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Critical Factors in Community Informatics

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David Douglas Miller Mason

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ABSTRACT

Community Informatics is a new field of research that studies how information and communications technologies can be used to improve the quality of life of communities.

The use and acceptance of technology is unpredictable. Early Community Informatics research found that deploying information technology with the aim of improving communities was seldom successful. Research has been done to identify the factors that might have a bearing on the outcome, but no definitive answer has emerged, and little work has been done on evaluating the effect of the methodology on the outcome. This research set out to establish what the critical factors were, and to determine whether a specific community informatics methodology could be designed.

The objective of this research was to design a Community Informatics methodology, a way of introducing ICT into communities, that would ensure a successful economic outcome. The strategy was to use tourism as the catalyst for economic growth. The outcome sought was a self sustaining, locally owned and scalable tourism product which would provide jobs initially and in the longer term would bring money into the local economy and lead to a revitalisation of the community.

The research was in two parts. The first part consisted of prototyping ecommerce Internet sites of increasing scope and complexity using a participative methodology within the socio-economic computer systems design paradigm. The work involved four organisations: the Katherine Mansfield Birthplace, the Spa Association of New Zealand and two large hotels. The outcome was a generic ecommerce model and a participative methodology for implementing that model. The second part of the research involved applying the prototype methodology to communities in isolated parts of New Zealand. The communities involved were located in North Hokianga, Mahia and East Cape. The final outcome was a community owned and maintained ecommerce Internet site that could form the basis for a tourism led economy.

This research has shown that by using the right methodology it is possible to create a viable community based ecommerce application, and that there are four critical factors in Community Informatics: leadership, motivation, consensus and the methodology used.

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Contents

Title Page	i
Abstract	ii
Acknowledgements	iii
Table of contents	iv
List of appendices	vii
List of tables and figures	vii
Note on terminology	viii

Section 1: Community Informatics Research

Chapter 1 Introduction to the thesis

1.1 Introduction	1
1.1.4 The contribution of the present study	5
1.2 The Methodology	6
1.3 Contents of the thesis	10
Section 1: Structure of the Thesis	11
Section 2: Developing the Community Methodology	12
Section 3: Community Development	14
Section 4: Critical Factors in Community Informatics	15
1.4 Future Research	16
1.5 Summary	16

Chapter 2 Literature review

2.1 Introduction	18
2.2 Community Informatics	18
2.3 Theories of Community Informatics	23
2.3.2 Models of Community Informatics methodologies	24
2.4 A strategy for community development in NZ	33
2.4.1 Tourism development and the Internet	35
2.5 Research objectives	38
2.6 Summary	43

Chapter 3 The research methodology

3.1 Introduction	44
3.2 Case study research	44
3.2.1 Issues in case study research	45
3.2.2 Rigour in Case Study Research	47
3.3 Action Research	49
3.3.1 Action Research and the case approach	49
3.3.3 Community Action Research	52
3.4 The Checkland Methodology	53
3.4.1 Stages of the Checkland methodology	54
2.6 Summary	59

Section 2: Developing the methodology

Chapter 4 Developing a generic ecommerce model

4.1 Introduction	60
4.1.1 The Katherine Mansfield Birthplace case	61
4.2 Designing a generic ecommerce model	62
4.2.1 Developing the generic ecommerce model	62
4.2.2 Implementing the methodology	63
4.2.3 The generic model functionality	67
4.3 Implementing the generic model	70
4.3.1 Implementing a static internet site	70
4.3.2 Interactive site management	72
4.3.3 Summary of the generic model	76
4.4 Implementing the KMB website	76
4.4.1 Enhancing the methodology	78
4.5 Summary	80

Chapter 5 Validating the generic ecommerce model

5.1 Introduction	82
5.2 Validating the generic model	83
5.2.3 Empirical analysis	85
5.3 Validating the design output	87
5.4 Reconciling the empirical model	90
5.4.5 Updating the methodology	99
5.5 Summary	100

Chapter 6 Extending the community methodology

6.1 Introduction	102
6.1.1 The Portal cases	103
6.2 The SPANZ case	103
6.2.3 Implementing the Spa community site	108
6.2.4 Methodology developments from the SPANZ case	109
6.3 The Hotel Portal cases	111
6.4 The methodology in action	113
6.5 Summary	122

Section 3: Applying Community Informatics

Section Introduction	124
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Chapter 7 Community Informatics in Hokianga

7.1 Introduction	127
7.2 The Hokianga Community	128
7.3 Designing the business model	131
7.4 Building the community portal	132
7.5 Implementing the Hokianga community site	137
7.5.1 Content creation using Web Raising	139
7.5.2 Community management and balance	141
7.5.3 Sustainability	142
7.6 Enhancements from the Hokianga case	143
7.7 Summary	146

Chapter 8 Community Informatics in Mahia	
8.1 Introduction	148
8.2 The Mahia community	148
8.3 Designing the business model	149
8.4 Implementing the Mahia business site	154
8.5 Enhancements from the Mahia case	158
8.6 Summary	162
 Chapter 9 Community Informatics in East Cape	
9.1 Introduction	164
9.2 The East Cape community	164
9.2.2 Designing the business model	166
9.2.3 Architecture of the community website	168
9.3 The implementation strategy	169
9.4 Implementing the East Cape community site	174
9.5 Summary	177
 Chapter 10 Critical Factors in Community Informatics	
10.1 Introduction	178
10.2 Development of the methodology	179
10.2.1 Issues affecting the generic model	179
10.2.4 Issues affecting the methodology	183
10.3 Identifying the critical factors	188
10.3.1 Review of the theoretical factors	188
10.3.2 Analysing the cases	190
10.4 Mapping the critical factors	198
10.4.1 Evaluating the critical factors	199
10.4.2 Evaluating the methodology	204
10.4.3 Summarising the case outcomes	206
10.5 Summary	207
 Appendices	208
 Bibliography	216

List of Appendices

Appendix 5A: Assessing Technical competency
Appendix 5B: Assessing Site Functionality
Appendix 5C: Museum Website Rating Matrix
Appendix 5D: Museum Site Owner interview plan

List of Figures

Figure 3.4.1 A rich picture of the Checkland Methodology
Figure 5.3.1 Idealised Museum model showing the seven main functions equally prominent.
Figure 5.3.2 Actual Museum Functionality

List of Tables

Table 2.5.3 Factors associated with successful CI projects
Table 5.2.2 Museum and gallery sites analysed
Table 10.4.1 Incidence of critical factors in the cases
Table 10.4.1a The critical factors categorised
Table 10.4.1b The critical factors
Table 10.4.2 Outcomes of the methodology
Table 10.4.3 Summarised outcomes of the cases

Note on terminology

Throughout the thesis the spelling has been standardised for some common terms:

When the Internet is being referred to directly it has been spelled with a capital. When the word is being used as an adjective, for example 'internet technologies' it is shown in lower case.

The term Community Informatics is shown capitalised when the text is referring to the academic discipline. When the term is being used as an adjective, or to refer to community informatics generally, it is shown in lower case.

The term 'ecommerce' is spelled thus throughout, as opposed to alternatives such as eCommerce, Ecommerce or e-commerce.

The spelling 'website' has been adopted throughout in preference to 'web site'.