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# **THE IMPACT OF INTERNET ON BUSINESS**

A thesis presented in partial fulfilment of the requirements

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## **Abstract**

The purpose of this thesis is to critically examine the impact of Internet on business with a particular emphasis on the New Zealand business situation. The focus is on the human elements rather than the technical aspects affecting organisations. The literature review establishes the context for the study with an overview of the development and progress of the Internet as a key component of the business environment.

The information gathered from early stages of the research provided a cross-sectional analysis of Internet use in New Zealand industry sectors. Information gained served as a basis for selecting businesses for a more in-depth analysis for face-to-face interviews. A range of interviews were held with participants from organisations that were in the high, moderate and low Internet adoption sectors as identified by the questionnaire responses.

Questionnaires were sent to businesses representing the full range of industry sectors via traditional paper channels. An industry- wide, New Zealand- wide sample was sought to give baseline data on New Zealand organisations to gain an understanding of current and future uses. To assess the issues involved in the future application of modern computer communications, issues such as cost-benefit analysis, privacy, security, access to information services and databases, competitive advantage, information management, public relations, marketing and electronic commerce will be explored. A range of issues identified from both the online and offline literature that seemed indicative of emerging and future trends formed the basis of the questions.

Once the paper questionnaires had been returned, a comparable sample of respondents was sought, again indicative of all seventeen industry sectors. All respondents in this sample were from organisations that at least had email, even if they did not yet have a presence on the Internet. These customers of Internet Service Providers were sent a largely identical questionnaire by email. The aim was to gather data about organisations already online to identify any early-adopter characteristics and to gather more specific detailed information applicable to this group as existing Internet users.

The final research phase was a longitudinal study using a case study methodology. Selected organisations were followed through a three-part process of planning for technology, acquisition and implementation of technology and the final stage of evaluation and audit. Trends from the literature and the questionnaires were examined in the context of New Zealand organisations. Structured interviews were conducted with these organisations.

The results of the investigation form the success factors with discussion on the necessary planning, implementation and evaluation for businesses wishing to embrace the medium. As 94% of New Zealand business are small and medium sized enterprises (SMEs), the majority of findings are relevant to that context in particular although a number can be extrapolated to Internet-connected organisations in general.

Three objectives run through the various research phases. The research objectives are:

- to identify the nature and extent of Internet based business activities by organisations in New Zealand
- to examine the motives and impacts of these initiatives
- to determine factors that contribute to the success of these endeavours

The first research phase focusses on the planning issues including perceived and actual information needs of organisations using the Internet. The process of selecting appropriate technology and Internet providers is considered and study made of the competitive advantage offered by the Internet. Implications for organisations such as knowledge gaps, changing power structures with new technology and issues of privacy and controls are also considered. Implications for individuals including workload, communication patterns, training, reskilling and deskilling are pursued.

The second research phase focusses on the acquisition and implementation of the Internet by organisations. Comparisons are made between organisations and their strategies for getting online and managing the process of changeover and transition to an Internet-based business environment.

The third research phase compares expected and actual outcomes from Internet implementation in organisations. A review is carried out with participating organisations by examining the role of the Internet on business effectiveness.

The area of Internet use in organisations needs investigation as the majority are faced with devising an Internet strategy, yet most companies have barely considered the online world till relatively recently. This research considers the implications of this for successful Internet use and presents success factors for organisations. The recent downturn in dot.coms has increased interest in the factors determining success although the cases included in this thesis are not dot.coms as such but ordinary businesses that want to use the Internet.

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