The experiences of the University of Montreal in using a rational-analytic framework to allocate resources at a time of budget costs are discussed. The following characteristics for rational decision-making are identified and applied to the University of Montreal: whether goals were known, whether alternative methods of resource allocation were known, the availability and use of information, whether consequences were known and judged by criteria, and linkage of resources to decision processes. Since the rational model can co-exist with other models, four competing explanations are considered to help explain the events at the university: the bureaucratic model; the garbage can model (e.g., decisions are not systematically resolved); the political model; and the collegial model. Conclusions include: the university's approach to cutbacks met most of the criteria associated with rational decision-making, but this approach had limited value; the business approach will not guarantee excellence; success depends on political skills; and the business perspective ignores essential political skills. Data about the university and the budget are appended. (SW)
The Rational Approach to Budget Cuts:

One University's Experience

by

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Introduction

Funding and enrolment problems have inspired many recommendations for a more business-like approach to the management of universities. It has manifested itself in an increasing interest in strategic planning models to guide resource allocation decisions; and the recommendations, associated with this literature, for "hard" choices which involve phasing out weak areas to promote growth areas (see, for example, Cope, 1978; Doyle & Lynch, 1979; Mayhew, 1979; Dube & Brown, 1983; Keller, 1983; Shirley, 1983; Uhl, 1983; Fincher, 1984; Micek, 1984; Maxwell & Currie, 1985). US schools have started to explore formal performance evaluation in the form of such concepts as value added in attempts to demonstrate their effectiveness (see, for example, Miller, 1986). The Jarratt report on the efficiency of UK universities has called for an "industrial model" and recommended that: universities undertake strategic and long term planning; vice-chancellors (university presidents) adopt the role of chief executive officer; planning and resource committees be established; performance indicators be developed; and a greater awareness of costs be fostered. In Canada, criticisms by the MacDonald commission and general funding restrictions appear to reflect governmental views that universities are wasteful and inefficient (Hardy, 1986).

In the same way that the structures of university governance were imported from the political model in the 1960s (Sibley, 1986); university administration in the 1980s seems to be borrowing largely from the business model. This perspective is grounded in a more planned and rational-analytic approach to problem solving and resource allocation. It tends to focus exclusively on economic rationale, which may be acceptable in the corporate world, but is questionable in the context of large, diversified universities that are so unlike the typical business enterprise. They have
been described as professional bureaucracies (Mintzberg, 1979). Power is
decentralized in the hands of the professors, and many different interest
groups, both inside and outside the institution, are able to influence
decision making. Performance is not easily measured and the diversity of
departments makes comparisons difficult. Decisions may be influenced by
political, collegial (Baldridge, 1971; Baldridge et al, 1978) and garbage
can (March & Olsen, 1976) processes as much as by rational analysis (Hardy
et al, 1983). Moreover, universities are constrained, unlike most
businesses, by tenure, government policy and, in public institutions,
government funding.

Rational decision making has often been prescribed but has long been
questioned in practice, even in the business world, due to complexity,
incomplete information and limited powers of comprehension (for example,
Simon 1955; Cyert & March, 1963). In order to examine the implications of
the "rational" approach for universities, this article examines the
experiences of a large Canadian university in its attempts to use a
rational-analytic framework to allocate resources at a time of budget cuts.

The University of Montreal (UM)

The University of Montreal (UM) is a large francophone (French
speaking) university in Montreal, Quebec (see table 1). Originally founded
in 1878 as part of Laval University, it received its own charter in 1920.
It was a Roman Catholic institution until 1967 when it received a new
charter which made it a public university. Today it has thirteen
faculties: Theology, Law, Medicine, Arts & Science (comprising nearly
thirty departments and around 600 professors), Education, Music, Continuing
Education, Pharmacy, Veterinary Science, Dentistry, Graduate Studies,
Nursing, and Planning. Students number around 35,000 including 7,500
graduates. There are more than 4,500 regular employees, including some 1,500 professors. The total budget, including research, amounts to $240 million. More than 90 per cent of the operating revenue comes from the provincial government. UM has two affiliated schools -- l'Ecole des Hautes Etudes Commerciales (HEC) and l'Ecole Polytechnique (EP). EP is the largest engineering school in Quebec with 5,000 students while HEC has more than 8,000 management students. UM confers their degrees although their budgets are administered separately.

Fiscal constraints in Quebec started during the late 1970s as a result of increases in operating grants that were less than inflation. In 1981, the government announced plans to reduce funding over the following three years. As a result, between 1978/9 and 1983/4, total university grants were reduced by 13 per cent in constant dollars, and the percentage of Quebec's budget going to universities decreased from 4.6 per cent to 3.5 per cent. 1981 marked the beginning of UM's cost cutting measures. The university still had a surplus at the end of 1980/1, but the government's announcement and an increase in UM's operating grant of only 4 per cent (even though salary increases, comprising more than 80 per cent of the budget, of around 17 per cent had been negotiated) signalled the beginning of financial restraint.

The reductions in university income between 1981/2 and 1983/4 amounted to $30 million (see table 2). Expenditures in the base budget were reduced by $26 million. The Quebec operating grant went up by only 6 per cent during this period, against an inflation rate of 22 per cent. Total income increased by 12 per cent but nonresearch income increased by only 8 per cent while student numbers rose by 9 per cent. Total expenditure during this period went up by 13 per cent; expenditure on faculties and services
rose by 9 per cent -- significantly less than inflation. In addition to compressing expenditure, the university had accumulated a deficit of $6.2 million by the end of 1983/4, having spent the surplus of $7.2 million which existed at the beginning of 1980/1.

**The Resource Allocation Process**

Cuts were distributed in an across-the-board fashion during 1981/2. Faculty budgets were reduced by 3.5 per cent, services by 5.5 per cent. An additional 2.5 per cent was cut later in the year from administrative units. According to administrators, the government's late notification of the cuts -- half way during the academic year -- left no time to plan any other course of action or develop tools to make more selective cuts. The cuts saved around $12 million. Deans and central administrators said they did not feel that the university had experienced any significant difficulty in absorbing this compression. They did feel, however, that the uniform nature of the cuts was encouraging mediocrity and penalizing good departments. These feelings strengthened as it became clear that the cuts would continue, and a demand was made for a more selective approach.

During the following two years, formulae were developed to allocate differential cuts on the basis of "productivity". The formula involved thirteen criteria in 1982/3, which were reduced the following year to three basic areas: general teaching; graduate teaching and research. Units were grouped, on the basis of these criteria, into five categories which were to receive differential cuts of up to eleven per cent in 1982/3 and seven per cent in 1983/4. Cuts for the university as a whole were to be seven per cent and four per cent respectively.

**The Rational Approach?**

The use of productivity formulae to allocate differential cutbacks
suggests a rational approach. All too often universities are criticized for "taking the easy way out" and implementing across-the-board cuts. UM officials argued that the initial horizontal cuts were forced upon them and they developed a methodology for selective cuts as soon as possible (Belanger & Tremblay, 1982: 29). It has been pointed out, however, that individuals often explain their actions in rational terms because of the normative value placed on this form of behaviour (Feldman & March, 1981; Chaffee, 1983). Closer inspection of the events at UM would, therefore, seem to be essential.

Rational decision making involves the articulation of goals, examination of alternatives and consequences, and selection of alternatives according to specified criteria. The strict economic definition has been relaxed as organization theorists have wrestled with the translation of theory into practice, and the concept of bounded rationality has emerged (Simon, 1955). Despite the fact that research on this concept has involved different types of organizations, decisions, definitions and methods, a number of key characteristics appear identifiable (see diagram 1). Goals are known, or at least can be inferred; information is available and analyzed; some alternatives are known; cause-effect relationships are known and consequences are judged according to criteria; resources are linked to decision processes (see, for example, Simon, 1955; Cyert et al, 1956; Allison, 1971; Weill, 1975; Nutt, 1976; Skok, 1980; Chaffee, 1983). This section will apply these characteristics to the situation at UM.

Were the goals known?

The evidence suggests that the goal of establishing priorities was articulated as the cutback process began. A committee on teaching and research priorities (COPER) had reported in 1981 and made recommendations
for the reduction of teaching resources according to the productivity of individual units [2]. The goals of this taskforce were clearly stated.

The general objective was to reduce reaching resources by use of the following means: (1) reducing course offerings, (2) reducing section breakdowns, (3) eliminating courses with low enrolment, (4) promoting cyclical course offerings, (5) increasing section sizes, (6) raising discontinuance questions on low productivity programs, and (7) making more efficient use of teaching resources (Belanger & Tremblay, 1982: 26-27).

The criteria developed by this committee to measure productivity formed the basis of the 1982/3 funding formula. The intention was to get away from general compressions.

Despite these critical retrenchment pressures, universities must find ways to reallocate resources to growing fields such as computing and biotechnology .... It was with that awareness that the task force members went about the business of recommending reductions of course offerings and teaching personnel (Belanger & Tremblay, 1982: 27).

Thus, when the formula for 1982/3 budget allocations was drawn up, the goal of selective cutbacks was clearly articulated.

The present document on the budgetary approach wants to place the accent on the establishment of priorities, in a context of economic difficulties (1982/3 Budgetary Approach: document I, p. 1, translated from french).

Since last year, many people have noted that the reduction in the level of expenses by the same percentage in all units is not recommended. A similar point of view has been publicly expressed by the rector. In this regard, the following objectives are emphasized: allocate resources to priorities; avoid the general "mediocratization" of the university; safeguard the possibility of financing certain developments judged particularly necessary (1982/3 Budgetary Approach: document I, p. 2, translated from french).

The formula for 1983/4 reaffirmed this objective.

The principal objective remains the same: a classification of teaching and research units according to activities and resources (Classification of Teaching and Research Units, January 1983, p. 5, translated from french).
Were (some) alternatives known?

Central administrators appear to have considered and dismissed two alternatives methods of resource allocation. One was the repetition of across-the-board cuts as the quotations above clearly show. The second, at the other extreme, was the imposition of radical cutbacks, leading to major surgery or reorganization.

Units could see themselves profoundly altered, even completely abolished. Choices of that order are neither possible or desirable at this moment, but without prejudging the eventual decisions, the university must prepare itself to face them. (1982/3 Budgetary Approach: document I, p 1, translated from French).

Thus, it would appear that the administration wanted differential cutbacks rather than horizontal cuts or radical surgery.

Was information available and analyzed?

The productivity formulae stemmed from a tradition of quantitative reports which have provided decision makers with information. In the 1970s, investigations into the future direction of the university and goals, developments and priorities had been conducted. Two working groups were set up, in 1978, to study teaching, research and faculty administration, and administrative services in the context of austerity. In 1981 two new committees were established -- one of which was COPER which led to the productivity formula; the second was COPAS [3] which examined nonacademic units. These committees were commissioned by and involved mainly central administrators. They produced lengthy reports with a significant emphasis on the quantitative analysis of teaching, research and service activities. For example, COPAS consisted of five administrators and one academic; it produced a report of more than 60 pages of mainly tables and figures. COPER involved seven administrators and one academic;
resulting in a report of 225 pages, again of mainly figures and tables. The document outlining the 1982/3 formula was produced solely by administrators and consisted of 14 pages of text and 41 of appendices; the following year, a 32 page document was written with an additional 22 tables. In addition, a 1983 study into the costs and savings associated with closing each of the units in the university resulted in a 12 page report. Each year an inventory analysis of more than 400 pages of information on students, professors etc is published. The documents outlining the formulae made explicit reference to the work done in the various committees and the information generated by them.

Were consequences known and judged by criteria?

The consequences of applying productivity measures to departments and allocating resources on that basis had been recognized by COPER.

The assumption that current program structures and course offerings were adequate, if not optimal, in attaining each department's educational goals was the basis for the rationalization of course offerings and faculty resources that would take place through the application of this methodology (Belanger & Tremblay, 1982).

COPER also defined how productivity was to be measured.

It consisted of the following five steps: (1) presentation of basic data, (2) normalization of credit offerings, (3) reduction of credits and FTEs, (4) verification of teaching resources vs normalized credits, and (5) recommendations (Belanger & Tremblay, 1982: 29).

The 1982/3 budgetary approach followed the same approach in which thirteen criteria were used to evaluate units, on the basis of which budget allocations were recommended. Thus, a clear link between the goal of establishing priorities, the use of criteria to identify these priorities, and the differential allocation of resources was articulated.

To implement.... the mandate of the Council [4] of the university [to reduce expenditure by selective
two problems must be resolved: (a) the explication of priorities; (b) the translation of these priorities into budgetary terms" (1982/3 Budgetary Approach: document I, p. 2, translated from French).

The 1983/4 formula refined and simplified these criteria:

with the aim of discerning more precisely the measurable aspects of teaching and research ... the present document retains the same basic criteria which it proposes to regroup differently and give a different weighting with a view to doing justice to the principal preoccupations that appeared out of the discussions surrounding the 1982/3 Budgetary Approach (Classification of Teaching and Research Units, January 1983, p 5, translated from French).

Were resources linked to decision processes?

Administrators stated that they intended the 1982/3 budgetary approach to provide priority areas with resources. The five categories were to receive three, five, seven, nine and eleven per cent cuts. Taking the two extreme categories (table 3), we can see that all units in category A were recommended reductions of three per cent or less; eleven per cent cuts were proposed for all "E" units except Dentistry (3.1 per cent) and Social Work (6 per cent). The 1982/3 budget shows a slight deviation in the case of a higher cut for Dentistry and lower ones for Music and Education.

Table 4 shows that impact of this selective approach on the overall distribution of the budget was limited. Despite being categorized as low priority Nursing, Dentistry, and Music held on to their share of the budget and staff. Arts & Science, with half of its departments in the top two categories and only four in the bottom two, did manage to increase its share of the budget although it was not translated into a larger proportion of academic staff. Education, ranked as a low priority, found its share of the budget declining. The actual budget allocations (table 5) show that Economics and Medieval Studies had to sustain cuts, while Ancient & Modern Studies, English, and Social Work received budget increases larger than
most of the "A" units, in the short term at least. Only Computer Science, Sociology and Demography seem clear priorities; while Dentistry, Education, Nursing and Optometry are obviously of low priority. Table 6 shows that only seven out of the twelve "A" units lost teaching staff, while seven out of the eight "E" units did. Four "A" units but none of the "E" units improved teaching ratios; the two largest increases in teaching ratios and two greatest decreases in staff numbers were sustained by "E" units. However, Computer Science and Economics, confronted with fewer staff and more students, had to contend with ratio increases that were larger than all but two of the "E" units. In summary, the flow of resources appears to have followed the productivity analysis, although the differences in resources did not match the magnitude of the differential recommendations and there were some discrepancies.

UM's approach to cutbacks conforms, in many ways, to our notion of rational analytic decision making where:

| calculation is used to select the best alternative, or at least distinguish acceptable from unacceptable proposals. central administrators make strategic choices unilaterally, typically in the presence of considerable "hard" data (Hardy et al, 1983: 421). |

The goal of selectivity based on productivity was clearly articulated by central administration, criteria were established and information was collected to measure performance, again primarily by administrators, and, on the basis of this analysis, resources were allocated. There was, however, a return to across-the-board cuts in 1984/5. A base cut of 2.6 per cent was applied to all faculties, although those that increased student enrolment received additional funds. Central administrators argued that they did not feel they could repeat the analysis embodied in the formula approach yet again, and they also wanted to encourage faculties to benefit from promises from the government to allocate additional money
for new students. This change can be interpreted as evidence both against and in favour of the rational approach. On the one hand, it might signal the end of a superficial commitment to selective cuts; on the other, it could represent a rational attempt to bring in additional revenue. This ambiguity highlights the difficulty in identifying decision making models; further analysis is necessary before any firm conclusions can be drawn.

Competing Explanations

It is possible for the rational model to co-exist with other models (Allison, 1971; Hardy et al, 1983; Chaffee, 1983). In order to fully understand the events at UM we must examine these other models.

The Bureaucratic Model

Large universities, because of their size, complexity, diversity and decentralization are bureaucratic in the sense that there is a formal hierarchy, channels of communication, rules and procedures (Baldridge, 1971; Riley & Baldridge, 1977). In the professional bureaucracy activities are divided into a series of standard programs or pigeon holes into which students (and professors) are slotted. Considerable bureaucracy is involved in monitoring, adapting and changing these pigeon holes through the various committee structures. (Mintzberg 1979; Hardy et al, 1983). This model, while it describes formal authority and structures, says little about processes (Baldridge, 1971; Riley & Baldridge, 1977). A bureaucracy can be overlaid with political, collegial or garbage can processes as well as rational analysis (Hardy et al, 1983).

The context at UM had many bureaucratic features but the process of resource allocation was not a bureaucratic one. Administrators were experimenting with a methodology that would bring about a more rational approach to cutbacks by linking performance evaluation to budgets. They
may have been trying to create a bureaucratic process in order to standardize resource allocation procedures but, at the time of the study, they were not operating one.

The Garbage Can

The garbage can model characterizes behaviour that is nonpurposive and random -- decisions are not systematically resolved, participation is fluid and solutions attach themselves to problems. Goal ambiguity, problematic technology, fluid participation, professionalism, and client input into decisions lead to the garbage can (March & Olsen, 1976; Riley & Baldrige, 1977). These conditions were not present at UM: goals were relatively clear; the methodology for assessment was relatively standardized; participation in the committees on the budgetary approach was well controlled by administrators; professorial membership was usually limited to one (and sometimes none); client input, from students, was nonexistent. The garbage can does not appear to be a useful model in describing events at UM; nor would one expect it to be. It rests on an assumption of disinterest -- budget cuts are seldom a matter of indifference, and consequently behaviour becomes purposeful (Hardy et al, 1983).

The Political Model

Linking performance to budgets appears rational, however, evaluation is highly complex. Different criteria can be used to ascertain effectiveness depending on: the purpose of assessment; who is doing it; the time frame; the data used; the level of analysis; the domain of activity being investigated; and the point of reference. Criteria are not necessarily chosen because they are accurate indicators of performance (Cameron, 1986): they may be chosen for political reasons. There is considerable evidence of politics at UM, which should come as no surprise:
universities are often political (Baldridge, 1971), a situation that may be exacerbated by scarce resources (Pettigrew, 1973; Pfeffer, 1981; Mintzberg, 1983; Hardy, 1984, 1985).

Many people at UM argued that the methodology was unfairly biased in favour of certain disciplines.

There were serious methodological questions. The formula was prepared for the type of department in the arts and sciences -- mainly in the sciences... It didn't give enough weight to practical work (dean).

Another committee [4] commissioned by the planning committee of senate rather than the administration, did question some of the conclusions of the formulae. It evaluated teaching and research activities against comparable units in the eleven major Canadian universities (Belanger & LaCroix, 1986), and found the performance of the natural sciences to be weak and "incompatible with the goals of UM in research and graduate studies". Biological Sciences (category "A") and Chemistry (category "B") were found particularly wanting. Political Science was also criticized and reservations concerning Psychology were expressed. Dentistry, Optometry and Nursing, Ancient & Modern Studies and English were confirmed as weak units, while Music, Education and Social Work received some praise.

Many deans felt that the evaluation exercise had not been used to determine resource allocation, but to "justify the cuts that had already been made" (dean) and as a ploy to delay taking action. The use of rational documentation as a political device to legitimize decisions that have been taken on other grounds is well documented (for example, Majone, 1977; Sabatier, 1978; Weiss & Bucuvalas, 1980).

They have used a formula to make the cuts look more logical... [but] you had the impression that no one listened to what you were saying and that decisions were made ahead of time (dean).

Every time we set up an inquiry it is a way of taking
no decision... It prolongs the agony (dean).

For example, while the criteria developed by COPER were later used in the resource allocation process, the recommendation to cut the number of elective courses came to nothing. Similarly, the recommendations of COPAS to merge some service areas were also rejected because, according to some, of "the threat to existing territories".

There is a big difference between making choices and just using the term. We did not make choices even with the criteria we had designed. It was not a formula conducive to choices. When you make choices there are value judgements (administrator).

The study into the costs and benefits associated with closing departments was also seen as a delaying tactic. It came to the conclusion that it would take so long to recoup the savings associated with program/unit closure that it was not worthwhile.

I don't see how we could cut an academic unit because we would lose students and lose more money... We've done some analysis and in all cases we cannot cut expenditures enough to compensate for the loss of the grant (administrator).

Critics have suggested the study was "a theoretical exercise" designed to prove a foregone conclusion.

It was designed to prove a point. Everybody was happy with it because it went through the council and the rector could say: "Well, you've been asking me about this -- here's the answer" (administrator).

Political lobbying seems to have occurred. For example Dentistry which, although classified as group "E", was only recommended a three percent cut.

I think finally we only had a small cut because of all those presentations and all the lobbying... When they applied the rules we were the heaviest cut in the university, and when we explained our situation we were [cut less] (administrator in Dentistry).

Other deans also felt that they had been able to influence decisions
I remember having a battle and saying it was unjust and I must have convinced somebody because I remember our allocation went up (dean).

Another action that received a political interpretation was a change to global budgets at the same time as the cutbacks, increasing the discretion of the deans. In reality, however, there was little room for manoeuvre since most of the budget was tied up in commitments to existing staff and salaries were negotiated centrally.

Some cynics said: now they don't have any money left, they give the power to the deans; when they had money left they kept the decisions to themselves.... I am one of those cynics (assistant dean).

It has been suggested that it was a political move to deflect blame and remove pressure from the central administration.

It would relieve the pressure on the central administration because the tough decisions would be made by deans. If all the pressures had been put on central administration then the deans, the faculty members, etc., would have been against a small group. Now with this decentralized system, the base is negotiating with the deans, the deans negotiate with the administration. There are different levels of decision (administrator).

It seems clear that UM's approach to outbacks contained political elements. The formulae were used with the explicit intention of achieving selective -- but not too selective -- cuts as the documentation made clear. Lobbying played a role in the decision making process. Certain actions have been interpreted as political. The rational approach seems to have been adopted, in part at least, for its symbolic value in legitimizing decisions and to delay or avoid some decisions.

The Collegial Model

Does the evidence of politics preclude the existence of the collegial model? The latter has been defined as one in which the common interest guides decision making (Hardy et al., 1983). It could be argued, for example, that the attempt to legitimize decisions by reference to a
rational decision making model was an attempt to build consensus and create collegiality. The choice of a methodology to impose selective but not drastic cuts might have been an attempt to avoid the morale problems that would undoubtedly accompany program closure. Delaying decisions could be explained by a belief that funding would improve after the three year period. Changes in recommendations might have been a response to legitimate needs rather than to lobbying.

The cut was on paper -- eventually they would worry about your needs. It's one thing to have something for the university as a whole but when you sit down with a vice-rector and say "we have to keep that person" it's a different ball game. They made various adjustments (dean).

The apparent inflated ranking of some of the sciences could have been the result of inexperience with performance evaluation rather than a politically biased formula. The timing of decentralization might have been coincidence or an attempt to provide deans with more "room for manoeuvre" for dealing with cutbacks.

To be frank I don't think it was meant that way [to be political]. When the budget was decentralized I think at the back of our minds was that the cuts would not last much longer (dean).

There are choices to make when you have cutbacks. It is very difficult for the central administration to do. These decisions must be taken by the base (administrator).

There is, then, an alternative to the political interpretation of events since part of the reason behind the adoption of the rational approach could have been a genuine desire to build consensus. This model is, however, very difficult to verify. Admissions of political gamesmanship may lead to its refutation, but the absence of such admissions and even protestations that actions were taken for the common good are not proof of its existence. We cannot prove whether administrative actions
were motivated by common or self interest, however, it is clear that if the
former was the case, they undoubtedly failed. The political attributions
discussed above is a clear indication. Moreover, low morale had been
attributed to the way in which the cuts had been handled [5].

Why was there so much suspicion and criticism of the administration at
UM and its handling of the cutbacks? One problem was the degree of
centralization. Deans felt that the power play took place "at a level far
beyond our influence". Power was concentrated in the hands of the "regie"
-- a nonstatutory body consisting of the rector and his vice rectors.

[The regie] knows how to present things, it knows what
to present, it knows not to present other things. The
rector and vice-rectors are very powerful (dean).

The high degree of centralization meant that central administrators
bore a great deal of responsibility for decision making in general and the
cutbacks in particular. Leadership, however, was seen to be lacking.

Leadership starts at the top. That has to be
underlined. We haven't had that for a long time.
(administrator).

With the management of this university, you have a hard
time seeing where they are going. I'm not sure they
know whether they are going either (dean).

This general lack of credibility was compounded by a third problem --
a number of perceived mistakes in managing the cutbacks. For example, more
than 100 letters were sent out to nontenured academic staff in 1982 saying
that, unless otherwise notified, contracts would not be renewed due to
budgetary constraints. The news created a great deal of criticism, however, and hit the headlines of local newspapers, forcing the university
to re-evaluate its position. Deans were given the choice of finding other
ways of making cutbacks and, with the help of a union agreement to forego 1
per cent of a salary increase, the positions were saved.
It was a stupid way to solve a problem. It was mismanagement -- they didn't think about it. You should see my junior staff. They are still afraid of what's going to happen before they become associate professors (dean).

Finally, the choice of selective cuts based on evaluation was bound to threaten some groups.

It was the first evaluation exercise in this university. People don't like to be evaluated, especially when there is a lot of money at stake (administrator).

It led to conflict and dissatisfaction in the university community.

We were sometimes fighting against each other although not on an open field. The overall amount of money was the same so each time we got one more dollar, someone else had to lose it (dean).

Every department is looking at the other department and seeing what we gave them. Everyone is criticizing the decisions we are making and we don't know how to proceed. If you do nothing they criticize, if you do something they criticize (assistant dean).

Conclusions

What can we conclude from the experiences of UM in managing cutbacks?

The Rational Approach has Limited Value in Universities

UM's approach to cutbacks met most of the criteria associated with rational decision making. There was a limit, however, to how useful this approach could be -- in 1984/5 UM returned to across-the-board cuts.

We could not analyze and reanalyze the situation... We felt we couldn't go through the whole process again but we still had to cut (administrator).

The constraints faced by most universities reduce the degree of strategic choice and limit the value of rational analysis. The only way to save significant sums of money, since usually at least 80 per cent of the budget is tied up in payroll, is to reduce posts. Tenure protects the
majority of professorial staff and Quebec legislation effectively guarantees job security for the nonacademics, so attrition has to be the main mechanism. UM has not expressed any intention of breaking tenure and, in Canada, only the University of British Columbia has challenged it in a handful of cases. Increasing revenues is difficult — additional research income only adds to overhead costs as many Canadian research councils do not pay them. A lack of a tradition of giving to universities makes fund raising hard in Canada, particularly in the francophone culture. Tuition fees, the lowest in Canada, are fixed by the government and have not increased for many years. Student numbers were increased in an attempt to raise the government’s operating grant but UM has been unable to profit from extra funding for management and engineering students because HEC and EF have separate budgets.

**The Business Approach will not Guarantee Excellence**

The business approach may improve cost efficiency but it will not, of itself, guarantee excellence and may in fact work against it. Excellence in universities is the product of excellence in people. It requires innovative and often risky recruitment decisions, and the provision of enough flexibility to allow individuals to be creative and innovative (Pearson, 1986). Increasing controls, quantifying output, pursuing predominantly economic goals may remove that flexibility and make attracting, keeping and motivating excellent people more difficult. Successful university management involves developing an organizational saga (Clark, 1972) — a collective understanding of the institution’s achievements with provides purpose and motivation, and finding the right approach for the particular institutional culture (Hardy, 1987). It requires leadership, communication, and political skills and not just economic analysis and strategy Chaffee (1984).
Success Depends on Political Skills

UM relied on a rational approach to outbacks but other models were present. It occurred within a bureaucratic context and may have been used politically -- to influence and legitimize decisions -- and/or for collegial reasons -- to build consensus.

We wish to argue that analysis figures prominently in both collegial and political processes, as well as garbage can ones, stimulated by the existence of ambiguous goals and multiple actors .... analysis serves more as a means of exerting influence in interactions rather than of resolving issues on its own. It may be used to aid personal understanding for individuals or groups, but it also serves as a means of communication and attention focusing, as a means of legitimizing decisions, as a means of legitimizing decisions, as a means of consensus-building, and perhaps most importantly as a means of persuasion. In this way, analysis helps to ensure that what does get decided in fact has some justification in principle. (Hardy et al, 1983: 421-423).

Administrators at UM failed because of inadequate political skills; ironically it was because they failed that their actions were labelled as political. The term "political" has negative connotations but it is important to realize that the same behaviour can be used for both the common good and self interest -- political skills can be used to build consensus and enhance collegiality (Hardy et al, 1983).

I think the imagery of politics is very helpful in understanding the operation of this place. Of course this doesn't necessarily imply "dirty" politics. I simply mean that you've got to understand the political forces -- both inside and outside -- that are trying to control this place. There are pressures impinging on the officials of the university from all directions, and in a real sense the management of this university is a balancing process. It's a task of balancing the demands of various groups against each other and against the university's resources.... the men in critical positions are not bureaucrats, they are politicians struggling to make dreams come true and fighting to balance interests off against each other (dean, quoted in Baldridge, 1971: 20-21).
Defining and funding priorities and identifying and phasing out weak areas, without alienating the professoriate and endangering morale, relies on more than just rational analysis, it requires leadership, intuition and political will.

The Business Perspective Ignores Essential Political Skills

The problem with the current emphasis on the rational approach is that it ignores political reality and devalues political skills. The analytic skills, concepts and frames of reference associated with the business perspective are of little use for managing the social and political processes occurring within the system (Lyles & Lenz, 1982). Universities may benefit from thinking more carefully about their environment, developing ideas as to their future direction, and acquiring more information about their activities but all the planning and analysis in the world will not necessarily make anything happen. Universities are complex organizations in which the top-down approach associated with business is often untenable. Decisions cannot be imposed, they have to be nurtured from the bottom-up (Mintzberg & Jorgenson, 1986), which involves not just machiavellian machinations but the ability to communicate, motivate, build consensus, and create loyalty and commitment.

The issues raised by the experiences of should be considered suggestive -- a single case study obviously has its limitations. It does, however, signal a need for further empirical study of the supposed benefits of the business model for universities. There has sometimes been a willingness to both impose and accept the industrial rationale in the university community which is not necessarily justified. Research is needed to answer the questions raised in this paper. How feasible is the rational approach in universities in the light of the constraints they face? Why do universities use this approach -- to be more businesslike, or
for political reasons? What are the results of this approach and are they beneficial? How important are factors such as leadership, intuition, judgement, and political will, and are they being neglected as a result of business models? Is "good management" in a university the same as in business? Until we can answer these questions more authoritatively, our trust in business solutions may be misplaced.
Notes

[1] The study involved more than fifty semi-structured interviews with deans, or their representatives, and central administrators including vice-rectors. All except two central administrators agreed to be interviewed. Interviews were also carried out with a selection of department heads. Quotations are taken from these interviews. They illustrate a body of opinion voiced in a number of interviews. A questionnaire was distributed to every second professor in each of the departments -- of the 892 questionnaires that were mailed, 239 (27%) were returned. Access to documentation was also provided, including the various documents mentioned. The study of UM is part of a larger study of eight Canadian universities (see, for example, Hardy, 1987).


[5] Questionnaire results supported the hypothesis that morale was low, not simply because of the cuts but also because of the way in which they had been handled. In comparing the responses of professors from UM and another Quebec university, respondents evaluated the damage done by cutbacks in much the same way but UM professors attributed twice as much blame to central administrators, saw them as largely responsible for their implementation, felt them to be less fair, and were far less happy about university administration (see Hardy, 1987).
Diagram 1.

Are goals known?

Are (some) alternatives known?

Is information available and analyzed?

Are consequences known and judged by criteria?

Are resources linked to decision processes?
Table 1.
University Characteristics 1983/4 [A]

<table>
<thead>
<tr>
<th># Student</th>
<th>29191</th>
</tr>
</thead>
<tbody>
<tr>
<td># Graduate Students</td>
<td>6766</td>
</tr>
<tr>
<td># Professors</td>
<td>1481</td>
</tr>
<tr>
<td>% Assistant Professors</td>
<td>19</td>
</tr>
<tr>
<td>% Professors 40+ years</td>
<td>70</td>
</tr>
<tr>
<td>Nonteaching Staff (FTEs)[B]</td>
<td>2497</td>
</tr>
<tr>
<td>Total expenses</td>
<td>$241m</td>
</tr>
<tr>
<td>Research as % Total Budget</td>
<td>14</td>
</tr>
<tr>
<td>% operating revenues provided by Quebec government</td>
<td>94</td>
</tr>
</tbody>
</table>

Faculties

Arts & Science
Continuing Education
Dentistry
Education
Graduate Studies
Law
Medicine
Music
Nursing
Pharmacy
Planning
Theology
Veterinary Science

[A] Figures from annual reports.
[B] Full time equivalents.
Table 2.

Changes at UM 1980/1-1983/4 (%) [A]

<table>
<thead>
<tr>
<th>Category</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quebec operating grant [B]</td>
<td>+8</td>
</tr>
<tr>
<td>Total Income</td>
<td>+12</td>
</tr>
<tr>
<td>Nonresearch Income</td>
<td>+8</td>
</tr>
<tr>
<td>Expenditure on Faculties &amp; Services</td>
<td>+9</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td>+13</td>
</tr>
<tr>
<td>Nonresearch Expenditure</td>
<td>+9</td>
</tr>
<tr>
<td>Deficit [C]</td>
<td>$13m</td>
</tr>
<tr>
<td># Total teaching staff</td>
<td>-10</td>
</tr>
<tr>
<td># Professors</td>
<td>-4</td>
</tr>
<tr>
<td># Nonteaching Staff</td>
<td>-23</td>
</tr>
<tr>
<td># Students</td>
<td>+9</td>
</tr>
</tbody>
</table>

[A] Figures from annual reports
[B] Increases in dollars do not take into account inflation; increases should be measured against a 22% increase in the CPI during the same period.
[C] UM spent a $6m surplus and incurred a $7m deficit.
Table 3.
Categorization of Selected Departments and Faculties [A]

<table>
<thead>
<tr>
<th>Department/Faculty</th>
<th>Category/Cut</th>
<th>Recommended Cut (%)</th>
<th>Proposed % Change in Budget [D]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science (FAS) [B]</td>
<td>A/3%</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>Economics (FAS)</td>
<td>A/3%</td>
<td>1.2</td>
<td>NA</td>
</tr>
<tr>
<td>Sociology (FAS)</td>
<td>A/3%</td>
<td>1.3</td>
<td>NA</td>
</tr>
<tr>
<td>Biological Sciences (FAS)</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Demography (FAS)</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>History of Science (FAS)</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Medieval Studies (FAS)</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Political Science (FAS)</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Psychology (FAS)</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Health Administration (Med) [C]</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Biochemistry (Med)</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Microbiology (Med)</td>
<td>A/3%</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Ancient &amp; Modern Studies (FAS)</td>
<td>E/11%</td>
<td>11</td>
<td>NA</td>
</tr>
<tr>
<td>English (FAS)</td>
<td>E/11%</td>
<td>11</td>
<td>NA</td>
</tr>
<tr>
<td>Social Work (FAS)</td>
<td>E/11%</td>
<td>6</td>
<td>NA</td>
</tr>
<tr>
<td>Dentistry</td>
<td>E/11%</td>
<td>3.1</td>
<td>4.4</td>
</tr>
<tr>
<td>Music</td>
<td>E/11%</td>
<td>11</td>
<td>7.8</td>
</tr>
<tr>
<td>Education</td>
<td>E/11%</td>
<td>11</td>
<td>4.4</td>
</tr>
<tr>
<td>Nursing</td>
<td>E/11%</td>
<td>11</td>
<td>11.0</td>
</tr>
<tr>
<td>Optometry</td>
<td>E/11%</td>
<td>11</td>
<td>11.1</td>
</tr>
</tbody>
</table>

[B] Faculty of Arts & Science
[C] Faculty of Medicine
[D] Source: 1982/3 Budget
NA Not available.
### Table 4.

Changes in Budget, Student and Staff Allocation 1980/1-1983/4[A]

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Proportion of Budget (%)</th>
<th>Proportion of Students (%)</th>
<th>Proportion of Staff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Science</td>
<td>35 36</td>
<td>38 39</td>
<td>34 34</td>
</tr>
<tr>
<td>Dentistry</td>
<td>5 5</td>
<td>2 2</td>
<td>4 4</td>
</tr>
<tr>
<td>Education</td>
<td>7 6</td>
<td>2 1</td>
<td>10 7</td>
</tr>
<tr>
<td>Law</td>
<td>3 3</td>
<td>6 5</td>
<td>3 3</td>
</tr>
<tr>
<td>Medicine</td>
<td>25 25</td>
<td>15 15</td>
<td>20 22</td>
</tr>
<tr>
<td>Music</td>
<td>2 2</td>
<td>2 2</td>
<td>3 3</td>
</tr>
<tr>
<td>Nursing</td>
<td>1 1</td>
<td>1 1</td>
<td>2 2</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>1 1</td>
<td>2 2</td>
<td>1 1</td>
</tr>
<tr>
<td>Planning &amp; Architecture</td>
<td>3 3</td>
<td>3 3</td>
<td>3 3</td>
</tr>
<tr>
<td>Theology</td>
<td>1 1</td>
<td>2 2</td>
<td>1 1</td>
</tr>
<tr>
<td>Veterinary Science</td>
<td>5 5</td>
<td>2 2</td>
<td>2 2</td>
</tr>
</tbody>
</table>

[A] Figures from information compiled by the Office of Institutional Research.
Table 5.

Base Budgets ($000)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Computer Science</td>
<td>1716</td>
<td>1830</td>
<td>1922</td>
<td>6.6</td>
<td>12</td>
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<tr>
<td>Economics</td>
<td>1683</td>
<td>1730</td>
<td>1625</td>
<td>2.8</td>
<td>&lt;3.5&gt;</td>
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<tr>
<td>Sociology</td>
<td>1469</td>
<td>1560</td>
<td>1581</td>
<td>6.2</td>
<td>7.6</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>2706</td>
<td>2960</td>
<td>2811</td>
<td>9.4</td>
<td>3.9</td>
</tr>
<tr>
<td>Demography</td>
<td>491</td>
<td>524</td>
<td>529</td>
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<td>7.7</td>
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<td>History of Science</td>
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<td>245</td>
<td>&lt;1.8&gt;</td>
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<td>Medieval Studies</td>
<td>542</td>
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<td>551</td>
<td>12</td>
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<tr>
<td>Political Science</td>
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<td>1300</td>
<td>1244</td>
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<tr>
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<td>4340</td>
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<td>4379</td>
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<td>.9</td>
</tr>
<tr>
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<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Biochemistry [B]</td>
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<td>NA</td>
<td>NA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Microbiology</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>1950</td>
<td>1921</td>
<td>9.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Social Work</td>
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<td>1140</td>
<td>1085</td>
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<td>822</td>
<td>882</td>
<td>830</td>
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<td>.9</td>
</tr>
<tr>
<td>Dentistry</td>
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<td>5566</td>
<td>5207</td>
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<td>&lt;14&gt;</td>
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<td>2806</td>
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<td>2589</td>
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<td>&lt;7.8&gt;</td>
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<td>8510</td>
<td>7656</td>
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<td>&lt;10.1&gt;</td>
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<td>1819</td>
<td>1797</td>
<td>1616</td>
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<td>1221</td>
<td>1036</td>
<td>955</td>
<td>&lt;15&gt;</td>
<td>&lt;22&gt;</td>
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</table>

[A] In order to reduce discrepancies between planned and actual budgets, figures have been taken from the budget of the following year (1982/3).
[C] Figures from 1984/5 budget.
NA Not available.
<table>
<thead>
<tr>
<th>Faculty/Department</th>
<th>% Change teaching staff</th>
<th>% Change staff: student/credits (undergraduate)</th>
<th>% Change staff: student/credits (incl. graduate)</th>
<th>% Change total student/credits</th>
</tr>
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<tbody>
<tr>
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<td>35</td>
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<td>37</td>
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</tr>
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<td>&lt;22&gt;</td>
<td>&lt;16&gt;</td>
<td>&lt;8&gt;</td>
</tr>
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<td>15</td>
<td>11</td>
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<td>Demography</td>
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<td>&lt;30&gt;</td>
<td>&lt;28&gt;</td>
<td>&lt;14&gt;</td>
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<td>7</td>
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<td>16</td>
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<td>5</td>
</tr>
<tr>
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<td>&lt;3&gt;</td>
</tr>
</tbody>
</table>

[A] Figures from information compiled by the Office of Institutional Research.
[B] Changes from 1982/3 to 1983/4 only.
Bibliography


Shirley, R.C. "Identifying the Levels of Strategy for a College or University", Long Range Planning, 16(10), 1983.


