Currently, mobility is a significantly pervasive term; the concept is being widely used in multiple discussions including social, economic, political, and technological debates. However, the theoretical grounding of the concept is surprisingly unstable. This thesis aims to offer a theoretical foundation for the concept of mobility, particularly in contemporary work contexts. With support of information and communication technologies (ICTs) in general and mobile technology in particular, contemporary work activities are increasingly distributed and dynamically conducted in various locations. In such an emerging work environment, maintaining a highly level of ‘mobility’ is becoming critical for contemporary workers, particularly for mobile professionals. Based on the theoretical considerations on the concept of mobility, this thesis empirically explores the dynamic and heterogeneous nature of mobile professionals’ work practices. In order to appreciate and explain the nature of mobility in contemporary work, this thesis specifically addresses the emerging work practices of mobile professionals. The data collection consisting of in-depth interviews and ad-hoc observations of sixty-two professional workers was conducted in Tokyo, Japan during the summer of 2002. Informed by the results of this qualitative field study, the thesis discusses a distinct mode of mobility in mobile professional work. The mode of mobility is characterised not only by extensive geographical movement but also by operational flexibility and intense interaction in mobile professionals’ dynamic work activities. Based on these theoretical and empirical discussions, this thesis aims: 1) to theoretically underpin our understanding of mobility in contemporary work contexts; 2) to offer empirically grounded implications for the post-bureaucratic, fluid organising of work; and finally 3) to advance the ongoing debate on the dynamic interplay of work, organisation, and technology.

**Supervisor: Dr C Sørensen**

**KAMEL, Sherif H. (1994)**

**DSS and Development Planning in Egypt**

The continuous development of information technology tools and techniques provided an opportunity before the developing countries to make best use of them in their socio-economic development planning. In that respect, the research of the thesis covers the experience of the government of Egypt in the use of accurate, timely and relevant information in development planning at the local level using state of the art information technology. The research will draw examples from the governates’ information and decision support centres established in Egypt for the development, use and diffusion of information technology at the local level. The main themes tested by the thesis include project planning and implementation, the use of information in development planning and the impacts of the use of various information technology tools and techniques on aspects such as organizational dynamics, structure of responsibility, turnover and management style.

**Supervisor: Dr J Liebenau**

**KANGA, Rustom (1977)**

**Economic Evaluation of Computer Systems for Developing Countries**

Computers can aid economic progress in developing countries when used properly. Used inappropriately, the computer can aggravate rather than aid development by increasing unemployment and the pressures on foreign exchange, capital and skilled manpower resources. Part I of the thesis studies the impact that computers have had on the development process and hence determines whether costly and often difficult evaluations are justified. It concludes that economic evaluations are necessary and selects the best technique from those available it also suggests the organizational changes that would be required in government and in individual organizations if the evaluations are to be effective. Part II develops the evaluation methodology which takes into account both the growth and the income distribution objectives of a developing country and applies it to the evaluation of computer systems. The thesis is supported by a worked example using the proposed methodology and a report on computer policy and usage in India based on a field study.

**Supervisor: Prof F Land**

**KASIMIN, Hasmiah (1987)**

This thesis analyses two important planning problems in a developing country such as Malaysia. The first problem occurs in the situation where the structure of the formalised planning is already established but the actual planning practices are rather unsatisfactory, based on ad hoc and informal procedures. The second problem is where the collection of data used is not based on its planning needs, but is derived from a framework adopted in developed countries. This leads to the situation where data is collected simply for its own sake and has very little use and bearing on supporting the planners in effectively carrying out their activities. We develop a conceptual framework in the context of a case study of the area development planning and control system [ADPS] of KEJORA, using a multi-disciplinary approach. Using the framework developed, it is possible for the planners to analyse planning problems and specify the possible solutions, taking advantage of the available planning methodologies, techniques and tools. The same framework can be used to develop a conceptual framework to specify the planning information needs as well as a tool to encourage the planners and system analysts/designers to participate effectively in the design of actual planning information systems.

Supervisor: Prof F Land

KELIHER, Leo (1987)
Policy Making in Information Technology: A Decisional Analysis of the Alvey Programme

This is a critical appraisal of the decision-making associated with all aspects of the formulation, approval, implementation and operation of the Alvey policy programme. The study analyses why a government that preaches public sector disengagement from the market has channelled funds into one of the fastest growing sectors of British industry, why a government committed to competition endorsed a programme based on collaboration between firms, and why a government opposed to picking ‘winners’ implemented a programme aimed at a few selected technologies. It describes the intricate advisory mechanisms which supported decision-making by powerful but technologically ill-informed government departments and the British core executive. The study questions the wisdom of the government insisting that industry should frame industry policy for when a sector dominated by defence contractors did so, the result was an increased dependence on government. The result was a pattern of self-interested and short-sighted policy making biased towards the interests of large firms in the defence and telecommunications fields. By divorcing itself from the mainstream of information technology developments and concentrating on selected narrow niches, the British information technology industry has set itself a difficult task for survival in the years ahead.

KHALIL, Khalil Salama (1978)
A Computer-Based Economic Model for the Bank of Sudan Utilizing Data Base Management

Central banks in developing countries have a major role in the management of the economy through their regulation of the money supply and their advise to the central government on financial and economic matters. So far the management of these banks have largely based their decision making activity on intuitive approaches which achieved moderate success.

This is mainly because these decisions involve dynamic and transient economic factors, which are difficult to cater for through such simple techniques that allow few degrees of freedom. The available feasible alternative proposes the utilization of empirical measurement tools. This would involve a change of the socio-technical environment, the establishment of the empirical background and the finding of a set of design objectives, that enable the change to develop in a harmonious environment. This is based on tools of systems analysis, economic modelling and data management utilizing computer techniques. Three econometric models are given; a macro-economic model, an agricultural model and a monetary model. The structural interdependence of the economy is depicted by a sectoral input output table.

Data analysis and data base design are considered in greater detail and the argument favours the relational approach. This and other specific guidelines proposed constitute a set of design objectives that may help the Bank of Sudan in achieving its goal within the environment of a changing organization.

KHIAONARONG, Tanai (1999)
Banking and Innovation: The Case of Payment Systems Modernisation in Thailand

This thesis examines the role of banks in influencing innovation and analyses their links to payment systems modernisation. The main argument is that banks are a type of technological institution having the potential to promote innovation, although such roles may be implicit or secondary. This role is investigated in eight chapters. The first three chapters review the major innovation models and progress in payment system. An analytical framework, based on evolutionary and resource-based views, is developed to examine how resources and routines, which reflect an organisation’s stock of skills, influence innovation, and assist them in sustaining competitive advantage.

The following three chapters present the empirical results. In a survey of innovation in the banking industry, research results suggested that although there were relatively high levels of information technology awareness and application, particularly in payment system automation, there remained a moderate level of innovative capabilities among the banks studied. Further analysis through four mini case studies of the largest commercial banks also suggested similar increases in technological investments, but replication rates were also relatively high. Thus, it is argued that such investments may gain, but not sustain, competitive advantage, whereby the latter requires banks to innovate by acquiring, accumulating, and advancing their stock of skills. In this respect, the role of the central bank in creating a conducive environment for innovation is also important, which may be seen through its involvement in payment systems modernisation.

The final two chapters discuss policy and research implications. It is argued that central bank policies oriented towards payment system reform, along with new payment product and services development by commercial banks, have come to play a progressive part in promoting technological innovation in banking. Such roles in reforming rudimentary payment systems have helped strengthen national information infrastructures, especially in emerging market economies, and moreover, have influenced the set-up of a national innovation system in banking, which underpins economic development.

Supervisor: Dr J Liebenau

KITIYADISAI, Krisana (1991)
Relevance and Information Systems

This thesis points out that relevance has to be explicitly recognised as an important quality of valuable information. Relevance has various meanings according to different disciplinary approaches, e.g. philosophy, law, logic, information science, communication and cognition.

These different concepts are discussed and criticised in two chapters. A new approach to the concept of relevance is proposed in which its general concept is considered as an affordance which encompasses all the specific concepts. This approach reflects all their underlying characteristics which are compatible with the assumptions of the logic of norms and affordances, upon which methods of semantic analysis are based. Two case studies are selected for experimenting these concepts which result in a guideline for systematic application in a semiotic framework.

Supervisor: Dr J Liebenau

KLECUN (KLECUN-DABROWSKA), Ela (2001)

This thesis explores a number of interrelated factors that influence the development of telehealth. Telehealth refers to health-related services that can be provided in electronic form over various telecommunications networks, including applications beyond clinical settings and reaching out to communities and homes. As such this study encompass different disciplines and draws not only on the medical tradition but also on information systems, social policy and ideas of information society.

The study is based on a fundamental claim that technology does not follow a pre-determinate path but is shaped by people, who in turn are constrained by historical conditions and current structures. This research takes into consideration a number of such defining structures, including the organisation of health care in Britain, the health policy process, strategies for the employment of information and communications
technologies (ICTs), conflicting ethical traditions and their manifestations in evaluation processes, and visions of an information society.

The theoretical position and research approach is predominantly informed by critical theory. Thus the work focuses on the different, often conflicting interests of varied stakeholders. It also unveils factors constraining social aims to which telehealth could aspire, e.g. reducing social exclusion, and proposes ideas that might encourage such developments. Insights into these concepts and their practical manifestations are explored through a case studies, which investigates a variety of telehealth projects and initiatives in London Borough of Lewisham.

The thesis' contribution is twofold - practical and theoretical. The practical contribution is aimed at those who work in and study telehealth, offering a new approach and focus that is not substantially found in other telehealth studies. In this the thesis makes a contribution to the ongoing debates about telehealth's potential as a means of organizational reform and the means and methods used in its evaluation. The theoretical contribution is found in the thesis' re-affirmation of the applicability of critical theory to the development of ICT based social and organizational innovations, re-conceptualised in the light of post-modern and information society theories.

Supervisor: Dr T Cornford

KLUZER, Stefano (1993)
**Diffusion of IT in Southern Africa**

The research topic is the diffusion of information technology in Southern Africa, primarily in Mozambique, but taking into account regional aspects from Zimbabwe and South Africa. The problem being investigated is the identification of the socio-economic and political factors/actors which are driving the diffusion of the technology and shaping its patterns of adoption/use. The conceptual framework is drawn from various disciplines: history of technology, sociotechnical analysis, economics of technical change, and technology transfer. IT emphasises the need to look at technology diffusion as a process of social change, involving socio-technical systems/networks rather than individual pieces of equipment and individual users and, in an international perspective, involving necessarily the interplay between endogenous and exogenous factors/actors.

Supervisor: Dr J Liebenau

KNOX, P.M. (1988)
**Automated GraphicaHy-Based Discrete-Event Simulation Systems**

The automation of program generation and the use of colour graphics in discrete event simulation modelling are currently becoming more standard. However, many of these system developments have been on the basis of gradual changes to existing system, which were originally designed for a different purpose. This thesis examines the available systems with a view to determining the desirable and undesirable elements. Graphical display screens are combined with model specification system prior to code generation Model verification and understanding is developed interactively. Flexibility of screen design and the use of multiple screens provide rapid intelligible model development. Such ideas are demonstrated in a working computer system. A more radical approach to simulation model development would be to use the screen display as the model specification itself. A way of implementing this is proposed, and a prototype system described.

KULJIS, Jasna (1995)
**Developing ModeHing Systems Using Applications Software Packages**

This research examines the possibilities of using commercial applications software packages in the development of decision aiding modelling systems. Such modelling systems have desired characteristics of interactive user input, algorithmic processing, and intricate and flexible output. They typically involve non-linear development, which is interruptible and restartable to meet changing specifications in the light of improved understanding during development. An ability to constantly begin again is required. A case study involving the development of an outpatients clinic simulation forms part of the experimental work. Packages looked at so far include databases, graphics libraries, and results presentation packages. The aim is to determine general principles concerning the flexibility of applications to meet specifications, the flexibility of
applications to meet specification changes, and customisability. Practical issues concern the interfacing of applications packages, which includes problems and solutions to questions of data, structure, speed and size.

*Supervisor: Prof R Paul*