



THE UNIVERSITY OF QUEENSLAND

**PRENTICE CENTRE  
STRATEGIC PLAN  
1993 – 1997**

### **Members of Prentice Centre Strategic Plan Working Party**

Mr Vern Bawden	Systems Programmer
Mr Alan Coulter	Director
Mr Kevin Dalton	Chief Technical Officer
Ms Noela Meier	Senior Systems Specialist (Convenor)
Mr Mark I Williams	Senior Engineer

### **Production**

The report was authored by Noela Meier and Alan Coulter. Claire Groves (ext 54169) of the Multimedia Design Unit was responsible for design and graphics. This document was produced using QuarkXPress 3.0 on an Apple Macintosh II CX and double-sided laser printed on a Digital PrintServer 20.

### **Further Information or Comment**

Ms Noela Meier  
Senior Systems Specialist  
Prentice Centre  
The University of Queensland  
Qld 4072

Telephone 365 4281  
Fax 365 4477  
Email [n.meier@cc.uq.edu.au](mailto:n.meier@cc.uq.edu.au)

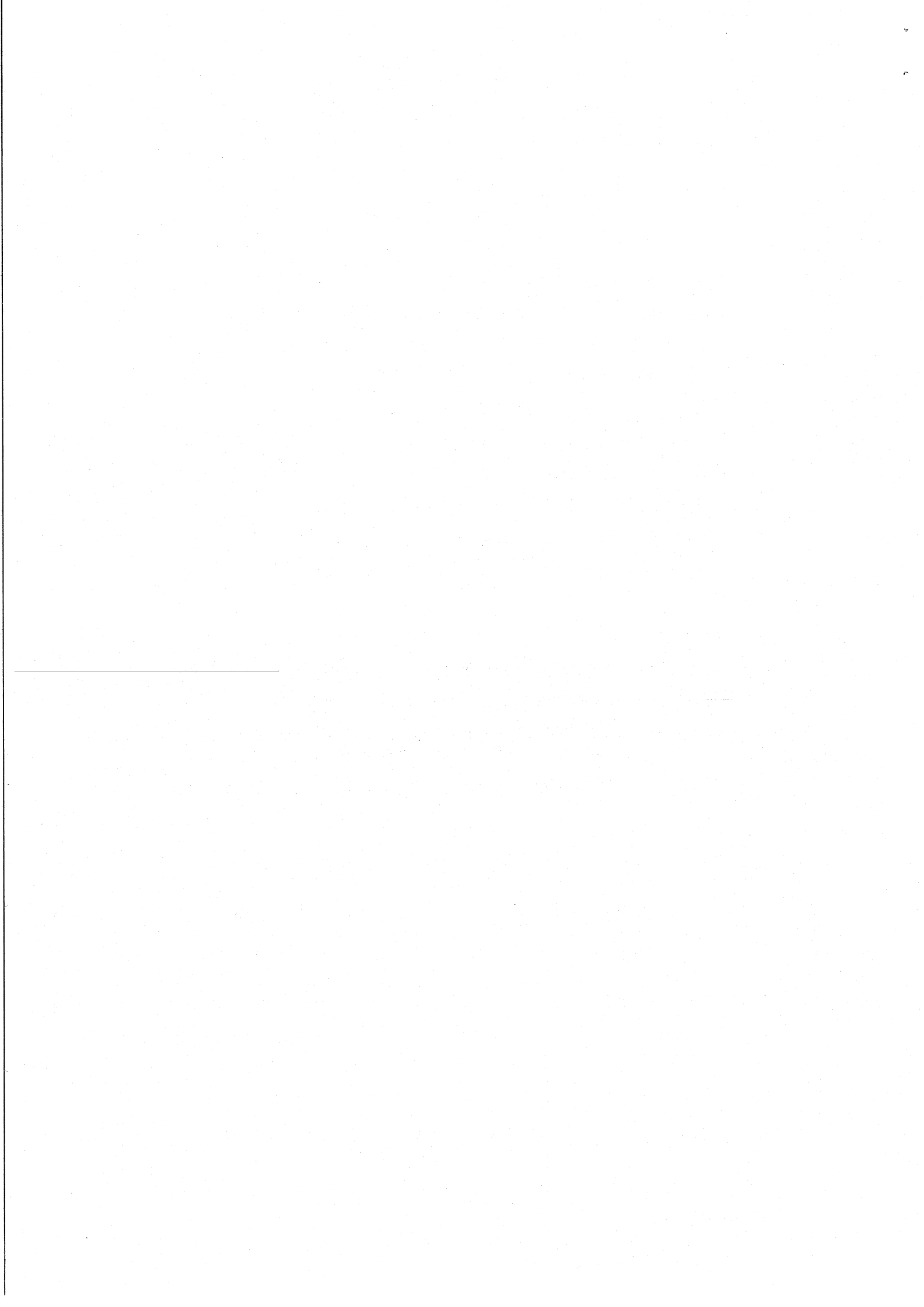
# PRENTICE CENTRE STRATEGIC PLAN 1993-1997

## CONTENTS

Mission.....	1
Impact of Information Technology on the University — the Vision 2002.....	1
Goals Summary.....	2
Goal 1 — Customer Service .....	3
Goal 2 — Technological Leadership .....	5
Goal 3 — Human Resource Management .....	6
Goal 4 — Financial Management .....	7
Goal 5 — Policy Formulation and Implementation.....	8
Goal 6 — Standards .....	9
Goal 7 — Links with the Community.....	10

### ATTACHMENTS

Attachment A: Prentice Centre Services — Relationship to University Goals .....	12
Attachment B: Prentice Centre Information Technology Network 1996 .....	14
Attachment C: Major Forces Driving Prentice Centre Services and the Effect on The University of Queensland .....	15
Prentice Centre Services .....	16



## MISSION

---

The Mission of the Prentice Centre is to support the current and future goals of The University of Queensland by providing information technology (IT) services, products, and skills based on computing, audio visual, electronic communications, and related technologies. The Prentice Centre is committed to support effectively the teaching, research, and administrative functions of the University through its attention to customer service, quality of its work, and the application of new technologies.

### **Prentice Centre and the University's Mission**

The use of IT is central to achieving the goals of the University. Attachment A relates Prentice Centre services to the five goals of the University's Mission Statement.

The achievement by the University of the "highest international standards" (including the attraction of outstanding academic staff) will depend on the nature and quality of its IT systems and services.

IT services are provided by many departments, sections and units. The Prentice Centre will continue to provide the infrastructure, specialised and shared services, and ensure institutional and international IT standards are followed. In particular, our network services (Attachment B) will continue to be of the highest standard and provide our academic and administrative staff access to the best of services available through local and global networks.

## **IMPACT OF INFORMATION TECHNOLOGY ON THE UNIVERSITY — THE VISION 2002**

---

The size, shape, and well being of The University of Queensland by the year 2002 will be influenced by its application of IT.

By that time, students entering the University will be computer literate over a large range of applications, having used IT from primary through secondary schooling. There will be an expectation that the University has advanced IT facilities. Existence of such advanced services will be an important influence on a prospective student's choice to enrol at The University of Queensland.

Rapid changes in IT will continue. Within 10 years, the competitive telecommunications and media industries will provide wide bandwidth communications to the home by cable and broadcast techniques. Multimedia will be widely used to enhance the teaching environment in many disciplines. The use of three dimensional graphics technology for the visualisation of complex data relationships will be combined with massive computational power and linked with networking facilities to provide a research environment which is far more potent than the application of each component in isolation. Smart Cards providing identity information and an individual's privileges to access resources will be in common use.

The population of south-east Queensland will increase significantly and the University should be operating in a distributed campus mode to serve satellite University cities.

The network and its associated IT services will be the strategic resource enabling students and staff to have access to knowledge, expert systems, and local as well as world-wide data bases of information. "Docking facilities" will allow students to connect their own PCs to the network and access these services.

The use of global networks, international collaborative research, and cooperation in teaching may well force closer formal associations of universities leading to multi-national universities.

Attachment C provides a brief summary of the major forces driving Prentice Centre services and the effects of these forces on The University of Queensland.

### **Customer Service**

The Prentice Centre will ensure a high level of customer satisfaction by maintaining infrastructure resources of high reliability, providing timely services of a high quality in production areas, and delivering these services in an efficient manner.

### **Technological Leadership**

The Prentice Centre will maintain a high quality and widely recognised skills base in areas compatible with the Prentice Centre mission, seek out and manage technological innovation, and provide IT leadership to The University of Queensland through consultancy and other services.

### **Human Resource Management**

The Prentice Centre will encourage personal and professional development, promote high ethical standards, and provide a good working environment for its staff. The Centre will ensure high productivity through efficient and effective management of its human resources.

### **Financial Management**

The Prentice Centre must meet its expenditures from its revenues for products and services and such other financial grants as may from time to time be made by The University of Queensland or other funding bodies acceptable to the University.

### **Policy Formulation and Implementation**

The Prentice Centre will implement the policy of The University of Queensland in the range, delivery, and pricing of services it provides. The Centre will provide technical input and business plans to policy determination and make recommendations on policy in respect of its area of responsibility.

### **Standards**

The Prentice Centre will ensure that products and services, which it provides, meet national and international technical standards to the extent that the adoption of such standards does not erode unnecessarily academic initiatives. The Prentice Centre will conform to other such relevant acts and regulations covering Privacy, Security, Occupational Health and Safety, and Financial Accountability.

### **Links with the Community**

The Prentice Centre will make its services and skills available to non-University of Queensland organisations where this activity enhances the public image of The University of Queensland, introduces skills needed by the University, supports the operation of Prentice services, or facilitates the transfer of knowledge and skills for the benefit of the nation.

## GOAL 1 — CUSTOMER SERVICE

---

The Prentice Centre will ensure a high level of customer satisfaction by maintaining infrastructure resources of high reliability, providing timely services of a high quality in production areas, and delivering these services in an efficient manner.

### Objectives

1. Project an image which reflects the importance of customer service and our strong commitment to achieving a high level of customer satisfaction.
2. Where feasible, ensure that resources we provide are available to customers when and where they are needed.
3. Ensure our services meet specified performance, reliability, and quality criteria.
4. Provide timely analysis and evaluation of customer requirements, and, if needed, implementation of solutions.
5. Provide products and services at advantageous prices.
6. Foster links with UQ departments, faculties, centres, and technology groups to improve our understanding of the needs of UQ and our ability to service those needs.
7. Monitor the changing environment of tertiary education to ensure our services and skills, and their delivery, are appropriate to meet current and foreseeable needs.
8. Strive for a co-ordinated approach to customer service between various groups within Prentice.

### Targets for 1997

- Upgrade Customer Service to provide rapid and timely response to queries and referrals in all service areas
  1. provide feedback to users on all problems within 3 days of initial query;
  2. satisfactorily resolve 90% of problems within 1 week of initial query (target: 1993).
- Maintain a database of all software available to all University departments, staff and students, including such matters as price, special conditions of use, and the degree of support (target: 1993).
- Review with the Director Administrative Information Services the requirements for high response, front-end client/server systems for user access to the administrative systems (target: 1993).
- Provide services to enable departmental requirements for outsourcing their computing facilities to be satisfied by the Centre (eg, through "Facilities Management Contracts" or tailored maintenance contracts) (target: 1993).
- Increase the level of service provided by the Technology Shop by extending trading hours to provide better service to part-time students (target: 1993).
- Ensure all staff and students have access to network resources (e.g. electronic mail, access to data bases such as the Library catalogue) (target: 1994).
- Ensure an education program is implemented to assist users migrate their applications from the IBM 3081 system before it is decommissioned (target: 1994).
- Equip all lecture theatres to provide high quality audio-visual and computing support with links to network facilities, so as to improve the quality of services available for lecture presentations (target: 1995).
- Ensure the Prentice Television Unit is recognised for the production of high quality educational programmes and for central support of programmes produced by Departments and Centres of the University (target: 1995).
- Increase transmission speeds for UQ network facilities to 10 times current rates (target: 1996).
- Extend user education and training to be consistent with the growth of the University community and acceptance of the use of IT (continuing).
- Extend the range of computing software licensed to the University site (continuing).

- Make available desktop computers, other workstations and advanced audio-visual equipment to staff and students at lowest possible purchase or rental prices through University purchase schemes (continuing).
- Increase access to computing network and audio visual services by staff and students through:
  1. University purchase scheme for staff and students;
  2. hire of equipment;
  3. well-maintained computer laboratories and sharing of expensive facilities;
  4. availability of support staff(continuing).
- Adequately document the access methods for those services available to the University via local, national and international networks (eg, supercomputers, databases of scientific information, co-operative research groups, etc) (continuing).



## GOAL 2 — TECHNOLOGICAL LEADERSHIP

---

The Prentice Centre will maintain a high quality and widely recognised skills base in areas compatible with the Prentice Centre mission, seek out and manage technological innovation, and provide technological leadership to The University of Queensland through consultancy and other services.

### Objectives

1. Create an environment which values technological leadership and the subsequent application of that expertise for the benefit of the University.
2. Recruit staff who can keep Prentice skills at the forefront of technology.
3. Ensure Prentice staff keep abreast of new developments in relevant technological areas.
4. Maintain and develop a diversity of high-level skills to adequately support our mission.
5. Foster productive links with other tertiary education institutions, government, industry, and such other bodies as will enhance our technological expertise in relevant areas.
6. Develop the required infrastructure to enable exchange of technological expertise throughout the University and to enhance the University's use of technology.
7. Encourage involvement in cooperative projects which benefit The University of Queensland.

### Targets for 1997

- Investigate the feasibility of acquiring a multiprocessor supercomputer as a supported network resource (target: 1993).
- Review with the Director Administrative Information Services the degree of cooperative development and support required for voice response systems (target: 1993).
- Complete one non-trivial project using CASE tools as a means of developing more effective, higher quality systems (target: 1993).
- Extend the University video network by fibre optic cable and broadcast techniques to provide University educational and community programmes, and to implement a public access, multi-media, University information system (target: 1994).
- Introduce digital photographic techniques and apply these techniques, together with smart card technology, to student and staff identification, including access control to resources. Apply other specialised photoinstrumentation techniques which are available for teaching and research (target: 1994).
- Extend services of the Multimedia Design Unit to support presentation technologies and new visualisation techniques to display large volumes of scientific data, and complete one user-funded project with these technologies (target: 1994).
- Extend the University video network by fibre optic cable and broadcast techniques to provide University educational and community programs, and to implement a public access, multimedia, University information system (target: 1995).
- Provide IT support requirements for a national distance education University for 30,000 to 50,000 students (target: 1996).
- Achieve universal connectivity to the network of all electronic information devices within the University (target: 1997).

## GOAL 3 — HUMAN RESOURCE MANAGEMENT

---

The Prentice Centre will encourage personal and professional development, promote high ethical standards, and provide a good working environment for its staff. The Centre will ensure high productivity through efficient and effective management of its human resources.

### Objectives

1. Create an environment which will attract and subsequently retain staff of the highest calibre to all levels of the organisation and maximise their contribution within the organisation.
2. Ensure that the range and mixture of staff skills, expertise, and qualifications effectively support our mission.
3. Implement and maintain fair and equitable arrangements for the regular review and effective assessment of staff performance.
4. Encourage membership in professional organisations and support staff activity within those organisations.
5. Provide opportunities for personal and professional development of staff aimed at improving the organisation's overall effectiveness and efficiency.
6. Ensure the provision of an appropriate physical environment and its maintenance to functional and safety standards.

### Targets for 1997

- Implement procedures for annual performance appraisal for all staff (target: 1993).
- Develop for each staff member a training/education program that will ensure the appropriate skills and experience to meet our goals (continuing).
- Ensure specialist staff resources are available to provide support for new Information Technologies through a continuing staff developing program (continuing).
- Audit Prentice Centre systems and procedures for compliance with legislation and University policy relating to sexual harassment, discrimination, and freedom from information; inform all staff of their obligations and rights (continuing).
- Establish effective internal communications within the Prentice Centre to ensure staff are involved in workplace issues and the development of the Centre, and have adequate knowledge of projects in progress (continuing).
- Give special attention to increasing the proportion of women in professional positions at the Prentice Centre (continuing).

## **GOAL 4 — FINANCIAL MANAGEMENT**

---

The Prentice Centre must meet its expenditures from its revenues for products and services and such other financial grants as may from time to time be made by The University of Queensland or other funding bodies acceptable to the University.

### **Objectives**

1. Maintain accurate and meaningful financial information for Prentice Centre, clients, and The University of Queensland.
2. Ensure the financial information is analysed with a view to continually improving operational efficiency and effectiveness.
3. Adhere to recommendations of Business Services at The University of Queensland.

### **Targets for 1997**

- Prepare accurate and complete financial statements for each month within one week of the "end-of-month" (target: 1993).
- Ensure adjustments required after the end-of-month period are less than 1% of the monthly expenditure total (target: 1993).
- Monitor section budgets monthly to ensure variances are within 20% of the monthly budget and within 5% of the annual budget (target: 1993).
- Ensure the Academy Project Control system is fully operational to enable the production of more usable financial information (target: 1993).
- Review the business planning process to provide a means of quickly reviewing the costs and benefits of existing services as well as future services (target: 1994).
- Prepare monthly rolling financial plans covering the next three years and providing automatic update of estimates as the actual results are recorded (target: 1994).

## **GOAL 5 — POLICY FORMULATION AND IMPLEMENTATION**

---

The Prentice Centre will implement the policy of The University of Queensland in the range, delivery, and pricing of services it provides. The Centre will provide technical input and business plans to policy determination and make recommendations on policy in respect of its area of responsibility.

### **Objectives**

1. Ensure up-to-date knowledge of UQ policy and actively facilitate effective implementation of UQ policy.
2. Where appropriate and possible, participate in the University's policy-making bodies.
3. Ensure our recommendations are well-founded and consistent.
4. Foster and maintain appropriate channels for presenting Prentice Centre policy recommendations to the University.
5. Ensure internal consistency of Prentice Centre activities with UQ policy.
6. Ensure our recommendations have a major impact and potentially high adoption rate within The University of Queensland community.

### **Targets for 1997**

- Review policy on physical and software security of the network and University computers connected to it, and complete realistic security penetration tests (target: 1993).
- Review policy on access to, and conditions of use, for computing and network facilities, including security and privacy issues (target: 1993).
- Establish policies on appropriate means of funding services of the Prentice Centre to be consistent with the University's general policies of funding academic services (target: 1993).
- Provide University planning bodies with models of the University's information structure to show the likely influence of new technological advances on the mission and objectives of the University (continuing).

## **GOAL 6 — STANDARDS**

---

The Prentice Centre will ensure that products and services, which it provides, meet national and international technical standards to the extent that the adoption of such standards does not erode unnecessarily academic initiatives. The Prentice Centre will conform to other such relevant acts and regulations covering Privacy, Security, Occupational Health and Safety, and Financial Accountability.

### **Objectives**

1. Maintain awareness of current standards and implement those considered appropriate to the University.
2. Where possible and appropriate, interact with, and/or partake in, standards committees.
3. Make recommendations on standards which are potentially beneficial to UQ departments, faculties, centres, and groups.
4. Enforce compliance with relevant acts and regulations.
5. Foster links with other organisations which are pursuing similar standards-related objectives.

### **Targets for 1997**

- Review operation of the Prentice Centre's Occupational Health and Safety Committee with the aim of improving its effectiveness (target: 1993).
- Establish procedures to implement standards for directory, security and authentication procedures to provide reliable and secure network performance (target: 1994).
- Review and report on non-compliance with those standards required to meet legislative requirements or those essential to the effectiveness of the University's IT system (target: 1994).
- Introduce methodologies and procedures to gain quality assurance certification in accordance with AS3563 (target: 1995).

## **GOAL 7 — LINKS WITH THE COMMUNITY**

---

The Prentice Centre will make its services and skills available to non-University of Queensland organisations where this activity enhances the public image of The University of Queensland, introduces skills needed by the University, supports the operation of Prentice services, or facilitates the transfer of knowledge and skills for the benefit of the nation.

### **Objectives**

1. Ensure potential benefits to The University of Queensland are acceptable before undertaking non-University work.
2. Ensure services provided to the University are not degraded through the provision of services and skills to non-University organisations.
3. Develop mechanisms for effectively gaining skills and expertise needed by The University of Queensland.

### **Targets for 1997**

- Establish the Prentice Centre Graduate Computer Club as a means of contributing to graduate development and support for the Prentice Centre; provide services to members where facilities are available without degrading the level of support provided to meet the University's needs (target: 1993).
- Set up a committee with other University of Queensland academic service centres and disciplines to determine conditions necessary for the University to benefit from links with the community; ensure standard approaches are adopted throughout the group (target: 1993).
- Extend services of the Prentice Technology Shop to all persons with appropriate University links (target: 1993).
- Increase the number of external firms qualifying as Affiliate members of Australian Academic Research Network (AARNet) to provide closer association of business and government enterprises with the University (continuing).

## **ATTACHMENTS**

**ATTACHMENT A**  
**PRENTICE CENTRE SERVICES — RELATIONSHIP TO UNIVERSITY GOALS**

Prentice Services & Facilities	UQ Goal 1. University Standing					
	1.1 Leading University	1.2/1.3 Equitable Access High Standard	1.4 More Higher Degree Students	1.5 Continuing Professional Education	1.6 External Links Commerce & Industry	1.7 Links with International Universities
Networks	•	•	•	•	•	•
QUESTnet / AARNet Management	•			•	•	•
PC/Workstation Repair & Hardware Maintenance						
PC/Workstation Support Group	•					
IT Education & Training Courses	•		•	•	•	
Applications Design & Devel	•				•	
Technology Shop	•	•	•			
Lecture Theatre Maintenance	•	•	•			
Audio/Visual Support Services	•	•	•	•		
Multimedia Services	•		•	•	•	
Computational Services	•				•	
Computer Laboratories	•		•			
Facilities Management						
Expert Consulting	•				•	
Customer Assistance					•	
Archive & Preservation Services	•			•		
Scanning & Image Processing	•					
Typesetting & Publication	•					
Photographic Services	•				•	
TV Production & Studios	•				•	
Community Television	•					
Contract & Project Management					•	

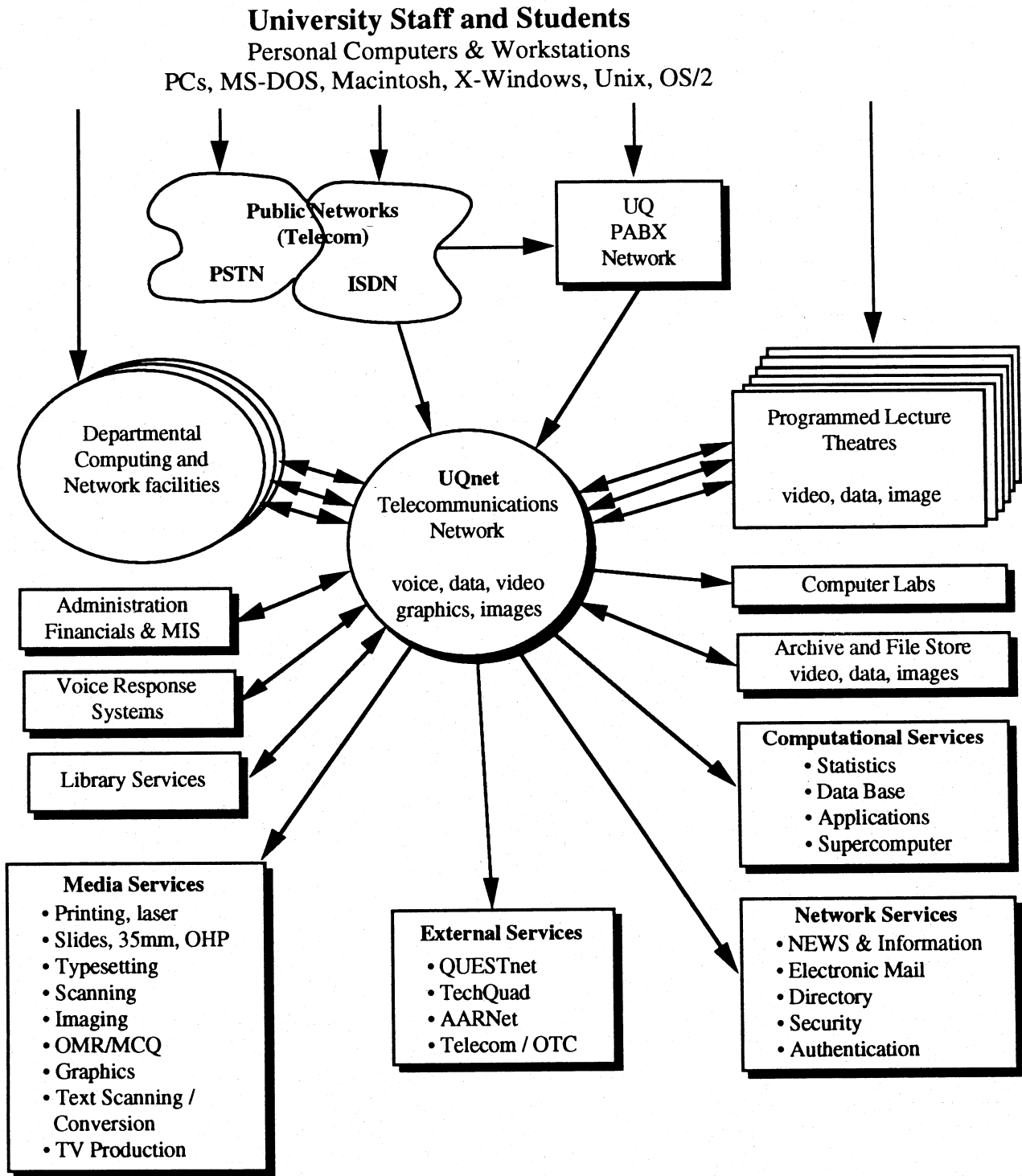
Prentice Services & Facilities	UQ Goal 4. Research Excellence					
	4.1 /4.3 Excellence in Research	4.2 National Needs	4.4 Continuing Professional Education	4.5 Evaluate Research Performance	4.6 Protect Intellectual Property	4.7 Transfer & Exploit Discoveries
Network Services	•	•	•		•	•
QUESTnet / AARNet Management	•	•	•		•	•
PC/Workstation Repair & Hardware Maintenance						
PC/Workstation Support						
IT Education & Training Courses	•	•	•			•
Applications Design & Devel	•	•				•
Technology Shop	•					
Lecture Theatre & Conf Services		•	•			•
Audio/Visual Support Services		•	•			•
Multimedia Services	•	•	•			•
Computational Services	•	•				•
Computer Laboratories						
Facilities Management	•					
Expert Consulting	•	•	•			•
Customer Assistance	•					
Archive & Preservation Services	•	•			•	
Scanning & Image Processing	•					•
Typesetting & Publication	•	•	•			•
Photographic Services	•					•
TV Production & Studios	•		•			•
Community Television						
Contract & Project Management						•



UQ Goal 2. Teaching				UQ Goal 3. Quality of Service				
2.1 Attract Most Able Students	2.2 Minority & Disadvantaged Groups	2.3 / 2.4 Increased Opportunities for Females	2.5 Credit for Work in other Institutions	3.1 / 3.7 Superior Performance, High Quality	3.2 Employ Appropriate Technology	3.3 / 3.4 Competent Academics, Well Trained	3.5 Academic Programs Up-to-Date	3.6 Support for Students
•	•		•	•	•	•	•	•
				•	•			•
				•	•			•
•	•			•	•	•		•
•	•			•	•			•
•	•			•	•	•		•
•	•			•	•	•		•
•	•			•	•	•		•
•	•			•	•	•		•
				•	•			•
					•	•		•
•	•			•	•			•
•	•			•	•	•		•
•	•			•	•	•		•
•	•			•	•	•		•
					•			•

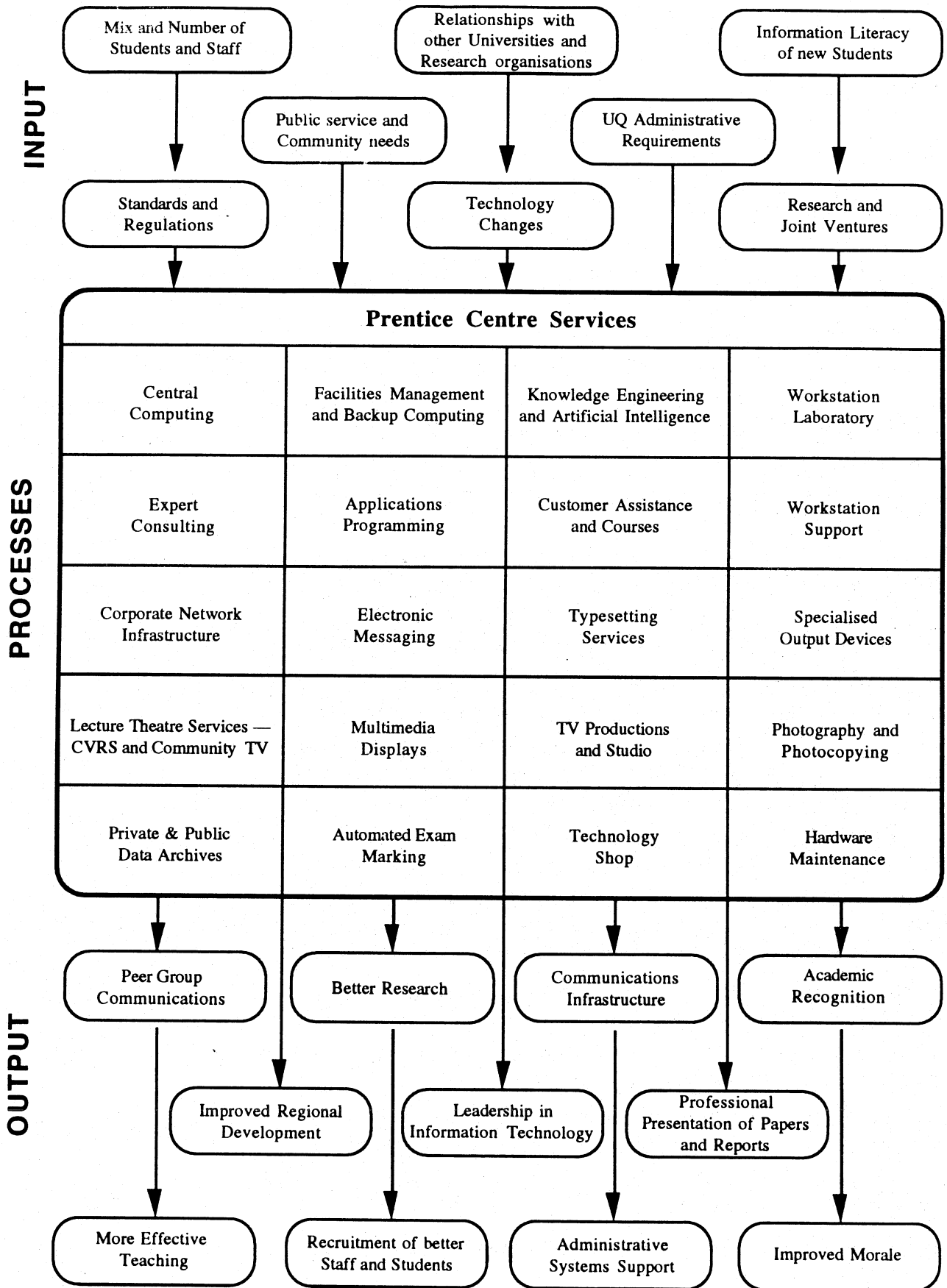
UQ Goal 5. Resource Management						
5.1 High Calibre Staff	5.2 Equal Opportunity	5.3 / 5.4 Staff Development & Appraisal	5.5 Administrative Support Systems	5.6 Physical Environment	5.7 Maximise External Income	5.8 Strategic Planning
•		•	•		•	
•					•	
•						
•						
•		•			•	
•					•	
•				•	•	
•					•	
•						
•						
•						
•			•		•	
•					•	
•						
•						
•					•	
•					•	
•					•	
•			•		•	

**PRENTICE CENTRE INFORMATION TECHNOLOGY NETWORK 1997**



ATTACHMENT C

MAJOR FORCES DRIVING PRENTICE CENTRE SERVICES AND  
THE EFFECT ON THE UNIVERSITY OF QUEENSLAND



## ATTACHMENT C

### PRENTICE CENTRE SERVICES

- Central Computing** — The Prentice Centre provides mainframe computing systems for University Departments. These give a range of environments, and many software packages.
- Backup Computing** — The Prentice Centre offers systems which can be used by departments in case of failure of their computer. The Prentice Centre VAX is the backup system for the Administration VAX.
- Facilities Management** — Experienced system managers will maintain and run computer systems for Departments, allowing the University to better utilise staff expertise.
- PC Laboratory** — A quantity of the most popular Personal Computers are provided for University use.
- Expert Consulting** — The Human Resources of the Prentice Centre offer many years of experience in a wide range of computing disciplines. Our staff are available to assist University Departments with computing techniques and initiatives.
- Applications Programming** — Teams of programmers from the Prentice Centre can be contracted to analyse and implement computing applications.
- Client Assistance** — When clients have specific questions on usage of any of the Prentice Centre's software or systems, they can receive assistance from the Help Desk. Workstation support is also available.
- Client Courses** — Clients can make the most effective use of the Prentice Centre's facilities by attending a courses. These cover the range of software available from Prentice facilities.
- Corporate Network Infrastructure** — Communications is expected as one of the services supplied to University departments. The Prentice Centre continually examines the technology available, and implements the most effective methods for the University.
- Electronic Messaging** — This covers a range of applications such as Electronic Mail, Facsimile, and News services. These services allow fast and effective communications with other institutions.
- Typesetting Services** — University departments may obtain professional typesetting services from the Prentice Centre. Books, manuscripts, and conference proceedings can be produced to high standards.
- Specialised Output Devices** — The Prentice Centre provides output devices for use by the University community. Some devices are either too specialised or too expensive to justify more than one on campus.
- Lecture Theatre Services** — Centralised video services to lecture theatres provide efficient usage of equipment. Interactive services to locations remote from the lecturer, extend the number of locations that can offer services to students. University wide Cable TV will be an essential part of this.
- Multimedia Displays** — A special unit at the Prentice Centre is working to promote this methodology towards wider use throughout the University. Advice and preparation services are available.
- TV Production & Studio** — The Prentice Centre maintains the ability to create entire TV productions for the University. With our own studio, cameras and production equipment, we can create presentations which equal those of many external bodies. The studio is also available for use by University departments.
- Photography & Photocopying** — A variety of photographic services is available to the University community. High quality photocopying is also offered.
- Private & Public Data Archives** — The Prentice Centre maintains an archival store of private and public domain data. Some of this data is provided for use by other institutions.
- OMR Marking Services** — The Prentice Centre can process examinations answered on Optical Mark Reader sheets. The answer sheets are assessed, and reports on the results are returned to the lecturer.
- Technology Shop** — sells workstations and personal computers to the University community. Software packages and other related products are also available, including consulting.
- Hardware Maintenance** — The Prentice Centre will repair or maintain all Personal Computers, Terminals, and video equipment on campus.



