PRODUCTIVITY, INNOVATION AND STRUCTURE

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ABSTRACT

For at least ten years now, libraries have been faced with growth in client demand at the same time as a decline in funding levels. In order to cope and to maintain productivity, libraries have pursued a number of strategies including: the use of automation to achieve efficiency in the allocation of staff resources; participation in bibliographic and resource sharing networks; and the introduction of marketing and fee-based services to recover the costs of some services. These strategies all prevent libraries from falling behind but do not necessarily move libraries forward. The real challenge for library managers is how to improve productivity and release enough slack in the system to invest in planned innovation.

What is 'productivity'? What is 'innovation'? How can a manager create purposeful, focused change? What are the strategic and organisation development issues involved in improving productivity and creating an innovating organisation? What types of organisation structure foster productivity and innovation?

These are some of the issues raised and discussed by the paper based on the experience of the University of Canberra Library and the management theories about productivity, innovation, strategy and structure.

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INTRODUCTION

For at least ten years now, libraries have been faced with growth in client demand at the same time as a decline in funding. Within the context of current resourcing levels, the organisational options available for a manager to promote or influence are:

1. Increase the Library's share of the resources by taking resources from other parties;

2. Increase the effectiveness of the corporate resource allocation process, within the institution, relating the resources of all parties to corporate plans and priorities;

3. Increase the Library's capacity to be productive and innovative and to re-deploy its resources internally;

4. Increase the funds generated by the Library from alternative sources; and

5. Increase the effectiveness of network arrangements between libraries.

It is likely that an appropriate mix of all options will need to be pursued. This paper explores the third option, i.e. increasing the Library's capacity to be productive and innovative and to redeploy its own resources internally. The problem is how to improve productivity within existing resourcing levels and also release enough slack in resources to make it possible for innovation to occur. The experience of the University of Canberra Library is documented and set within the management theories about productivity, innovation, strategy and structure.

DEFINING PRODUCTIVITY

Productivity is an economic measure of an organisation's success. A productive organisation can be one which performs its work for the least total cost or undertakes the minimum level of work that needs to be done or obtains the optimum output for a given level of investment. These were the various meanings of productivity defined by the ACDP Working Party on Library Resources.[1]

Productivity is also a behavioural concept. High productivity is associated with the effective motivation of staff. For example, in Japan, productivity is attributed to the priority that is given at all levels of Japanese society to the maximisation of economic advantage and also to the commitment from the workforce to the company's success. Employment is an essential part of the individual's identity and the company's prestige becomes the individual's prestige.[2] One of the keys to American corporate success is seen as 'productivity through people'[3] through the use of work teams, collaborative problem-solving and other organisation development techniques.[4]

In Australia, productivity is integral to the management of industrial relations between employers and employees. Since 1983 an 'accord' has been evolving between the government and the Australian Council of Trade Unions in which productivity improvements are to be achieved through award restructuring, providing the basis for wage increases. Linked to award restructuring is a commitment by management and unions to multi-skilling, training, staff development, participative job design and performance appraisal. This commitment is not a matter of choice. It is required as part of an industrial decision made by the Australian Industrial Relations Commission in response to calls from trade unions, employers and governments for a wages system that would reflect the needs of a changing economy with the two tier wages system introduced in March 1987. The first tier consisted of a $10 across-the-board increase for all employees from March 1987. The second tier consisted of an increase of 4 per cent in salaries or wages but was conditional on identifying 'productivity offsets'. The decision marked a major departure from previous decisions which granted automatic increases and set the stage for the Structural Efficiency Principle decision which was the vehicle for the introduction of multiskilling.

The Structural Efficiency Principle is itself therefore a change agent with at least two foundation planks to the successful implementation of award restructuring and the introduction of more flexible work patterns. It needs consultation between employers and employees and a large investment in education and training. This external industrial relations constraint coincided with the UC Library's own interest in improving its productivity.

Another external change agent with implications for productivity is the policy of equality of opportunity in employment. In Australia, organisations have been required to eliminate unfair discrimination in employment on the grounds of age, race, nationality, ethnic origin, qualifications, gender, pregnancy, marital or family status, political or religious affiliation, physical or intellectual impairment, sexual preference or social or economic circumstances. The incentive for organisations to accept responsibility for equal opportunity in employment (EEO) has been the Affirmative Action (EEO for Women) Act, 1986. Organisations are required by the Act to report annually to the Australian Government on the strategies developed and implemented to improve employment conditions for women. At the University of Canberra, these strategies include the establishment of career paths for women (and men) in areas of limited opportunity, multi-skilling, training, staff development, the development of management and supervisory skills, and participation by staff in decision making. The University's EEO policy and management plan were developing at the same time as the Library's focus on productivity and became important organising principles.

The UC Library also accepted both the economic and behavioural aspects of productivity as worth pursuing and needing attention. It sought through productivity a sense of organisational health and well-being and what Mastenbroek[5] refers to as 'organisational vitality': the integration of all operations towards the same outcomes and the management of interdependencies between units.

DEFINING INNOVATION

Innovation originally referred to technological change and was associated narrowly with the activities of R & D units within organisations. It covered the R & D stages of generating an idea and undertaking applied research including the development, assessment and modification of a prototype. During the 1970's the innovation process began to be seen as involving not only the R & D unit but also corporate management, marketing, sales, design and engineering, production and advertising and the co-ordinated activity between all of these units.[6] Further, it was recognised that the innovation process needed managing with emphasis given to the following principles:

1. Personnel involved in the innovation process should have a proper understanding of the innovation process and their role in it;

2. Responsibility and authority for managing the total innovation process should be at an appropriately high level to facilitate the co-ordination of all the functions required;

3. Although good innovation management is very important, it is of little value if the ideas are poor to begin with; and

4. People involved in the process are crucial: creativity must be fostered and guided; there must be provision for continuity of assignments to projects; the people must be competent, and committed to the project; entrepreneurial, as opposed to quantitative or mechanical judgement is critical; there must be top management support and very often a project champion; the best projects seem to be those where many people are aware of many aspects of the problems being addressed.

By the 1980's innovation had evolved to mean highly successful entrepreneurship. Drucker[7] refers to innovation as "the effort to create purposeful, focused change in an enterprise's economic and social potential". Examples of this activity are the efforts of the British Library[8] and the State Library of New South Wales.[9] The term 'innovation' is also used to describe the rate at which libraries adopt innovations (e.g. computers, electronic theft detection systems, CD ROM products). Willard[10] provides an overview of the latter form of innovation and the responsiveness of library staff to such changes.

The UC Library understood innovation to be the activity described by Drucker i.e. creating purposeful, focused change. It also wanted to foster the management activities which Levitt[11] identified as the key to an innovating organisation: "... leadership that insists on constant, open self-examination of everything, on demonstrable receptiveness to change, and on the budgeting encouragement of innovation."

The philosophy of innovation management provided the UC Library with a way to cope better with resource constraints. It offered the opportunity to move beyond 'wish we could do that!' sentiments to 'let's try that!' action. The goal of excellence which is usually associated with innovation (and questioned by Cronin and Gudim[12]) was not the driving force for the UC Library. The overriding goal was to integrate all operations and activities towards the development of a client-oriented service and a work environment fostering

individual growth and quality performance. These were both seen as critical factors to prevent the UC Library from stagnating and to enable it to progress at a time of declining funding.

CREATING PURPOSEFUL, FOCUSED CHANGE

The stimulus for investigating the UC Library was the recognition that the services provided were costing more than the Library could afford. A looming deficit budget for 1987 made it imperative to review the situation and make changes. The starting point for the investigation was an organisational audit which the Library called "the Library's planning process". The audit was an evaluation and also involved the notion of planning which gave the process a positive note and a sense of movement towards a target. The planning process was modelled on a market plan or business plan and involved seven stages:

1. The development of a comprehensive fact base about the current state of the Library in terms of client groups served, products and services offered, levels of service achieved (effectiveness), productivity, efficiency, communication with clients, attitudes of clients, alternative services available to clients, and trends occurring in education and information technology and the Library's readiness to respond;

2. Identification of the problems and opportunities for the Library (based on data gathered in Stage 1);

3. Determination of priorities for both the Library's services to clients and for its internal operations;

4. Formulation of objectives to achieve desired results in services and operations;

5. Development of strategies for achieving the objectives;

6. Costing of the strategies as a basis for budgeting; and

7. Forecasting of acceptable levels of performance.

It was intended that this audit should be an iterative, ongoing process rather than a once-off review. The steps in the process therefore continue to underlie all management decision making.

The "desired results" identified for operations and services were that the Library should be productive and innovative within the budget limits set by the institution. An assumption made for planning purposes was that it was essential to make the best use of existing resources before making a case for additional funds.

The audit was done by means of interviews with each member of the Library's staff; reviews of each major operation (acquisitions, cataloguing, reference, serials, short loan and general loans) and specialist branches (audiovisual library and a map/design data library); a series of meetings with clients; and a formal study[13] of client priorities for the Library's services.

The current state of the Library which emerged from the comprehensive fact base was one of organisational inertia. While there were a number of potential strengths (commitment to service and pride in good client relations, efficiency in most operations within the constraints of the technology in use, a feeling of belonging by staff, and a number of individuals with ideas for change) there was a general perception that this potential was not being developed, and that operations were not integrated. The Short Loan Section, the Audiovisual Library and the Map and Design Data Library each existed largely in isolation from the rest of the Library.

Ongoing evaluation was not happening in all operations nor was it occurring system-wide. The planning of day-to-day operations was not integrated and co-ordinated across the Library; there was reaction to demand with the solution usually seen as 'add more staff'. Each department or section was setting its own priorities in work flows. Sectional loyalties made agreement on Library-wide priorities difficult. There was a 'win-lose' view of decision-making about scarce resources. Planning for new developments was not occurring according to any strategic plan. The links between planning, evaluation and budgeting were weak. There was no obvious mechanism for relating good ideas to funding as the budget process was a conventional line-item method based on the maintenance of the previous year's activities rather than on the cost of future plans. Communication was effective within units but less evident between units. The formal structure (see Appendix A) reflected a conservative view of management and divided work into a large number of units. Staff belonged to a single unit with a place for everyone and everyone in his/her place. The skills and competencies of individuals were highly specialised, limiting the capacity for transferring staff between units in response to changing demands in work loads or gaps caused by staff absenteeism. This problem was exacerbated by the spread of the Library across three different geographical locations on the campus (Main Library, Building 8; Audiovisual Library, Building 9; and Map and Design Data Library, Building 7) and the separate service points for general loans and short loans within the Main Library.

Given the declining budget, this structure lacked flexibility for the deployment of staff and was expensive to maintain. The structure emphasised supervision more strongly than leadership. Most staff defined teamwork as helping others and there was little evidence of team building based on goals, plans, skills, competencies and different contributions from each individual. The dominant management values were order, rules and control resulting in a desire for predictability and set patterns of behaviour. There were many staff with an interest in professional and managerial issues but there was no formal mechanism for their collegial expression.

While these issues were not of critical concern to the majority of the staff, the senior management team was aware that the Library had a deficit salaries budget which was likely to increase, that the 1988 industrial negotiations on structural efficiency and second tier wage rises were pending; that competition for funds between units within the institution would increase in response to overall declining funding patterns making it unlikely the Library would be given more funds; that funds for books and serials were declining; that the Library would not be able to afford to maintain as many service points (however much they were valued by clients); that broadbanding of clerical positions was on the industrial horizon; and that there was a crucial

need to establish library-wide priorities to ensure that all work being done needed to be done.

There was also concern by Library staff that their skills, services and collections were under-utilised and overshadowed by the short loan service which over the years had grown so large that it had become a library within its own right. Academic staff and students both perceived the Library primarily and often singularly as the place for 1) gaining access to essential readings selected by the lecturer and 2) photocopying them. This was largely a response to the teaching priorities and methods of assessment and the teaching (as against the research) orientation of the institution. (Prior to 1990, the University of Canberra was a college of advanced education with a teaching mission.) The Library, however, had been structured and staffed on the assumption that it had a broader role providing information support and professional assistance for independent and self-directed learning by students and for applied research by lecturers. Within the context of limited resources, the Library had no choice other than to question its concept of service vis-à-vis that of its clients and its concept of internal management. It did this by identifying selectively what Eadie[14] calls the "strategic or external service issues" and the "internal management or organisation development issues" to be managed as part of a change process.

MANAGING THE STRATEGIC ISSUES

Strategy has been defined succinctly by Toft[15] as "doing the right things as contrasted with doing things right". While the UC Library was confident that it was doing most things right it needed re-assurance that it was doing the right things. The Library staff still believed that their views about the role of a tertiary library were correct and that they needed to promote more actively the UC Library's capacity to 1) give students and lecturers skills in gathering information to support learning and research and 2) provide access to information at large both within the collections and from external sources. They also knew that the views held by most lecturers (and passed on to their students) were that the UC Library had a good collection of prescribed readings but that to consult the full range of available resources it was necessary to visit other publicly accessible libraries in Canberra. The assumption made by the clients was that resource sharing between libraries was "the right thing".

In order to get a match between the Library's expectations about services and those of its clients, the Library developed a plan for clarifying its role. There were three aspects to the plan: involving clients in policy making, establishing professional/client relationships and developing the information technology.

Involving Clients in Policy Making

The academic community was asked to formulate "An Academic Policy for the Library" specifying activities needing information and the level of support expected from the Library. This process took almost eighteen months and culminated in a policy document endorsed by the University's governing body, the Council.

The Academic Policy recognised that each Faculty and its students had different information needs and that their priorities for library collections and services would be different. Some faculties, for example, wanted the Library to become an intermediary, skilled in identifying the existence of information irrespective of its location and in arranging for its supply; other faculties wanted the Library to perform this intermediary role as well as acquiring collections of essential readings. No client group expected the Library to build extensive collections. Most client groups saw an active role for the Library in giving students skills in finding information.

The Academic Policy also addressed the question of priorities, giving each client group an active role with Library staff in determining expenditure on collections and services to meet its needs. The Library's selection policy became simply 'We buy what we know will be used'. This approach was seen as essential for identifying shortfalls in Library funding and assessing the consequences of such shortfalls for the satisfaction of client priorities and hence for the delivery of the academic programme.

Establishing Professional/Client Relationships

The Library established an 'academic planning support' role for its Librarians Class 3, redeploying them from line management to a marketing role. Their task was to establish professional/client relationships with selected academic staff by assisting them with the planning for collections and services to support programmes with high priority. It soon became apparent that this role would provide learning for academic staff, updating their knowledge of the Library's ability to identify information and provide access to it. Many academic staff were unaware of the latest online searching services and CD ROM products. Some were still basing their own judgement of the Library's services on the libraries which they had used for their own tertiary studies some years earlier.

The academic planning support role was also successful in getting the Academic Planning Support Librarians, and hence the Library, thinking more creatively about services to meet client needs and reviewing policies. There has been, for example, experimentation with the re-packaging of selected journal articles by the Library for loan to students; a proposal for the provision, on a trial basis, of a serials routing service for a fee to one faculty to support its staff development programme; the establishment within the Library of a microcomputer/VCR work station for students needing to view a video for instruction on a computer software package, the trialling of a wide range of CD ROM products and CD ROM networking and the introduction of a series of 'information update' sessions for academic staff. These are small innovations but powerful in building positive client views about the Library as a responsive organisation. The academic planning support role has therefore been effective in countering the tendency for strategic planning to lead to resistance to change. Mintzberg[16] has suggested that organisations rely on strategies to reduce uncertainty by setting direction, focusing efforts, and defining the organisation and in this way, "strategies are to organizations what blinders are to horses; they keep them going in a straight line, but impede the use of peripheral vision."

The active listening by the Librarians to clients followed by creative thinking about solutions to the information problems of clients has been important in challenging the conservative thinking about the Library's role.

Developing the Information Technology

The Library formulated a strategic plan for information technology. This plan spelled out the Library's intentions for utilising technology to support the academic business of the University. It stated the Library's mission, described the current use of technology to support services to clients and internal operations, identified problems with the Library's existing information technology and the opportunities for utilising information technology for improved performance, detailed the long-term and short-term goals and cited the benefits of the library's plans for its clients.

The strategic plan emphasised the leadership role to be played by the Library in networking and in moving towards the 'scholar's workstation' concept. The Library's vision was for students and staff to have customised, current information available from terminals, PC or any workstation, on campus or off-site, on the information resources available through the Library regardless of format, location or ownership, to support their teaching, learning and/or research needs and a document delivery service including by electronic means to support the scholars workstation concept.

The strategic plan was also a useful tool for evaluating appropriate information technology on the market to move the Library in the direction of the vision.

MANAGING THE ORGANISATION DEVELOPMENT ISSUES

The internal management issues identified in the Library's planning process, the Structural Efficiency Principle and the University EEO policy became the catalysts for setting goals for change and re-structuring work relationships.

Setting Goals for Change

The Library adopted a top-down approach to setting goals for change. The senior management team was influenced in its task by two different areas of management. The first was business logistics and the second was the design of decision support systems.

In a logistical system, the delivery of a product or service is effective in meeting customer needs if it satisfies the economic utilities of form, possession, time and place. The objective of a logistical operation according to Bowersox[17] is:

> "to deliver finished inventory and material assortments, in correct quantities, when required, at the location desired, and in usable condition at the lowest total dollar cost."

While libraries are not industrial factories processing raw materials and distributing finished inventory for national consumption in operations of the kind analysed by Bowersox, libraries have a technical arm which acquires and catalogues information in a range of formats and a reader services arm which

distributes the processed information to clients. If these two operations pursue their own functional goals, it is easy to lose sight of the four utilities. The UC Library was receptive to Bowersox's observations that customer needs are more basic than products; products must be viewed in an end-use context; and volume is secondary to profit (or in the case of libraries, to client satisfaction). By viewing the UC Library as a logistical operation, the integration of all technical service and reader services operations became a goal for change.

Decision Support Systems (DSS) represent a conscious, planned approach to the design of computerized information systems with a view to achieving improved decision-making by the user. The purpose of the DSS is to provide the type of information that the decision maker will use and to provide the cues for alerting the decision maker that information is needed.

The recognition on the part of the DSS designer that the decision maker is not able to predetermine his information requirements is central to the "support" aspect of the DSS. An information system can only fulfil a support role if it is responsive to the changing needs of the decision maker. Keen[18] stresses that a DSS can only be considered as such "where the final system will evolve only through the ongoing interaction of designer and user, learning, person-alized use, or the evolution of new functions." Therefore, DSS are not static, passive information storage and retrieval systems that can be modelled then built then implemented. The planning stage is not a once-off task; planning the DSS has to be accompanied by continual attention to implementation, evaluation, and further planning in response to feedback from the user. In this way, DSS represents an adaptive process as much as a concrete information system. A DSS shapes the user and at the same time is shaped by the user.

It was this notion of mutual shaping which sparked a new way of thinking about library service. The relationship which ought to exist between a library and its clients is one in which the library shapes the information gathering be-haviour of clients and is also shaped by their problem solving behaviour. The pursuit of this relationship became a second important goal for change.

Re-Structuring Work Relationships

Powell[19] has defined structure as "a means of allocating resources through authority relations". Productivity and innovation are both desired end results which require a change in the way resources are allocated. In order to make enough slack in the organisation for innovation to occur, changes must be made in the authority relationships and hence in the way people perceive the re-source allocation process. The need to analyse structure and process together is an idea posed by Kahn[20] in his role theory of organisations:

> "The structure of an organization is the pattern of actual behaviors as that pattern is created and re-created by the human beings we call members of the organization."

It was by changing the roles or "actual behaviors" of every member of the UC Library that changes were able to be made to the resource allocation process. The most significant role changes were:

1. All staff now "belonged" to the University Librarian and were "on loan" to operations and were not "owned" by the manager and/or supervisor of an operation.

2. Most staff were required to fulfil multiple roles and worked in more than one operation in accordance with principles for multi-skilling developed by Library staff. This was facilitated by the preparation of generic duty statements for all position classifications in consultation with all staff.

3. Senior staff at the upper first and second levels of the hierarchy were removed from line management positions and redeployed to new roles. At the first level, the Head of the Reader Services Division and the Head of the Technical Services Division were each made general managers working together as a team on the strategic planning and financial management for all services, systems, staffing and facilities. At the second level, the Head Cataloguer, Head Reference Librarian and Head Acquisitions Librarian were given roles assisting senior managers in the general management of the Library and also establishing marketing activities in their roles as academic planning support librarians.

   These changes made it possible for the Library's most senior staff to look out of the Library and across the Library instead of down the Library as dictated by their previous roles. Their new orientations were essential for a library wanting to integrate all of its activities towards service and receptiveness to change.

   The senior staff also developed leadership roles based on subject authority. They were encouraged to maintain their professional interest in the technical aspects of operations such as cataloguing by acting as mentors for more junior managers.

4. The structure of 'Technical Services' and 'Reader Services' was dismantled and functional departmentation was replaced by a number of basic operations, each with a manager and also a work supervisor. This flattened structure opened up line management roles for more junior librarians. They were expected to work within established guidelines planning, costing, staffing, training and evaluating the day-to-day running of each operation. The guidance for them was provided by building a supportive environment. They met as a group with more senior librarians each week to forecast demand, schedule priorities, co-ordinate staff deployment and staff development, and to give feedback on policies, strategies and budget. Each manager was also attached to a more senior librarian who acted as a "consultant" for advice on problem solving within the manager's operation. The work supervisor in each operation, a clerical officer, was given responsibility for line supervision of clerical staff. The manager and work supervisor were expected to work as a team rather than in a supervisor/subordinate relationship.

   This opening up of the structure facilitated the transfer to the Library of technical officers when the University closed its media centre. It was easy to integrate the equipment services operation into the Library's operations without the need to re-structure again. It also made it possible to rationalise service points and integrate the loans for all

formats of material into a single loans operation in place of the original four separate service points for general books, short loans, lecture tapes and maps.

5. Decision making was structured by type of decision and roles for decision making allocated on a participative model within each decision type. Policy decisions about broad goals, the Library's relationship with its external environment and budget were made by the senior management; planning decisions about new services and policies relating to existing services were made by the senior management with the academic planning support librarians; operational decisions about the day-to-day management of the Library, day-to-day staffing and day-to-day priorities involved all managers of operations together with academic planning support librarians and one of the senior management team. In this participative model, roles for decision making were extended to many staff and decisions became closely linked to the Library's plans, financial resources and priorities.

The changes to roles unlocked a store of under-utilised staff resources, providing both the slack and the flexibility to divert staff energies to different priorities. Without increasing the Library's salary budget, the Library re-deployed over 25 per cent of its existing staff salaries. It also achieved more fluidity in moving staff between basic operations. This was an important productivity gain as well as providing a staff infrastructure for an innovating organisation.

MAKING TRADE-OFFS

The commitment to improving productivity and/or to creating an innovating organisation inevitably involves conflict. While Library staff notionally want organisational vitality in their work environment and clients want a responsive library, neither party really wants change if it involves disruption to their routines. The potential for conflict is increased, paradoxically, when an organisation attempts to be more responsive in its services to clients by developing its internal organisation for improved productivity.

In order for a library to view its services in an end-use context, it must integrate its operations. Most libraries, however, are managed on the classical model which separates functions or departments. This organising principle works against integration. Golembiewski[21] comments on the serious problems inherent in a structure which departmentalises around like things:

"No departmental activity constitutes a flow of work, and their separate contributions defy an easy calculus of relative worth of contributions. Hence competition is likely to revolve around the reputation of power status of the several functions, as contrasted with contributions to a flow of work."

Organisation development activities, the Structural Efficiency Principle and EEO requirements all consume staff energy and time, competing in the short term with the resources needed for the maintenance of existing services. The transition period from the old order to the new is characterised by uncertainty and anxiety as staff assume new roles, adjust to new authority relationships, learn new skills and come to terms with both changed work procedures and physical work environments.

The UC Library combined its organisation development programme with the implementation of the Structural Efficiency Principle and the EEO management plan. The latter both involve employer and employee recognition of the "costs" of consultation and training and a continued commitment to meeting them. The cost is also borne by the Library's clients with the move away from staff specialisation in the interests of multi-skilling. It is inevitable that clients experience a decline in the level of service when the specialist staff member who always knew everything is replaced by the multi-skilled staff member who is still learning. It is easy for clients to see the whole exercise as de-skilling and an erosion of service.

The response of some staff and clients to this temporary downturn in efficiency can be likened to bereavement behaviour. They experience a sense of loss followed by depression, anger and then adjustment. This is the trade-off, however, for re-vitalising the organisation so that it can survive at a time of declining funding and continue to be responsive and productive. Provided that the Library consolidates, evaluates and improves the changes, and puts significant resources into training, it can achieve a new state of equilibrium for its staff and clients. The UC Library accepted that improving its productivity would be a long-term process accompanied by trial-and-error learning as well as success.

MOVING BEYOND "THEORIES-IN-USE" ABOUT THE MANAGEMENT OF LIBRARIES

There are two approaches to managing the problem environment facing libraries. The first involves measuring the Library's performance against traditional values about good library service, identifying errors or deviations from the norm, and taking corrective action to fulfil the prescribed roles more effectively. This approach is based on what Argyris[22] has described as one's "theories-in-use" or learned perspectives about an organisation. While the organisation responds to feedback, it is feedback within a "single loop" without any stimulus to challenge whether the original expectations about good service were right or wrong. According to Argyris, organisational learning occurs only if "double loop" learning exists, moving the manager beyond the learned perspectives to a re-examination of the very meaning of good service and the formulation of a new model if necessary.

If an organisation is committed to viewing its products and services in an end-use context, it must be structured in such a way that it can get close enough to its clients to hear their perceptions of good service and then respond. While all libraries claim to be in the business of satisfying the information needs of their clients, as libraries grow, they become bureaucratic and their goal becomes efficiency in operations rather than effectiveness in service to clients. In a stable environment, with continuity and growth in funding, the focus turns to inputs and throughputs rather than outputs. Achievements are estimated in terms of collection size and staff numbers. Policies are formulated with a view to reducing disruption to throughput in the number of books catalogued, the number of books loaned and the number of inquiries answered. It becomes easier to reject a client request which does not fit the policies than to revise the policies. There are always reasons why a new need cannot be met. Bureaucracy breeds "single loop" learning.

The UC Library experimented with its structure in an attempt to create an environment for "double loop" learning. It was influenced in its approach by the model of innovation and non-innovation described by Nystrom[23]. A non-innovation organisation emphasises financial control, organises using hierarchy, markets reactively, undertakes R & D defensively, manufactures unchanging products, and aims for efficiency at the highest levels by giving attention to automation and rationalisation. An innovative organisation perceives the future as uncertain, organises around a dual structure - vertical and horizontal, markets aggressively, disturbing a stable environment in order to create new opportunities, highlights R & D activities as being important, designs manufacturing operations with a view to the possibility of introducing new production methods rather than simply maintaining efficiency, and demonstrates an openness to change.

When compared with Nystrom's model, the UC Library had moved a considerable way from being a non-innovation organisation. It had reduced hierarchy, introduced a horizontal dimension to the structure, established a marketing activity with links to all other operations, trialled new services and adjusted to the uncertainty of the external environment. While it still retained a concern for financial control and rationalisation, in response to the declining budget situation, it was also investigating ways of being entrepreneurial to generate income. Its fixation on efficiency was a "theory-in-use" which persisted within operations but the new marketing orientation fostered "double loop" learning for the library as a whole.

WHITHER STRUCTURE?

The literature of innovation and organisation is extensive and much attention is given to rejecting traditional structures in favour of new forms of organisation. Govin and Slevin[24] examined the influence of structure on the relationship between top managements' entrepreneurial orientation and financial performance. Their study concluded that management style is contingent upon the organisation structure. Managers wanting to pursue entrepreneurial activities will be more successful if they develop organic structures as distinct from traditional mechanistic structures. However, if managers are conservative, organic structures will be too loosely knit to meet their requirements for efficiency and predictability. Drake[25] rejects the importance of people and their managerial styles in contributing to entrepreneurial activity. He attributes the drive behind entrepreneurial behaviour to the systems and structure used by an organisation. Stevenson and Gumpert[26] question what structure is best. They suggest that the organisation structure which fosters an entrepreneurial culture versus an administrative culture is flat with multiple informal networks in place of hierarchy, clearly defined authority and responsibility. There should be encouragement of an individual's imagination, flexibility and a willingness to accept risks.

While a library now needs to be entrepreneurial in the face of pressures to generate income, it also has to maintain continuity of service and efficiency in it operations. It needs entrepreneurial thinking but cannot afford to abandon all of its mechanistic thinking. Therefore, its structure must accommodate efficiency as well as the push for productivity and innovation. Von Cotta-Schönberg[27] has suggested that libraries need a new service structure which is fully oriented towards service, but he is unable to identify any particular type of structure. The UC Library reached the con-

clusion that structure in the sense of formal charts was no longer relevant for an organisation in which most staff played multiple roles within vertical and horizontal channels.

The fluidity which characterises a productive and innovative organisation needs a more dynamic form of expression. The UC Library developed what it called a 'service strategy' to describe the range of activities occurring throughout the Library for achieving integration and openness. The service strategy (see Appendix B) outlined a hierarchy of processes which must occur for the library to be a responsive service. As distinct from the old formal structure, the processes were not functional units or departments and they were not status or authority relationships. Staff from a range of position classifications could be involved together in a process on the basis of their skills, knowledge, competencies and interests.
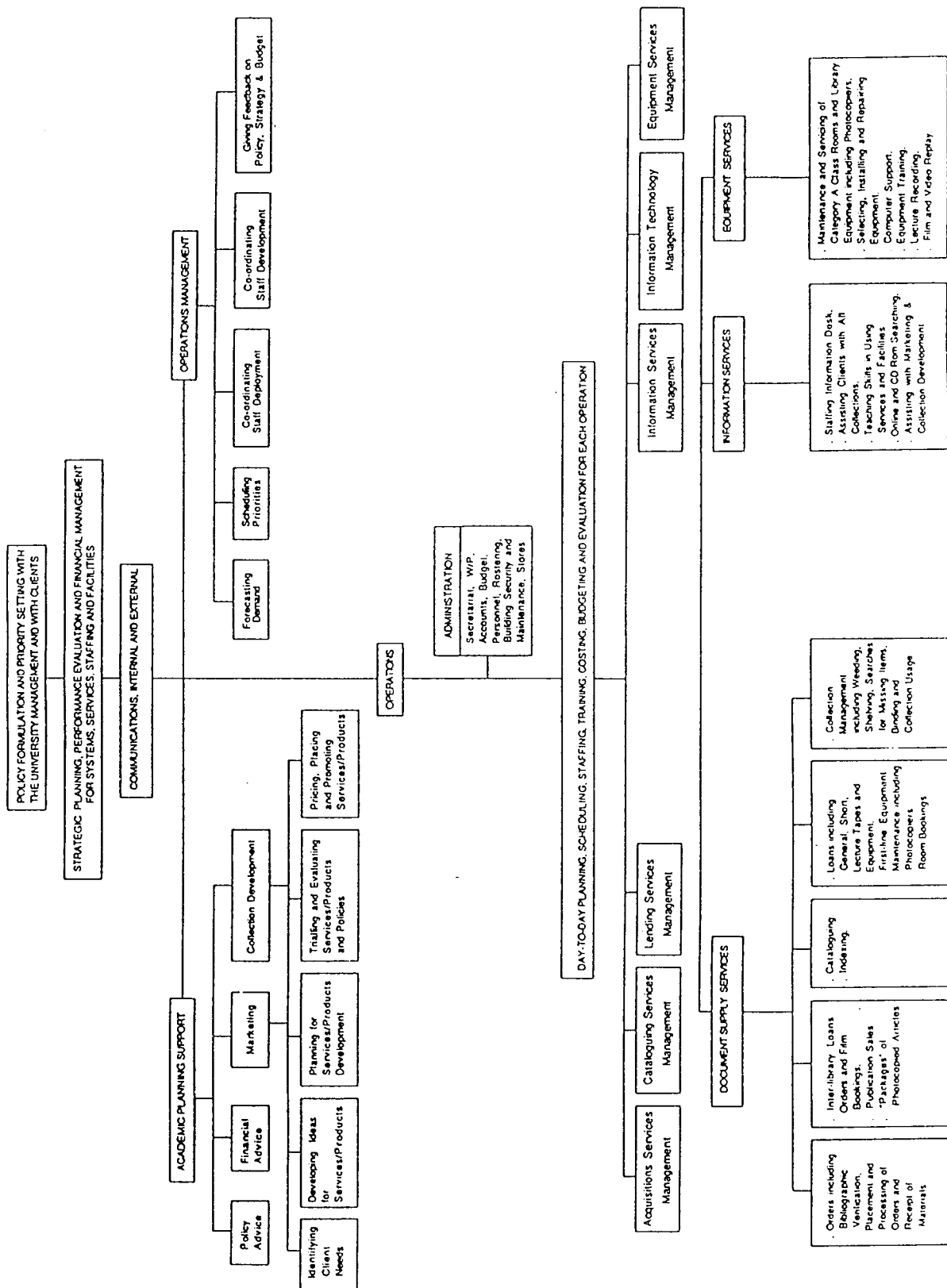
The service strategy was an attempt to keep the Library on the rails and heading down the right track. There was scope for efficiency in operations but this was set within a broader organisation context. Efficiency was balanced by the new focus on policy formulation and priority setting with the University management and with clients; strategic planning, performance evaluation and financial management, internal and external communications with clients and staff; marketing; and a co-ordinated approach to the management of day-to-day operations.

The UC Library is still consolidating the changes outlined in this paper. The next stage in its growth is the setting of performance goals. The Library is very conscious of Drucker's[28] view that the structure for an information based organisation must be "around goals that clearly state management's performance expectations for the enterprise and for each part and specialist and around organised feedback that compares results with these performance expectations so that every member can exercise self-control". This goal setting is being done by various means. An inhouse management programme has been introduced to provide a supportive learning environment for the managers of operations to formulate performance goals for operations and develop plans as input to the budget process; performance goals for individuals are being set with individuals through the staff development programme; and a participative job design process is being introduced with all staff.

CONCLUSIONS

The management of service organisations has always been a complex task. However, as funds have declined, as client expectations have changed and as the interdependencies between organisations have increased, the nature of management has become problematic. There no longer is a prescription for achieving order. The managing of chaos has been intensified by the need to improve productivity and to be innovative. This paper has documented the experiences of one library coming to terms with organisational change. Other libraries will need to assess their own situation and develop strategies appropriate to their own needs. The prospect of pursuing excellence within the context of current resourcing levels is daunting if not overwhelming. The key to survival and to sanity lies in the establishment of good professional/client relationships. By listening to clients and hearing their needs, an organisation can find the starting point for looking creatively at its problems and directing its limited resources towards manageable outcomes.

UNIVERSITY OF CANBERRA LIBRARY

SERVICE STRATEGY

- POLICY FORMULATION AND PRIORITY SETTING WITH THE UNIVERSITY MANAGEMENT AND WITH CLIENTS
- STRATEGIC PLANNING, PERFORMANCE EVALUATION AND FINANCIAL MANAGEMENT FOR SYSTEMS, SERVICES, STAFFING AND FACILITIES
- COMMUNICATIONS, INTERNAL AND EXTERNAL

OPERATIONS MANAGEMENT
- Forecasting Demand
- Scheduling Priorities
- Co-ordinating Staff Deployment
- Co-ordinating Staff Development
- Giving Feedback on Policy, Strategy & Budget

ACADEMIC PLANNING SUPPORT
- Policy Advice
- Financial Advice
- Marketing
- Collection Development
- Identifying Client Needs
- Developing Ideas for Services/Products
- Planning for Services/Products Development
- Trialing and Evaluating Services/Products and Policies
- Pricing, Placing and Promoting Services/Products

OPERATIONS

ADMINISTRATION — Secretarial, W/P, Accounts, Budget, Personnel, Rostering, Building Security and Maintenance, Stores

DAY-TO-DAY PLANNING, SCHEDULING, STAFFING, TRAINING, COSTING, BUDGETING AND EVALUATION FOR EACH OPERATION

- Acquisitions Services Management
- Cataloguing Services Management
- Lending Services Management
- Information Services Management
- Equipment Services Management

DOCUMENT SUPPLY SERVICES

- Orders including Bibliographic Verification, Placement and Processing of Orders and Receipt of Materials
- Inter-library Loans Orders and Film Bookings, Publication Sales "Packages" of Photocopied Articles
- Cataloguing Indexing.
- Loans including General, Short, Lecture Tapes and Equipment, First-line Equipment Maintenance including Photocopiers, Room Bookings
- Collection Management including Weeding, Shelving, Searches for Missing Items, Binding and Collection Usage

INFORMATION SERVICES

Information Services Management
- Staffing Information Desk.
- Assisting Clients with All Collections.
- Teaching Skills in Using Services and Facilities.
- Online and CD Rom Searching.
- Assisting with Marketing & Collection Development

EQUIPMENT SERVICES

Information Technology Management / Equipment Services Management
- Maintenance and Servicing of Category A Class Rooms and Library Equipment including Photocopiers.
- Selecting, Installing and Repairing Equipment.
- Computer Support.
- Equipment Training.
- Lecture Recording.
- Film and Video Replay.

4 May 1990

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