THE FIRST YEARS 1996-2004:

PLANNING THE NEW DEPARTMENT

In 1994 the Information Technology revolution was poised to fundamentally and dramatically change the world's economy. Making this change happen was going to require a new workforce of change agents, people with a mix of skills from different academic disciplines. It would also require a set of specialists who could forge the way forward by developing new theories and testing those theories, in order to progress in the best direction.

University of Melbourne Vice-Chancellor David Penington wanted the University to play an important role in this revolution, and particularly in educating the people who would effect the change. However, he was undecided about the best way to go about it. He turned to Peter Weill, then an Associate Professor at Melbourne Business School, for help. Peter Weill recalled receiving the call from the Vice-Chancellor that would eventually lead to a new university department.

"He was on the board of the Business School and so was I, so we knew each other. You either liked him or you didn't – he was very binary. I liked him. He had this ability to cut through all the vagaries. He had a great interest in the future of Information Systems in the University. He called me up one day and said, 'Be in my office at 9am tomorrow."

Weill appeared the next morning, unsure exactly what the Vice-Chancellor wanted from him. It turned out he wanted a fresh answer to the question of what to do about Information Systems.

Senior University academics had previously discussed the growing need for a course that addressed the emerging field of Information Systems. Up to that time, the new discipline had been covered in a piecemeal manner in a range of departments scattered across the University.

An academic committee had looked at the broad question of how to handle the growing field of Information Systems in the University structure, but the Vice- Chancellor was not satisfied with the answers it provided. Should Information Systems (IS) be taught as part of an existing department? Should the University offer a separate degree in it? Which faculty should offer the degree? In Penington's mind, it was essential to find the right answers to these questions if the University wanted to be a serious participant in this emerging field.

Two faculties, Economics and Commerce and Engineering, had expressed an interest in housing any new Department of Information Systems that might be formed. Penington had reservations about both possibilities.

"That was argued about extensively during that period either side of 1994, the issue as to if there was going to be a new Department, where it should be based. I was very convinced with the argument that there was a worthwhile discipline in IS which was broader than Computer Science. But it was not in my view a narrow professional subset of Management of the kind that the Faculty of Economics saw it becoming," he said.

Choosing the right home, and shaping what the University should teach in the new field wasn't going to be easy for other reasons. The entire IT industry was ready to take off on a fast growth trajectory. Determining how to prepare students properly to enter this emerging field that cut across different disciplines presented a challenge in cross-disciplinary thinking and planning.

Weill said, "The [previous] committee hadn't predetermined there should be a degree. It ground on with lots of debate and white papers. Everybody wanted it [any new IS department] because it was a hot new topic – people were very interested in it. My perception was that there was some difficulty in seeing the University's role – that is, in looking beyond one's own faculty. Penington got very frustrated."

When Weill sat down in the VC's office, Penington gave him a request he couldn't refuse.

"Penington said to me, 'In six weeks, I want you to write a proposal for a degree in Information Systems. Ignore what faculty it should be in. Ignore what the committee has talked about to date. Just take a blank piece of paper," Weill said.

At the time, Weill was one of only two people in the University with expertise in Information Systems. He had completed a PhD in the field at New York University. Penington saw him as that logical choice to lead a team commissioned to determine how the University should approach the new Information Systems field.

The task was a considerable one, and Weill needed people with other areas of expertise to help answer Penington's high level question. The two most likely fields that any student in IS might also want to study were Management and Computer Science. With her background in Computer Science, Associate Professor Liz Sonenberg filled an important gap on the team. When Stephen Deery, Professor and Head of the Department of Management and Industrial Relations, also came on board, the team was complete. Everything was ready to go.

The first challenge was to discover how other universities around the world were addressing the emerging field of Information Systems. The team looked at courses in about a dozen other universities, including MIT, New York University, Carnegie-Mellon University, Stanford University, University of Auckland, University of Warwick, University of Arizona, Southern Methodist University and the City Polytechnic of Hong Kong.

There was no one standard structure for IS across the universities. Some institutions had IS departments, others gave IS its own faculty. In one university an IS department might be part of the Faculty of Science, in another it might be housed in the Engineering or Commerce faculties. Some courses were very managementoriented, others were highly technical.

Having reviewed how other universities taught IS, the planning team turned their attention to what kinds of specific classes the University of Melbourne should offer to students in any new IS course.

The key question the group tried to answer was simply, "What is the essence of Information Systems?" The answer to this would form the core of the University of Melbourne's own IS course. The three academics grappled with the question in part by considering what sort of skills a student qualified in IS might need in the workforce.

"We wanted students to understand how to go into an organisation and talk to people, to understand what the organisational processes were and to design them in an optimal way using the technology. In a sense, they were change agents," Peter Weill said.

He felt IS graduates should probably not be pure technologists, or pure managers, but rather something in between.

"They are people who live in the DMZ [De-Militarised Zone] between the hard core technologists and the people who run the business," he said.

Weill's vision of an IS graduate was someone who could take on a translation role, as well as a coach and facilitation role. Most importantly, the graduate would be capable of changing the way an organization functioned.

To become an effective change agent, graduates would need a strong combination of skills and knowledge across disciplines.Weill worked through the kinds of challenges they might face in the workforce.

"They had to understand what a communications network was," he said. "They probably had to normalise a database and write some code and understand five or six computer languages. They had to work with people who were heavy duty coders and translate the needs for them."

Yet, these technical skills would not be enough. To exist in the change agent DMZ, they had to be able to communicate with the people who ran a business – executives who might have minimal technical knowledge. In short, they had to be skilled in what engineers might describe as the softer side of management.

"They had to understand change management issues, the way people worked, the incentives, the intrinsic motivations people have. They had to understand the different economics of different types of organisations,"Weill observed.

While all three academics agreed on the broad vision of what a graduate in IS would need in terms of skills, they each brought a different perspective as to how heavily tilted that balance of skills should be in each area of IS. Weill recalled some lively philosophical debates among the team members during the two-hour meetings held regularly in his office.

"We all came with our own baggage. Liz Sonenberg wanted technology – more programming, databases, and communications networks. Steve Deery wanted more management – learning the skills to be a manager – and economics and Industrial Relations. I wanted more skills on interpreting need and building the stuff – things like systems analysis and design, organisational processes, implementation of systems," he said.

One of the dilemmas in shaping the new Department was whether to supply some of these core subjects from other departments or to teach them as brand new subjects. There was a strong argument against re-inventing the wheel. After all, if a core maths subject could be taught out of the Maths Department based on an existing class, why not simply use that? Was there any real need to invent an entirely new subject and bring in a new teacher of that subject?

Another argument used by some within the University community was that other departments would be paid to teach that course as a "service course". This service teaching would provide funding for those departments. Other academic departments had been teaching core subjects in their fields for years: they knew how to do it, they had a proven track record but Weill disagreed.

"I had a very strong view that you had to do this from the ground up,"Weill said. "For example, if you took an engineering mathematics course, it would be the wrong course for Information Systems. It would be way too technical and mathematical. I'm an engineer so I remembered what it was like. The numerical analysis that you need for computing is very different than what you need for engineering. It's all about whole number mathematics; it's a binary system."

The team rejected the model of farming out core subjects to different departments in the University. Instead, they thrashed out a healthy compromise across traditional fields to arrive at a core set of subjects for a three-year undergraduate degree called a Bachelor of Information Systems, with the option of fourth year for honours. They planned and designed 24 new subjects, 16 of which were compulsory core subjects.

"These new subjects included a unique and rigorous mathematical subject designed specifically for IS people," Weill said.

Sonenberg, Deery and Weill each took responsibility for planning out the detailed subject outlines for eight of these core courses, according to their own areas of expertise. Where subjects were drawn from other core disciplines, the lens of Information Systems shaped their specific design.

"The essence was understanding how IS was used in organisations, and then identifying the requirements of systems for the use in organisations, and then the systems analysis and design process. IS is about getting value from computer systems in organisations. That could mean the Red Cross to Government to Kraft Foods."

The course focussed on business processes. "I think it was the first business processes course taught in Melbourne University," he said.
On 4 June 1994, the Weill Committee recommended the creation of a new undergraduate degree in Information Systems, to be taught from a newly formed Department of the same name. The Committee's report said "The focus of the program is to prepare students to be part of teams that imagine, specify, design, justify, develop, implement, manage and use information systems in an organisational context."

It proposed five major "themes": information systems, organisations, information technology, analytic skills and personal competency. Once students had covered these themes through the core course, they could specialise in one of three streams: Organisations, Information Technology or Custom. The "Custom" stream allowed students to design their own specialisation subject to approval by the Department.

Weill took his recommendations up to the Vice-Chancellor's office and waited somewhat anxiously for a response to the report. David Penington was pleased with the work. He asked Weill's opinion about which faculty should be home to the new Department – a contentious issue. Weill answered he thought it should go to the Economics and Commerce Faculty. Penington thanked him, then mulled over the issues before making a decision the following day.

Professor Boris Schedvin, Deputy Vice-Chancellor (Academic) from 1991-2000, recalled that Penington felt placing a new department in Engineering "would have been seen as far too much oriented toward technology and hardware applications."

"There was also a perception ... that Computer Science had been in a particular theoretical mode of training," Schedvin said. This was not the image suited to the new Department."

The Faculty of Economics and Commerce vied with the Faculty of Engineering over who would own the new Department of Information Systems.

"When we couldn't get agreement between those two warring faculties as to which was to own the new development if it were to go ahead, it just seemed to be that the way to solve that problem was to get agreement in principle that we wished to establish a new department to address the discipline of IS. It would draw on skills, knowledge and existing activities in Computer Science, particularly software project management, and would draw on the management qualities that Economics was keen to pursue. [It] could offer units in programs for either Engineering or Economics and Commerce in their undergrad programs but that it needed to have a life of its own," Penington said.

Penington also felt the Faculty of Economics and Commerce would not be the right home. He resolved to place the new Department in the Faculty of Science, headed by Dean Bruce McKellar from Physics, for at least a two-year period.

"I saw [it] as neutral ground – away from the clutches of both the engineers and the economists and accountants," he said.

He recalled the Science Faculty had a cautious attitude toward taking on the new Department, but they agreed to the two-year trial period, subject to review. The Faculty had missed out on some high-growth departments in earlier years and didn't want to lose another good opportunity.

"When I first became VC, the Science Faculty had very mixed attitudes toward Computer Science. Was it really a science or not? That was partly why Computer Science was happy to move into the Faculty of Engineering.

"We moved the Department of Psychology out of the Arts Faculty because it was not getting the sort of research support it needed. I suggested that it move into the Faculty of Science – that was around 1990 from memory. The Faculty was very aloof over that; it wasn't 'real' science, and so on. So we got agreement to move it into Medicine and it has never looked back. It has been very happy in Medicine. And Science very deeply regretted that decision because in fact Psychology has moved very well and it has a very good research record.

"So, having missed that opportunity and seen Medicine snap it up, the Faculty of Science were more open to the proposal that they take on the Department of Information Systems," he said.

It was a choice that would be proven over time to be good for both the faculty and the fledgling Department. The choice gave a much-needed shot in the arm to the faculty, which had been suffering declining student interest in many of its departments during the 1990s. Although it was still early days, the department was poised to become the faculty's new shining star.

THE DEPARTMENT OPENS ITS DOORS

The University scored a coup when it headhunted Mike Vitale as the first head of the new Department. An American by birth, Dr Michael Vitale was a Fellow at Ernst & Young Centre for Business Innovation in Boston and had previously been an Associate Professor of Business Administration at Harvard Business School. He had written more than 50 case studies on the use of information technology in organisations. Vitale was seen to be a visionary, not a bureaucrat, and a great teacher.

David Penington thought that Vitale's combination of academic background and work experience across fields was important for the new Department.

"I was attracted to him because of his breadth of experience. We wanted a person who was experienced in the discipline from both the technical and the management view point, was not just a computer scientist and not just a management theorist or consultant," he said.

"Establishing a new discipline within the uni required having a credible leadership and it needed to be credible across the span of things that the new discipline represented. He offered a particularly unique way to do that."

Vitale became the Foundation Professor of Information Systems and the first head of the new Department. Boris Schedvin played an important role in recruiting both Vitale, and Iain Morrison as deputy head. As Acting Vice-Chancellor on the selection committee for the position, he knew it would be difficult to fill the chair with the right person.

"Initially it was only for one position. But in the process of considering short-listed applicants it was decided that the Department could benefit by having a second professor," Schedvin said. Iain Morrison became a professor in the Department. He worked half time in the new Department, as Deputy Head, and the rest of the time he continued his role as Assistant Vice-Chancellor (IT).

Penington felt Morrison's strong background in the development of the University's own internal information systems would be a good asset. Penington had worked previously with him, and the VC respected his abilities.

"A very hardworking, conscientious person who was very heavily involved in the theoretical development of management information systems for universities, [Morrison] had worked with me quite extensively when I was VC in data collection and development of systems within the University and its own administrative functions," Penington said.

Vitale knew that starting a new university department was a rare opportunity, but he was unprepared for exactly how rare.

When he arrived at the University, he went to the administration office and asked the assistant for the paperwork he needed to fill out to open the new Department. "She came back in five minutes saying, 'I'm having a little trouble locating it.Why don't you have a seat?'

"Then 15 minutes later, she came back and said, 'I really can't find it. Come back in the afternoon."

"I came back later and she said, 'Look, there isn't any paperwork."

"I thought I'd just find the last time someone started a department and talk to them to get some tips. But it had been so long that nobody could remember the last time a department was started. It just shows that most people would never have a chance to be in a new department let alone start one. It's a unique thing," he said.

The University was a late entry into the IS field. Most Australian universities which were going to establish IS departments or areas of study by the turn of the millennium had already done so by the time the University of Melbourne's new Department opened. Only the University of Sydney would open a new department of IS after Melbourne, according to Vitale. Vitale and his team had to rush to catch up with established courses elsewhere.

Penington offered some explanations as to why the University was late off the starting block.

"I think it is a valid comment that we were slow to identify it as a discipline in its own right, although aspects of it were being covered by both Computer Science and Economics and Commerce prior to the establishment of the Department. It was a growing area of applied study and it would be perhaps not surprising that the newer institutions that are more committed in applied education would have seen it as a growth area before the older established universities that were not looking for applied disciplines," Penington said.

Penington had a strong vision for the young department, and that vision included a balance between the Department's activities in the longer term: he wanted to propel the Department forward in research as well as teaching.

"If we were coming into the business late, we didn't just want to be a teaching department. There were plenty of others around Australia that were doing that. It should be a valid academic department that could hold up its head in research as well as in teaching so that it would be teaching informed by research in a fast changing field," he said.

Vitale arrived in Australia from Boston in April 1995. By July the same year, three students had enrolled in their new department, in part as a result of newspaper advertising announcing the new course. Since the Department was not able to offer classes so soon after being formed, the students started classes in other departments, particularly Computer Science and Software Engineering, under the guidance of DIS's early skeleton staff. There was a list of recommended subjects.

One of these first three students was Darren Skidmore, who later joined the Department's academic staff. He recalled, "They didn't actually have any classes in the Department, but they still managed to have a timetable clash."

It was such early days that the Department was being run out of two small rooms.

"We had these two little rooms on Level 2, that were loaned to us by the Computer Science Department," the department's first manager, Jen Sullivan said.

The team set about hiring the core DIS research, teaching and administration staff, from outside the university and from existing departments across the campus.

The first staff member hired by the new Department head was Jen Sullivan. David Kemp and Tobias Ruighaver, from Computer Science and Software Engineering, Mary Sandow-Quirk from Education and Peter Seddon, from Economics and Commerce, all joined DIS at the end of 1995 or early in 1996. Vitale recruited Cathy Urquhart and Jacob Cybulski. Marg Ross also came on board as Administrative Assistant. Her first big job was working on Discovery Day for the Department – an annual university open day that was very important in showcasing the Departments' courses to potential new students.

As the growing team began refining the planned curriculum in anticipation of the first classes being offered in early 1996, there were plenty of practical problems to solve. Moving up from its humble first offices, the Department took over a floor of the 207 Bouverie Street building in Carlton. This sounded more promising than it turned out to be, for the place was completely empty.

"You could stand in one side of the building and look across to the other side of the building and there was absolutely nothing," Vitale recalled.

"We were building the labs and the classrooms right up until the moment the students came in. We finished painting on Saturday and students came on Monday. It was really that close."

Deputy Head of the Department Iain Morrison had cleverly suggested building a wall down the centre of the empty floor. Vitale recalled Morrison telling him; "Look, we'll build to one side of this wall and that will be enough for us to get started. Once the students are here, we'll build on the other side of the wall. Then we'll tear down the wall and have the whole floor."

Vitale was impressed with the plan, and gave the green light. "If we'd tried to build the whole floor at once we would never have gotten finished by the time the students arrived," he said.

In early 1996, the Department of Information Systems offered its inaugural academic lectures to its first incoming undergraduate class of about 47 students (first semester).

In the first few years, the realities of having to teach classes to a first intake of new students sidelined some of the early research ambitions of the Department. "We were trying to do both – build a research Department and a teaching Department," Vitale explained.

To vamp up the new Department's research capabilities, Vitale brought in two research fellows on two year contracts. Sandy Staples came from Canada, where he was finishing his PhD at The University of Western Ontario's (UWO) Richard Ivey School of Business. Ravi Patnayakuni joined DIS from Southern Illinois University at Carbondale, where he had been working on his PhD.

"They were big successes," Vitale said, and they pushed the early research agenda of the new Department.

However, the pressure of day to day teaching took precedence over the much longer time frames of research, according to Vitale. So he decided to focus most of the staff's energy on building up both the numbers and the quality of students at first, while developing strength in research later.

Vitale's management style encouraged participation and debate. It was a strategy he felt was essential to build up the new Department into a solid team.

"We had a very good close-knit democratic group of faculty, and we made a lot of decisions by consensus," Vitale said. "We had weekly staff meetings – this was unheard of – some departments don't have staff meetings at all, and not every week. We were much more democratic than that."

The Department faculty members had lively debates over how to build the curriculum, such as what programming languages to teach the incoming students.

In the teaching arena, Vitale encouraged the DIS academic team to take risks and try new things to see what worked and what didn't.

"We tried lots of experiments. For example, I decided we would try having a class that met at eight in the morning. I'm always here by 8am anyway, so I said I'd teach it," Vitale said.

The experiment didn't go exactly as planned.

"There was one student, she would come in every morning, and before I even opened my mouth, she would fall asleep. She had gotten out of bed, she'd come to class but she wasn't done sleeping yet. It was the most amazing thing," he said.

Some ideas were clearly better than others. Vitale decided to end that experiment after one semester. He declared the department would not be having any more 8am classes.

In another experiment, the Department team agreed that every faculty member would learn to use the programming languages being taught to the students. That experiment also failed.

"After two sessions I couldn't understand it at all," Vitale said. "The students could understand it perfectly. It was just me and a couple of other people in the Department that couldn't get it at all."

Other types of experimenting were more successful, such as the ways in which the new students explored technology.

"The first two years I remember as being very fun all the time," Vitale said.

"It was bigger than a dotcom start up. There was the energy of young people being around technology – and some were doing really good things with technology."

Students who would stay up all night working in the computer lab, were completely absorbed with what they were creating, and they were learning in the process. The Department had decided to give them as much freedom to experiment as possible by doing things such as granting them late-night access to the labs.

"The students were very, very excited in what they were accomplishing," he said. This wasn't only in their study assignments, but also in building a community.

The students formed a student society, the Information Systems Student Society, to promote social, educational and vocational activities for its members. They organised a pre-term away 'camp' for students to meet each other and build friendships.

Vitale ran into Professor Barry Sheehan, Deputy Vice-Chancellor (Resources) as the students were boarding buses in front of the IS building for the trip. They watched the students packing their bags, along with large quantities of alcohol and squirt guns.

Sheehan looked a little worried. He turned to Vitale and said, "We're not sponsoring this are we?"

Vitale was quick to assure him that the students had organised it all on their own. As the Department expanded its teaching scope in 1997, it drew from its group of what were now second year students. It hired students from its inaugural class to tutor the new incoming students, to provide lab support and even casual secretarial work in the administration office. If they wanted to integrate into the community, there were plenty of ways to do that. Vitale said, "That worked pretty well."

GROWING THE DEPARTMENT

In 1995 and 1996, the Department wanted to grow student numbers, while still maintaining quality. To do this, it needed a bigger applicant pool. Unfortunately, in these early days, students did not seem to be applying to study in the new Department in the numbers that Vitale and others had first hoped.

"We thought that here was this amazing boutique course," Jen Sullivan said. No one could figure out why the students weren't flocking to it. At the start of 1996, the Department only had a small number of applicants. Few students knew about the new course, so it was not popular among applicants.

"There was always going to be a time lag in marketing the new course," Sullivan explained, but the numbers of students applying were still disheartening even allowing for that. Department staff had worked hard to get the Department up and running, so there was a degree of frustration things were not progressing faster.

Moreover, while undergraduate student numbers were not reaching levels that the Department had hoped for, the post-graduate applications were even more disappointing.

"We tried to get a masters post-graduate program going in 1996 but it just didn't go anywhere. We just didn't get the number of students we wanted," Vitale said.

"A lot of IT courses don't have high TER [entry] scores because some amorphous student body doesn't think it's as high standing as Law, Commerce or even Computer Science," Sullivan said.

"Information Systems has trouble defining itself, and managing perceptions of itself. Information Systems [as a field] hasn't quite separated itself from IT. IT is not a discipline at universities in Victoria. IT courses tend not to have attractiveness to students with results in high entry scores – but the combination [degrees] do. A high entry score is an emblem of success," she said.

The Department staff team was baffled as to why student applications weren't higher. Vitale was left scratching his head. He thought, "This is a good institution: we should be able to attract people, but we were barely able to attract anyone."

Vitale did some soul searching with the rest of the team in order to unravel the mystery.

"We made a funny mistake," Vitale admitted. "And I think it's probably because neither Iain Morrison nor I are Australian. We advertised the course as 'new', 'different' and 'innovative'. It turned out later when we asked people why we didn't get as many students as we hoped it was because all those words actually frightened people away. It isn't what they wanted. They wanted proven, established and low-risk."

Another problem was a general lack of exposure and awareness for the new course. Vitale and Morrison hit the road, talking to schools, parents, and teachers to let people know the University had opened this new field of study.

"One of the great things Mike did was to travel constantly, selling his great charisma – and us along with it," Sullivan said.

"He lined up seminars and school visits. It was a punishing regime. He would go for five days talking virtually non-stop, and then come back and teach classes. For years after he left, people still emailed him thinking he ran the course."

The plan was to offer only first year subjects in 1996. However, despite student applications not being as great in number as first hoped, there seemed to be some growth from unexpected quarters.

"We had enough interest from students with advanced standing that we had to offer them something more," Sullivan said.

Students were increasingly interested in earning joint degrees. Yet, when DIS staff approached the Faculty of Economics and Commerce, the faculty seemed reluctant at first to forge close ties with the new Department.

However, by the middle of 1996, discussions between the faculty and the Department about a five-year joint undergraduate degree were underway. Eventually, both sides reached an agreement and formed a new partnership. This joint degree turned out to be one of the Department's biggest success stories. In 1997, students began enrolling in the combined Bachelor of Commerce/Bachelor of Information Systems degree. By the end of the year, there were 132 students in the new multi-disciplinary course – the equivalent of about three quarters of the total BIS student population in the same year. A small number of students also enrolled in the joint Bachelor of Science/BIS and the Bachelor of Geomatics/BIS degrees.

By 1997, there were 173 students enrolled in the Bachelor of Information Systems degree. The class sizes had increased by this stage, but were still small enough for personal attention. In Vitale's words, the classes were of a size that "you could look the students in the eye and see if they were understanding."

Also in 1997, the Department enrolled its first PhD student, Theerasak "Joe" Thanasankit. He finished his PhD, on "Exploring Social Aspects of Requirements Engineering – An Ethnographic Study of Thai Systems Analysis" – in lightning speed – just two years and ten months. He then joined the Department's academic staff.

Nearly three years after arriving in Australia to head up the new Department, Mike Vitale decided it was time to move on. The turning point in his decision-making happened one evening in early 1998.

"One of the final things that happened that precipitated me going, was that I was in the office one night [working late] and I fell asleep. My wife couldn't get me on the phone. She came into my office and shook me; I had fallen asleep on the floor. I realised I was just utterly exhausted. She shook me and that was the moment when I realised I had to go," he said.

He walked out the back door of the SEECS building on Bouverie Street into the back door of the neighbouring Melbourne Business School, where he became a Professor in the Centre for Management of IT.

Vitale left behind a stream of successes, particularly the Department's early students. The feeling was mutual between those early department students and their mentor.

"Those first few bunches of students were really special," Vitale said. "They were risk takers, they were a little bit cheeky, they were very patient. My philosophy is that you can never really teach people anything; you can just put them in a position where they can learn. And that's really what we did.We gave them tremendous freedom.

"Somebody transferred into the student group in the second year and he said, 'It's like the movies. I feel like I've joined a cult. The IS cult,' Vitale said.

"They were really focused on learning. They have gone out and done good things. I am very confident that they will go on to be among the leaders of the IS profession in Australia in the future.We will see them."

In early 1998, Professor Iain Morrison took over as the Head of Department. Born in Scotland, at Chapelhall, Lanarkshire, he had come to Australia in 1976. He had joined the Physics Department, and later moved to a joint appointment between Physics and the Department of Computer Science. He subsequently served as the Registrar – IT of the University, and later the Assistant Vice-Chancellor (IT) from 1990 to 1999. In this role, he had worked on IT policy and strategic planning, and in particular had developed plans for the 'digital mainstreaming' of the curriculum. He was also a director of AARNET, the national Academic and Research Network that sponsored innovative applications for teaching and learning and research support. Later he also became a director of Melbourne-IT and AuDA, the Australian Domain Name Authority.

Besides his background in IT, he came to the role with a history of involvement with the Department. Morrison had been on an earlier committee examining the possible creation of the new Department. His particular research interests were in the design of educational multimedia, the regulatory and policy frameworks for the evolution of the Information Economy particularly for Electronic Commerce, and online education.

Peter Seddon, one of the early recruits to the Department who had joined in December 1995, became the Deputy Head.

1998 marked several important achievements for the Department. The Department's postgraduate program began to take hold. During the year, the Department more than doubled the number of its PhD students, from three students at the end of 1997 to seven by the end of 1998. The undergraduate population grew dramatically, with a total of 266 BIS students enrolled across all years – an increase of more than 50 per cent compared to the previous year. The total number of students in the joint degree program with Economics and Commerce grew even more, rising from 132 students in 1997 to 245 students in 1998. The joint BSc/BIS student population remained small but had more than doubled in size, reaching 31 students.

Staff numbers also increased, with seven senior tutors by the end of the year compared to just three in the previous year. The new staff reflected the increase in undergraduate students. Recruiting work, including Vitale's and Morrison's early presentations in schools, was bearing fruit at all levels.

In 1999, the Department's growth accelerated, with student numbers rising substantially again. The total number of BIS enrolments rose 28% from 1998 to 1999 reaching 341 students. The BCom/BIS student group increased more than 38% to 340 current enrolments. In all, the Department had 760 students enrolled in single or joint undergraduate or diploma programs in 1999.

There were also a number of changes to the course content from the original course structure, and there was a special emphasis in teaching focus on the Y2K bug. However, the general approach to the course stayed at the same level, with the course broadly divided into three parts covering technology, business/organisational issues and an integration of the two areas.

The University continued to add new staff to the Department, and promoted existing staff to meet the demand.

Graeme Shanks joined in February 1999 as Associate Professor. Previously a senior lecturer at Monash University, he had earned his PhD in IS in 1996. The appointment marked an important maturing of the research culture in the Department. Shanks was widely known and respected nationally as an Information Systems researcher. His appointment was part of a suite of events happening in the Department that sent a message to other IS departments around the country: the University of Melbourne's Department, though still young, intended to be taken seriously as an IS research centre. This in turn had a direct impact on the quality of academics that began applying to join the Department in the following years.

Shanks began the reorganisation of the Department's research areas. He established the DIS Research and Industry Committee. Policies were developed for research groups that defined what was required for a group. He hoped this would allow groups to form naturally rather than to be established in a top down manner.

Under the new structure, a research group within the Department was to have at least three researchers who were publishing academic works, and supervising PhD students. One of the goals of this reorganisation was to bring staff members together to work in cohesive groups on research topics. Shanks also worked on developing research funding for staff and students, research student confirmation and progress processes.

The Department's large number of small disparate research fields were consolidated initially into two major research groups: e-Commerce and IS Implementation and Effectiveness (renamed in 2001 to the Enterprise Systems research group, and later again renamed to Organisational Aspects of Information Systems). As staff with complementary interests were added in the period 2000-2002, new clusters of excellence developed and new groups emerged.

During 1999, Shanks also restructured the Masters of Information Systems, reducing it from a four semester course to a three semester course and introducing the postgraduate Certificate and Diploma. He developed the honours program before handing it over to Steve Howard in 2000. In partnership with research student representatives, Shanks also initiated the annual PhD Consortium.

Elsewhere in the department, Brian Corbitt, formally a Department Associate, was appointed as a Senior Lecturer before leaving in 2000 for a professorship in New Zealand. He later moved to Deakin University, where he became a Professor in the School of Information Systems and Pro Vice Chancellor.

The Department also forged links with industry both formally and informally. Graeme Simsion, founder of the well-known consulting firm Simsion Bowles & Associates, and author of Data Modelling Essentials, took the role of Senior Fellow.

The family of PhD students also continued to grow, though somewhat more modestly than the jump in the previous year. Eleven PhD students were enrolled in the Department by the end of 1999.

The Department continued to nurture its research culture. While the Department was still young and staff were grappling with an increasing teaching load due to student interest in the technology boom, there was still a commitment to strengthening its research focus.

When Mike Vitale stepped down as head of department in 1998, the University had advertised the professor's position.

According to Boris Schedvin, Science Faculty Dean John McKenzie was "looking for a can-do person, who was good at teaching, good at organisation, – and had a balanced view about where the department should head." McKenzie had taken over as Dean of the faculty when Professor Bruce McKellar stepped down in 1997.

McKenzie's search was no small task in an era when demand for experienced managers with strong technical skills was driving salaries in the private sector sky high.

The Department was growing at an increasing rate. This meant any new head would have to manage this growth, including hiring significant numbers of additional new staff, as well as winning more physical workspace and generally steering the Department on a strategic path forward.

After the advertisement and selection process initiated in 1998 had failed to identify a suitable new professor, in mid 1999 John McKenzie approached Liz Sonenberg, then an Associate Professor in the Department of Computer Science and Software Engineering at the University, to apply for the position. He encouraged her to throw her "hat in the ring."

She declined, as she thought the Department needed a "straight IS person". Her research interests were not, in her view, sufficiently aligned with those of the Department. McKenzie saw it differently and over several conversations, he continued to encourage her.

Some weeks later McKenzie received a small package. Inside the envelope was a small box with just two items inside. The first was a miniature hat. The second was Liz Sonenberg's business card.

"At some stage I came to a decision – I didn't at that moment know whether if I were offered the position I would want to take it – but I decided I would test myself and the waters to see what would happen if I did make an application," Sonenberg said. The position was offered to Sonenberg in late 1999. As part of accepting the position, Sonenberg negotiated with Boris Schedvin for funds for building modifications to expand the number of offices, and increase student facilities in the SEECS building where the Department was housed. This was an arrangement that would benefit both the Department of Information Systems and the Department of Computer Science and Software Engineering that shared part of the building.

2000 ONWARDS

Sonenberg started as head of the Department in early 2000, along with five other staff (Joe Thanasankit, Simon Milton, Steve Howard, Robert Johnston and Jennie Carroll). It was a prophetic beginning, for the Department was about to embark on a rapid staff recruitment period.

In the view of the new head of Department, the four major issues the Department faced in its growth were research maturity, the limitations of physical resources, the nature of its budget models and staffing matters. They were intertwined. So to a large degree she had to address them simultaneously, although the continued explosion in student numbers meant that hiring new staff was perhaps the most urgent problem.

"When I joined [in January 2000] we had about 600 full time equivalent students. In January 2003, we will have about 900. That's fifty percent growth in three years."

"Our student staff ratios .. [had] been sitting at around 30 to 1.We are now all the way down to 26 to 1 [at the end of 2002]. The Faculty average is about 17.5 to 1," she said.

Between December 1998 and 2001, the Department graduated 376 Bachelor of Information Systems (BIS) students. Of these, 172 graduated in 2001 alone – about twice the number of Physiotherapy graduates and more than twice the number of Veterinary Science graduates in the same year. Also in 2001, BIS graduates accounted for more than 20% of all Science graduates. Within these numbers were the combined degree BSc/BIS and BCom/BIS students, who by 2002 comprised over half the intake of new students.

"In the three years that I have been here I have been responsible for around 35 academic, technical and administrative staff appointments," she said in late 2002. "Allowing for some departures, this has meant a growth in academic staff numbers of over 50 percent, a growth that has been mirrored by student numbers." Such was the transformation that by the start of 2003, fewer than one-quarter of the academic staff had been in the Department for more than three years.

The spectacular growth since the first staff appointments in 1995, and the first major student intake in 1996 meant that the early plans and projections had been overtaken by events. Even when Sonenberg joined the Department, space was tight. Staff were overflowing the available office space, and the student labs were crowded. One of Sonenberg's priorities was to win resources from the University to improve the situation.

"There were resourcing issues both in terms of the way budgets were put together and in terms of whether that was adequate for the Department's growth within the faculty context," she said.

"The student staff ratios and the space to student ratios were just embarrassing when you listed them. The growth expectations were enormous. The University knew it wanted to grow the two areas [IS and Computer Science]."

She felt a bid for University resources would be stronger coming from both departments in the building, and worked together with the Computer Science and Software Engineering Department to seek funds.

In April 2000, the two departments made a formal bid to the Capital Works Committee. At the end of June 2000 the Committee approved funding of $4.5 million over three years for refurbishment and redesign for both departments. It was an important milestone in the Department's history, in part because it signified that other academics outside the Department – people who sat on decision making committees – recognised that the IS Department was no longer just the new kid on the block, the two year experiment for the Science Faculty. It had become a fully-fledged and respected department, revealing an increasingly serious research contribution, and was recognised as such within the University community.

Events again overtook the plans however, when Dean John McKenzie rang her up several months later offering a possible move to Building B.

She said, "What's Building B?" – and soon received an answer.

"That was on a Wednesday. The following day I had a hard hat on and I was walking around Building B which was in a considerably unfinished state at that time."

Prof Mike Vitale,
Foundation Professor and Head of Department
1995-1998

After a great deal of discussion and negotiation involving the two Departments, the Deans of Science and Engineering, and the Senior Executive of the University, in late 2000 approval was given for the two Departments to relocate to one of the University's new buildings at University Square. The building had been completed in mid 2000 as a shell, so a unique opportunity arose to develop a purpose built design for the internal space of the building. This was only possible because a significant budget had been set aside for this purpose when the building was commissioned.

From late 2000 to the end of 2002, Sonenberg and others in IS worked with their colleagues in Computer Science and Software Engineering, and with the newly appointed architects and the University Square project team to design new spaces, and then manage the transition to the new glass-fronted Building B.

Prof Iain Morrison, Head of Department
1998-2000

It would be a significant move for the Department, as it would continue to share a building with the Department of Computer Science and Software Engineering as it had done in the Bouverie Street site. After the final fit-out, the new building offered the Department over 300 computer laboratory seats, a dedicated research lab for the Interaction Design Group, 50 offices for academic and research staff and visitors, seating for 50 research students, and share facilities for 75-100 coursework postgraduate students, among other benefits. Most importantly, the move meant that the entire Department could be housed in one building instead of three.

Despite the distraction of planning a move for an entire academic community into a building under construction, the Department continued to place a high priority on encouraging research maturity during 2000 to 2002.

In December 2000, the Department appointed Steve Goschnick as Research and Business Manager to head up the IDEA Lab - an Interaction, Design, Evaluation And Analysis laboratory.

The Department also sought to further raise its profile in industry. As part of this, Deputy Head of the Department Graeme Shanks organised several one-day down town seminars that were marketed in conjunction with the Australian Computer Society. He re-established the DIS Industry Advisory Board. This included six or seven senior industry representatives from a variety of backgrounds who met twice each year to provide strategic advice to DIS on key issues in teaching and research.

**From left: Connor Graham Information Systems PhD student,
Associate Prof Steve Howard Deputy Head of Information Systems,
Prof Liz Sonenberg Head of Information Systems, Alan Gilbert Vice
Chancellor,
Lynne Kosky MP, Minister for Education and Training – in the IDEA lab**

A new half time administration position was established in 2000 to support various research activities. Increased demand meant that by the end of 2002 the initial half time role grew to one and a half positions.

Despite successes, improving the Department's research maturity was a challenge since most staff were relatively young and held recent PhDs, in part due to the new nature of the IS field. In a proactive move, the Department expanded its support for staff applying for research grants, both internal to the University and externally. Mentoring by more senior members of the Department proved a crucial part of that support.

The expanding research activities of the Department and increasing experience level of the staff also made the Department more attractive to research students. The steady increase in PhD students studying in the Department continued, from its humble beginnings with just one PhD student at the start of 1997 to 43 higher research degree students by the start of 2003.

To continue to meet the demand by students who had more interest in practical coursework, in mid 2002 the Department began planning a new masters degree by coursework in a joint development with the Department of Computer Science and Software Engineering. The new Masters in Information Technology was first offered in March 2003 after an accelerated track through the University's approval processes.

In April 2003, Victorian Minister for Education and Training, Lynne Kosky officially opened the ICT Building on University Square, the Department's new home. In July 2003, the Department's first Associate Professor and current Deputy Head of Department Graeme Shanks resigned in order to take up a full professorial appointment at Monash.

Emeritus Professor Peter Poole, Prof Liz Sonenberg Head of Information Systems,
Fay Marles Chancellor, The Hon Lynne Kosky MP Minister for Education and
Training, Prof Alan Gilbert Vice Chancellor, Prof Rao Kotagiri Head of Computer
Science and Software Engineering.

The post-millennium downturn in the international IT industry resulted in a decline in the number of undergraduate student applications to the Department in 2003 and 2004.The downturn similarly affected IT-related courses across Australia.

While this posed a new challenge for the Department, it also provided an opportunity for the Department to further increase its focus on research.

In 2003 the Department won a prestigious ARC Discovery Grant worth $220,000 over a three year period. The research project was to refine and test a new IS design methodology.

In addition to winning other grants, in 2003 and 2004 the Department also enjoyed research visit collaborations with international IS experts from a number of overseas institutions, including universities in Warwick, Leipzig, Buffalo, Utrecht, Berlin, and Seoul.

**The Hon Lynne Kosky, MP, Minister for Education and Training addresses the
audience at the opening of the ICT building**

Closer to home, the Department's students continued to achieve. James Lee, a fourthyear BIS/BCommerce student won the Victorian section of the Young Australian of the Year 2003 for co-ordinating a tutoring program to migrant and refugee children in the Richmond Housing Commission flats.

One of the challenges for the Department in the future was to continue to grow, but also to retain the positive academic community built in the Department's early days.

"The Department had a wonderful collegial feel to it – it's one of the things that Mike Vitale and others worked hard on," Sonenberg said.

"One of the issues for all of us who joined along the way is to preserve that as best as one can. Obviously some things don't scale well, but I think we are doing a pretty good job of keeping it a very collegial, mutually supportive environment. It is potentially a fragile thing. The calibre of the senior staff of the Department means that people .. absorb the message that it is important to help one's colleagues and to do things well oneself. It is very much a shared responsibility."

The momentum established in the early years under Mike Vitale's leadership has consolidated into a new maturity evident in the Department's research and teaching activities. Now housed in one of the University's showpiece buildings, DIS is poised to strengthen its leadership role in educating the next generation of computing professionals and IS academics, and in working with Australia's IT industry toward applied research outcomes. An exciting future lies ahead.

Timeline of the Department of Information Systems

1994

Vice-Chancellor David Penington opens high level discussions for new Department teaching Information Systems. He commissions Peter Weill (Melbourne Business School) to write a report examining other IS departments at universities around the world and to recommend a curriculum for a new department.

Peter Weill brings in two other academics from related fields, Liz Sonenberg (Dept of Computer Science and Software Engineering), and Stephen Deery (Dept of Management) to help design and plan the new course.

1995

Foundation Professor and Department Head Mike Vitale, Deputy Head of Department, Professor Iain Morrison and Department Manager Jen Sullivan are recruited. They begin building a department from scratch.

The Department begins accepting applications from students for first year entry in 1996.

Three students enrol mid-year in the Bachelor of Information Systems. No classes are offered in the new department yet, so they take all classes in other departments.

Between May and December, the Department begins recruiting new staff.

1996

The Department begins offering academic classes to its inaugural intake of first year students. Academic staff teach first year classes while designing the second year course at the same time.

Mike Vitale and Iain Morrison hit the road in Australia and Asia presenting the new course to students, who respond with curiosity.

Information Systems is added to the VTAC list of undergraduate courses offered by the University of Melbourne.

The Department opens discussions with the Faculty of Economics and Commerce to set up a joint 5-year degree. This degree turns out to be very popular with students.

1997

The Department admits its first PhD student, Theerasak ('Joe') Thanasankit. The University opens a Masters Degree in IS by coursework and thesis.

More than 130 students enrol in the new IS-Commerce joint degree, the BIS/BComm. A small number of students also enrol in the new joint degree programs with Science and Geomatics (BSc/BIS and BIS/BGeom).

1998

Mike Vitale leaves the Department to join Melbourne Business School's Centre for Management of IT (CMIT) with Peter Weill.

Iain Morrison becomes Head of the Department and Peter Seddon becomes Deputy Head.

1999

The Department offers another new degree: a Masters in Information Systems by coursework alone.

The research groups of the department are reorganised and consolidated into two main groups: e-Commerce and IS Implementation and Effectiveness.

Another new Department degree, a Diploma in IS, attracts 26 students.

2000

Liz Sonenberg leaves the Department of Computer Science and Software Engineering to become Head of the Department of Information Systems with Iain Morrison as Deputy Head.

The total number of individuals enrolled in joint or single degree programs in the Department reaches 1,101 students. Some 478 of these are new students, starting courses in the 2000 academic year.

The Department forms a third research group, the new Interaction Design group headed by Steve Howard.

2001

The University of Melbourne Information Systems Alumni (UMISA) organisation is formed by a group of IS graduates.

Graeme Shanks becomes Deputy Head of the Department.

Mike Vitale becomes Dean of the Australian Graduate School of Management in Sydney.

570 new degree, joint degree or diploma students enrol in the Department in 2001.

The IS Implementation and Effectiveness research group changes its name to Enterprise Systems.

The Department opens the IDEA Lab for "interaction design, evaluation and analysis" in two rooms at its Swanston Street building. Using cameras, microphones and a one-way mirror, the new lab allows researchers to observe and study how people use technology. Digital video capture and video editing equipment was acquired.

2002

The Enterprise Systems research group expands and assumes another name, Organisational Aspects of Information Systems (OASIS) to better reflect the interests and expertise of the growing membership. Agent Systems has a higher profile with the growth in research students in this area under Liz Sonenberg's supervision.

The Department announces a new Masters Degree by coursework: the Masters of Information Technology (MIT) delivered jointly with Computer Science and Software Engineering. The first classes in the new program are to begin in March 2003.

In December, the Department moves into Building B, also called the ICT Building, at 111 Barry Street in the recently completed University Square. This unifies the entire Department in one place from its previous three different locations.

The IDEA lab sponsors its first conference: The HF2002: Human Factors Conference. The conference, held in November in Melbourne, is "designed for the whole person, integrating physical, cognitive and social aspects" of the human - computer interface.

2003

The original IDEA Lab grows into the IDEA Lab II. The move from the Lab's original Swanston Street home to the Department's new Barry Street building allows the lab to grow to more than four times its original size. The new lab is re-equipped with the latest technology available for the usability studies of all kinds.

In April, Victorian Minister for Education and Training Lynne Kosky officially opens the new ICT Building. The Department shares the building with the Department of Computer Science and Software Engineering (CSSE).

The Department collaborates with CSSE on a new coursework masters degree in IT, and with the Faculty of Education on a Masters Degree in Knowledge Management.

In July, Deputy Head of Department Graeme Shanks resigns in order to take up a professorial appointment at Monash University. Associate Professor Steve Howard becomes the new Deputy Head and Novell Ltd becomes a major corporate sponsor of the IDEA Lab.

2004

More research grants than ever are submitted, with increasing success rates. Increasing numbers of staff engage in research collaborations with industry.

Noldus Information Technology, makers of the The Observer V5 usability software, become sponsors of the IDEA Lab.