and to allow them to proactively identify areas of concern. And in an increasingly competitive environment, there were concerns that without improved performance measurement systems the University would potentially be at risk of failing to identify areas of inefficiency or be able to capitalise on the areas of success.

The Balanced Scorecard

The Balanced Scorecard was developed by Robert Kaplan and David Norton of the Harvard Business School in a series of papers in the early 1990s[2][3][4]. It was developed in response to concerns about traditional methods of measuring organisational success, which were felt to be too focused on financial measures, and hence backwards looking. Kaplan and Norton's Balanced Scorecard consists of a series of performance measures combining both financial and non-financial metrics, grouped under four perspectives:
- learning and growth perspective
- customer perspective
- business process perspective
- financial perspective

The aim is for the scorecard to be genuinely balanced, through including in its measures "a complete description of what one needs to know about the business". The scorecard is also balanced through recognising:
- the time dimension of the four perspectives
- both internal and external aspects of the business
- through cause and effect assumptions[5]

The time dimension is captured by recognising that the activities measured through the learning and growth perspective impact on future organisational performance. The need to measure both internal organisational processes and the impact of the organisation on external stakeholders should be self-evident; an organisation may regard itself as internally excellent but if customers (and other stakeholders, for organisations providing public services) don't agree then it is unlikely to be successful. Cause and effect assumptions about organisational activities and performance also link the scorecard measures. The scorecard can be used "to reflect how strong these assumptions are… and how certain one may be about them in the face of external competition and change".

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[1] SMART targets are Specific, Measurable, Achievable, Realistic and Time-Constrained

[2] Kaplan R S and Norton D P (1992) "The balanced scorecard: measures that drive performance", Harvard Business Review Jan – Feb pp 71-80.

[3] Kaplan R S and Norton D P (1993) "Putting the Balanced Scorecard to Work", Harvard Business Review Sep – Oct pp 2-16.

[4] Kaplan R S and Norton D P (1996) "Using the balanced scorecard as a strategic management system", Harvard Business Review Jan – Feb pp 75-85.

[5] Olve N-G and Sjöstrand (2002) "The Balanced Scorecard", Capstone Publishing, pp 6-7

In developing the appropriate mix of measures for its scorecard, the organisation needs to recognise for each of the four perspectives the strategic goals relevant to it, and the supporting critical success factors. Once the appropriate measures have been agreed, these should determine action plans for strategic implementation.

While the Balanced Scorecard was initially seen as a tool for the private sector, it has been increasingly adopted by public sector organisations, including universities. Among the attractions in the not-for-profit sector are that the approach covers the entire range of the organisation's activities, addressing the difficulty of using purely financial measures in organisations where the primary objective is not maximising shareholder return or bottom-line profitability.

University of Edinburgh Balanced Scorecard

The University adopted a Balanced Scorecard containing 32 indicators. The original indicators are listed in the appendix. These were under four headings: Organisational Development Perspective; Financial Perspective; Stakeholder Perspective; and Internal Business Perspective.

An early decision was taken to make the Balanced Scorecard available publicly on the University's website. Partly this was because of impending Freedom of Information legislation, but the main argument for this was based on one of the main purposes of the Scorecard... providing information for accountability for the University's strategic decisions, including to internal staff and student stakeholders and externally to the public.

The indicators were chosen to try to reflect the range of the University's activities, and were linked to our Strategic Plan[6]. They were based on a mix of external and internal data. They included measures to signal where the University desired behavioural change.

For the indicators based on external data we used both information publicly available through the UK's Higher Education Statistics Agency and material derived from ongoing data sharing arrangements e.g. from the Association of University Directors of Estates. For internal measures we used pre-existing data, as we did not want to compromise the exercise by allowing objections based on the creation of significant additional work.

Each indicator was linked to one of the nine University Goals in the then current version of the Strategic Plan. For each we published a definitional page. The definitional pages: define the indicator; explain what it is measuring and why it was chosen; link it to the Strategic Plan and to other indicators; and comment on any caveats for the indicator e.g. problems with data/issues of interpretation. For most indicators we have also published more detailed underlying information, either breaking the indicator down into components or providing further contextual information e.g. in cases where we had chosen a representative indicator from a set of several. We felt it important to provide this richer information set, partly to make the Scorecard more useful to its various audiences but also in reflection of the challenging nature of the academic context in which we were producing it.

As updated information appears through the financial year it is added to the draft Scorecard for that year. At the end of each year the Scorecard is archived, so that we have a permanent record of our scorecards.

We also publish time series information for each indicator, and comparative information for selected members of the Russell Group. We recognised at the outset that we would only get

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[6] The relevant Strategic Plan at the time of creation of the Balanced Scorecard is at: http://www.planning.ed.ac.uk/SP2003-07/SP0307.htm. The University's current Strategic Plan is at http://www.planning.ed.ac.uk/StrategicPlan.htm

full value from the Balanced Scorecard when we had a rich set of both trend and benchmarking data available.

Managing the Project

The Project was undertaken by the University's Planning Section. We obtained initial support from the Principal, and then produced a paper setting out the proposals which was approved by the Central Management Group and then the University Court. This was then followed by extensive consultation with relevant senior managers, both to explain the approach in more detail and to discuss appropriate indicators for their areas. The final proposals were produced by Planning for the Principal's initial agreement, followed by approval through the committee culminating in final approval by Court.

Issues

A number of issues emerged as we progressed the Project:
- there were some tensions over the necessarily small number of indicators we could include for each area, and also on the identification of individual indicators, but interestingly not for the overall concept.
- fit with the four Kaplan and Norton perspectives. We decided to rename two perspectives to provide a better fit with the University's business. We also struggled to find equal numbers of appropriate indicators for each perspective. Technically we ended up with a balanced scorecard rather than *the* Balanced Scorecard.
- we came under early pressure to produce backwards-looking time series, rather than wait until we had these several years in the future. This was easy for some publicly available data, but much harder for some other areas.
- it proved more difficult to produce comparator information than we had anticipated. We had originally hoped to have comparator information on similar institutions in the smaller EU nations, but quickly realised that differences in structures and availability of data make this close to impossible. And even within the UK, comparisons were going to be very difficult for other than information derived from standard data sets.
- we had originally expected that measures would eventually be supported by targets, but in practice this has been addressed through the revision of the Strategic Plan, meaning that where there is not a specific Strategic Plan target there is not a target for the Scorecard measure.
- updating the information. We quickly realised that not all the measures could be updated by Planning staff, and that collaboration from other departments was needed.
- time required for the Project. We had originally aimed to complete in a few months, but in practice it took around nine months.

Interestingly there were very few concerns about our decision to make the Scorecard publicly available.

The University's Use of the Scorecard.

The Scorecard is now an integral part of the University's senior management and governance processes. It has been accepted by the Court, and there is clear buy-in by senior management. Its introduction has facilitated the University's move towards a more genuinely Strategic Plan with clearer targets.

The Scorecard is made available regularly in draft form to the Principal's Strategy Group, which consists of the Principal, the Senior Vice-Principal, and the Heads of College/Support Groups. It is presented annually to the Central Management Group and Court, along with a report on trends. This takes a simple traffic light approach, with four categories - improving, limited change/trend unclear, no progress/deteriorating, unable to assess. The classification is somewhat subjective, but is aimed at prompting and supporting discussion.

Further developments

The initial project is now an ongoing one. We have worked/are working on:
- getting better comparative information for data not in a publicly available data sets, where we now work with a number of other institutions
- getting some comparative information for international institutions. We are in discussions with the University of Melbourne.
- reviewing the indicators in the light of experience to date and in the context of our new Strategic Plan. Most indicators were retained, some with minor tweaking, but six are to be replaced (see appendix)
- cascading the approach to Colleges/Support Groups. This is a target in the latest Strategic Plan.

Lessons learned

What were the main lessons learned:
- support from the Principal/University Court was vital. This ensured that discussions with senior managers were about what indicators were appropriate rather than whether or not we should adopt the approach.
- flexibility on theory. We did not follow the theory rigidly where we thought it inappropriate for our business. Also, we tried to reflect the academic context in our approach, for example by providing more information than is strictly necessary on the background to individual indicators.
- engagement of the Principal's Strategy Group. This is the forum where the most senior University managers meet regularly and drive forward institutional change.
- the need for a disinterested single individual/unit to produce the final proposals. It was impossible to reflect every concern/view of the senior managers in the final proposals. If we had, the final Scorecard would have been several times bigger, would have included "easy" indicators/those which would show particular areas in the best light rather than provide genuine measures on strategic performance, and would have lacked overall balance. It would certainly not have been a balanced scorecard.

Conclusion

In his introduction to the new Strategic Plan, the Principal states:

"The balanced scorecard is a very useful tool and I encourage my colleagues, members of the University Court and other stakeholders to use it more widely. The most important way of measuring the success of the University is via international benchmarking and that is how we will have to test our achievement of the ambitious long-term goals in this plan."

Indicators in University of Edinburgh Balanced Scorecard

1. Original indicators

Organisation Development Perspective
Shape of student population
- proportion of full-time UGs from Scotland
- number of research postgraduate students
- fee income from taught postgraduate students
- lifelong learning students
Flexibility of curriculum
Research grant applications submitted per annum per member of academic staff
Proportion of new appointments to chairs who are women (*)
Headcount of staff development attendees (*)
Number of staff on fixed term contracts as % of all staff employed

Financial Perspective
% Of total income from non-formulaic funding sources
Historic cost surplus as % of turnover
Administrative operating costs as % of academic operating costs
Research indirect cost recovery contribution as % of total research income
Commercialisation of research (licences signed)
Fundraising
Ratio current assets: current liabilities
Average annual cost of an FTE staff member (*)
Utilities, maintenance & servicing costs per square metre

Stakeholder Perspective
International student headcounts
Proportion of students achieving a first and upper second degree
Widening participation: proportion of students from state schools/colleges
Intake of home/EU students from ethnic minorities as % of total intake of home/EU students
Newspaper cuttings analysis: % of column cm positive
% academic staff in 5 and 5* RAE units of assessment

Internal Business Perspective
Number of full-time students per open access computing seat (*)
% library stock issued by self-service (*)
Proportion of central committees with an online service for members and the proportion of papers available online from these committees (*)
Total income per square metre of gross internal area
Capital expenditure & planned maintenance as % of estate value
Total property cost as % of university total income
Backlog maintenance spend required to bring the university into compliance with Disability Discrimination Act
Room utilisation

 (* - indicator being replaced from the 2005/06 Scorecard)

2. New indicators

Percentage of new appointments at lecturer, senior lecturer/reader and professor/chair level who are female
Number of staff development events attended per FTE member of staff
Usage of key information services resources provided, per £ of investment
Harmonisation of common systems and services
Percentage of users satisfied with information services
Proportion of usable freedom of information publication scheme resources