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An Investigation of New Zealand Recruitment Agency Web Sites

John Paynter

Xuelian Wang

André M. Everett

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John Paynter, Xuelian Wang

Dept. of Management Science and Information Systems
University of Auckland
New Zealand
j.paynter@auckland.ac.nz, xwa055@ec.auckland.ac.nz

André M. Everett

Department of Management
University of Otago
New Zealand
aeverett@business.otago.ac.nz

Abstract

Many recruiters use the web for job placements, to help organisations quickly reach the correct audience by posting available positions on the Internet and providing a way for candidates to submit resumes electronically. Recruitment agencies find this an efficient and effective way to establish a connection between employer (client organisation) and job seeker (candidate). It is a fast, flexible, inexpensive way to find potential organisations/candidates. Content analysis is used in this study to evaluate recruitment agency web sites. The online recruitment agencies web sites are categorised into two groups: IT specialists, and the more general recruitment agencies web sites covering a wide range of industries. We evaluate and compare the New Zealand web sites of seven IT specialist recruitment agencies and eleven general ones. The fundamental elements for a fully functional electronic evaluation model based on the Hersey model (as cited in [5]) were defined. The results showed that although the sites scored well on the Information and Trust dimensions, they preformed relatively poorly in transaction capability and in providing promotional elements.

1. Introduction

The Internet has become a medium, a channel between two independent parties. In this study, they are the client organisations and job candidates. The Internet not only brings the potential for much more marketing opportunities for both entities, but also provides the way both could communicate with each other more efficiently and effectively. The Internet has a great impact on the process of the traditional recruitment industry evaluation, so a new business model is built, and the recruitment environment is changed as well. In addition, organisations and customers are facing potential opportunities and challenges.

The global economy is entering a slowdown stage; this phenomenon affects not only NZ economics but also the employment market. In this environment, people are not passively seeking jobs any more. They know in the world where everything is fast moving, employers and employees want to make quick decisions. Recruiting through the Internet allows them to do this. The Internet becomes an effective medium, providing a wealth of information in real time. Online job recruitment agencies provide a common ground for both client organisations and job seekers. As a result, candidates use it to attempt to obtain new jobs. People are aware that online recruitment agencies web sites are an important and effective tool to both seek candidates and to place resumes that can match the job requirements of both parties.

2. Literature Review

This section will present a literature review on recruitment related topics. First, the Internet's influence on industry structure will be explored. Second the role of online recruitment agencies is described. Finally, web site evaluation models suitable for examining the effectiveness of recruitment web sites are reviewed. These include the infotainment model and usability evaluation model.

2.1 The Internet Influences Industry Structure

Strategy guru Michael Porter [3] states that the Internet's greatest impact has been to enable the reconfiguration of existing industries that had been constrained by high costs for communicating, gathering information, or accomplishing transactions. Particularly, for the online recruitment agencies, the Internet is used not only to connect the various activities and entities but to optimise its working in real time. In addition, the data the recruitment agencies can collect and maintain will be optimised and customised based on input not only from organisations and suppliers but also from customers. He also explains that the basic tool for understanding the influence of Internet on organisations is the value chain - the set of the activities through which a product or service is created and delivered to customers [3:74]. By enabling the new approaches to meet needs and perform functions, the Internet creates new substitutes. The use of the Internet also tends to expand the geographic market, bringing many more organisations into competition with one another.

2.2 The Role of Online Recruitment Agencies

The recruitment agency's job is to represent job seekers fairly to potential employers, and to explain in clear detail where the job seeker stands in the marketplace and the types of work one can expect to find, as well as the appropriate remuneration package. A good agency should be able to give you a timeframe for finding a job, as well as provide you with an idea of the type of organisations with whom you can expect to be deal.

Whitely [5] said that the advantages of the Internet on recruitment agencies are obvious. It is easy for everyone with a computer access. It is incredibly quick, and much cheaper than advertising in newspapers and magazines. He also predicted that in the future the standard way to apply for a job could be to send e-mail to an online recruitment agency and go through the whole interview and selection process over the Internet. However, David Fox, CIPS's recruitment database co-ordinator, says: "The Internet is not a replacement for traditional methods. It's an add-on."

From the job seeker's view, they can provide their resume to a number of locations much more quickly, and also can get up-to-the-minute information in terms of which jobs are available. Organisations are looking for people who are not necessarily located in their area or even in the country in which the organisation is operating.

Customers want a recruitment and selection system is not only fast, but also flexible, paperless, and inexpensive. At the same time, they want a system that can be tailored to their individual requirements, be customised to select for position-specific skills, and provide up-to-date, easily accessible candidate information. They want a system that would reliably produce high quality candidates and be fair and equitable to all applicants.

2.3 Web Site Evaluation Model

This section includes models for web site evaluation, particularly for online recruitment agencies.

2.3.1 Infotainment Model

The Infotainment model created by Chung and Paynter [1] is used to provide a framework in which business sectors should consider a strategy to attract revisits to a web site The framework includes two main attributes on which to classify a web site, 'information' and 'interaction'. A two by two matrix develops it with the axes of degree of information and interaction. Chung and Paynter defined these four quadrants as passive, interaction-oriented, information-oriented and interactive-information. Based on the features of online recruitment agencies against the infotainment model, the recruitment agencies web site should fall into information-oriented quadrants, which is mainly associated with information rather than with interaction.

2.3.2 Usability Evaluation Model

There are many approaches have been proposed for web site effectiveness evaluation and design. Here, a general model for e-commerce evaluation and design developed by Ian Hersey (as cited in [5]) is introduced. The model consists of fourteen elements that respond to different aspects of an effective e-commerce web site. This model was designed for the usability of an entire e-commerce web site and served as a five point scale from the web site visitor perspective to assess and rank the site when designing and implementing an e-commerce web site.

Based on this model, Paynter et al. [2] proposed a usability evaluation model that measures web sites by three dimensions: effectiveness, efficiency and satisfaction. The model consist of four fundamental components to an e-commerce web site. These are information, transaction service, trust and non-functional requirements. Each component includes the number of elements that might vary based on a particular industry. Therefore, this model presents an abstraction level, ignoring the identification of each element. With this idea, the model can be regarded as a basic model to evaluate the usability of variable e-commerce industry sectors. This model can be applied to recruitment agencies web sites. Therefore, the elements for this particular industry can be defined for examining the web sites. The details are described in the next section.

3. Research Method

The research method mainly focuses on content analysis backed up with qualitative assessments of the individual sites. The aim to determine the characteristics of the online recruitment agencies services web site to assess and rank site capabilities against the model proposed to serve as a benchmark.

3.1 Content Analysis

Weber [4] defined content analysis as a research method that uses a set of procedures to make valid inference from text. Content analysis is a quantitative research method. In this project, content analysis consists of two main steps. An evaluation model for online recruitment agencies web site is developed, and then a systematic and objective procedure can be followed to evaluate the individual sites.

3.1.1 Online IT Recruitment Agencies Web site Evaluation Models

The main ideas for the recruitment model are derived from the combination of the components in Hersey's e-commerce web site evaluation model and the categories in the abstract site usability model [2]. Due to the recruitment agencies' unique features, some components and categories are not appropriate to meet the requirements of online recruitment web site services. Therefore, a model for online recruitment agencies was developed. Five dimensions are used to measure online recruitment agencies web sites. Each dimension consists of various elements. Although the model is specific to IT recruitment agencies, the model still can be used for other types of recruitment agencies web sites. The categories are: Information, Transaction Service, Trust, Non-Functional requirements and Promotion. These five categories are defined to effectively catch the elements of quality for each specific model.

The categories and the elements incorporated into each category will be discussed below in detail.

1. Information: Three are three elements are associated with this category, which are
   - Organisation information. The site provides the information on the organisation, including the organisational profile, history, team members, contact information and marketing plan and branch.
   - Customer information. Due to the unique feature of recruitment agencies, two kinds of customer are allowed to enter into the web site by registration and contract service. These are job seekers, local or overseas, and client organisations.
   - Vacancy. The site contains job vacancy (NZ and overseas) information. These last two categories are the "product" of the recruitment agency.
2. Transaction Service: This category is used to assess the industry-specific services offered on recruitment agencies web sites. The criteria components are:
   - Job search engine. The site has this function to help customers purposely and quickly search the job.
   - Candidate registration (profile detail). The site registers candidate information into the database
   - CV submission. The candidates apply a vacancy by CV submission
   - E-mail contact service. The candidates can also use the email to apply for a vacancy.
   - Contractor Login. The function allows candidates to view or edit their personal details in the database, or enter the employment database that is specially set up for registered candidates.
3. Trust:
   - Legal disclaimer. The site should provide the legal information such as organisation and position information
   - Privacy statement. The site makes sure that a customer privacy and personal information are protected
   - Security. The site ensures the security when personal data (CV) are stored and transmitted.
4. Non-Function Requirements:
   - Aesthetic effect. The site contains graphics or animations
   - Ease of use. The site provides effective navigation tool or site map to help customers use the site
   - Update frequency. As the feature of recruitment industry, the job market is constantly changing, up-to-date information is essential to customers.
   - Page loading speed. The page loads in less than 8 seconds.
   - Online help. The site provides additional information to candidates.
5. Promotion
   - CV and interview Tips. The site provides the CV format and interview guide.
   - Email Newsletter. The site provide current job marketing news and update organisational news
   - Link. The site can link to other relevant sites from which the customers can get other information, such immigration and NZ general
   - Online learning/training. The site offers online training, especially in the IT field.
   - Articles and case study. A range of subjects in articles and case studies is available.
   - Survey. The site offers an up-to-the-moment insight into salaries presently commanded in each market.
   - Feedback. The site can get feedback from customers about the site and recruitment information.
   - Job offers. When a vacancy is matched, the site can automatically inform candidates by e-mail.

The components and elements on effective recruitment web sites are summarised in Table 1.

Table 1: Model for online recruitment web site evaluation

Information	Organisation
	Customer
	Vacancy
Transaction Service	Job search engine
	Candidate profile registration
	Contractor login
	CV submission
	Vacancy submission
	E-mail contact service
Trust	Legal disclaimer
	Privacy statement
	Security
Non-Function Requirements	Aesthetic effect
	Ease of use
	Update frequency
	Page loading speed
	Online help
Promotion	CV and interview tips
	Newsletter
	Web site link
	Online learning/training
	Article and case study
	Survey
	Feedback
	Job offers

3.2 Sample Selection

The main industry recruitment magazine, the New Zealand Computer World (www.computerworld.co.nz), and the New Zealand Herald (www.nzherald.co.nz) were scanned to look for recruitment agencies. The electronic yellow pages (www.yellowpages.co.nz) was used as an additional source to search for other recruiters. Surprisingly few recruitment organisations were found. It

seems that in the last few years there have been structural changes in the industry. There were few, if any, indigenous recruitment agencies. The existing ones had been dissolved on the retirement of their principals or had been absorbed into multinationals.

4. Data Analysis and Key Findings

This section presents an overview of the data and its analysis, including identification of the specific web sites examined, how the scores were obtained and coded, how each site scored, and how each item scored across sites.

Seven IT specialist recruitment agencies web sites were included in this study. The names of agencies and their URLs are listed in Table 2.

Table 2: IT Recruitment agencies

No.	Recruitment Organisation	URL (http://)
1	Candle New Zealand Ltd	www.candle.co.nz
2	DeWinter International Ltd	www.dewinter.co.nz
3	Duncan & Ryan Associates Ltd	www.duncanryan.co.nz
4	I.T.@Work Recruitment Ltd	www.itwork.co.nz
5	Information Technology Recruitment	www.itec.co.nz
6	Sabre Systems Limited	www.sabrenz.co.nz
7	Sapphire Technologies	www.sapphirenz.com

Eleven general recruitment agencies web sites were included in this study (Table 3).

Table 3: General Recruitment agencies

No	Recruitment Organisation	URL (http: //)
1	Crown Recruitment	www.crown.co.nz
2	CRS Recruitment (Auckland) Limited	www.crsrecruit.co.nz
3	Lawson Williams Consulting Group Limited	www.lawsonwilliams.co.nz
4	Madison Recruitment Management	www.madisonrec.co.nz
5	Martin Personnel Group	www.martinpersonnel.co.nz
6	Momentum Consulting Group	www.momentum.co.nz
7	OCG Consulting Limited	www.ocg.co.nz
8	OPAL Consulting Group	www.opal.co.nz
9	Robert Walters Associates	www.roberwalters.co.nz
10	Sheffield Limited	www.sheffield.co.nz
11	Spherion Recruitment Solutions	www.spherion.co.nz

4.1 Coding of Recruitment Agencies Web Sites

Binary scores were used to record the appearance of each element in the evaluation model on each site, including both IT specialist and general recruitment agencies (Table 4).

Table 4: Site scoring by element

	Information			Transaction Service						Trust			Non-Function Requirement					Promotion								Total score
	Origination	Customer	Vacancy	Job search engine	Candidate registration	CV submission	Vacancy submission	Contractor login	E-mail contact	Legal disclaimer	Privacy statement	Security	Aesthetic effect	Ease of use	Update frequency	Page loading speed	Online help	CV and interview tips	Newsletter	Web site link	Online training	Article and case study	Survey	Job alters	Feedback	
www.candle.co.nz	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25
www.dewinter.co.nz	1	1	1	1	0	1	0	1	1	1	1	1	0	1	1	1	0	0	0	1	0	0	0	0	0	14
www.duncanryan.co.nz	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	1	18
www.itwork.co.nz	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	19
www.itec.co.nz	1	1	1	0	0	0	0	1	0	1	1	1	0	0	0	1	1	1	0	0	0	1	0	0	0	10
www.sabrenz.co.nz	1	1	1	0	1	1	0	1	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	10
www.sapphirenz.com	1	1	1	1	0	0	0	1	0	1	1	1	0	0	0	1	1	0	0	1	0	0	0	0	1	12
www.crown.co.nz	1	1	1	0	1	0	0	1	0	1	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	14
www.crsrecruit.co.nz	1	1	1	0	0	1	0	1	0	1	1	1	1	0	1	1	0	0	1	0	1	0	0	0	0	13
www.lawsonwilliams.co.nz	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	15
www.madisonrec.co.nz	1	1	1	0	0	0	0	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	11
www.martinpersonnel.co.nz	1	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	14
www.momentum.co.nz	1	1	1	1	0	0	0	1	0	1	1	1	1	1	1	0	1	0	0	0	0	1	0	0	0	14
www.ocg.co.nz	1	1	0	1	0	0	0	1	0	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	13
www.opal.co.nz	1	1	0	1	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	11
www.roberwalters.co.nz	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	0	0	19
www.sheffield.co.nz	1	1	1	0	0	1	0	1	0	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	0	16
www.spherion.co.nz	1	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	19

4.2 Scores on Recruitment Agencies Web sites

Scores for IT specialist recruitment agencies and general recruitment agencies web sites are shown in Figures 1 and 2, respectively. The bars labelled with the data value indicate how many elements were present in each specific recruitment agency web site. The longer the bar, the higher the site score. The recruitment agency web sites with a higher score have incorporated a greater number of elements identified in the evaluation model for effective web site design. The maximum value obtainable is 25, which represents the 25 elements defined in the evaluation model for the recruitment agency web sites.
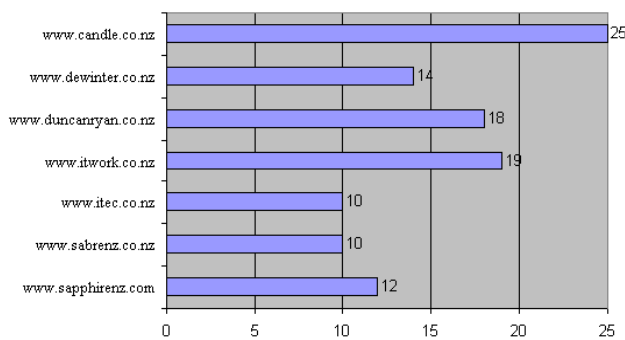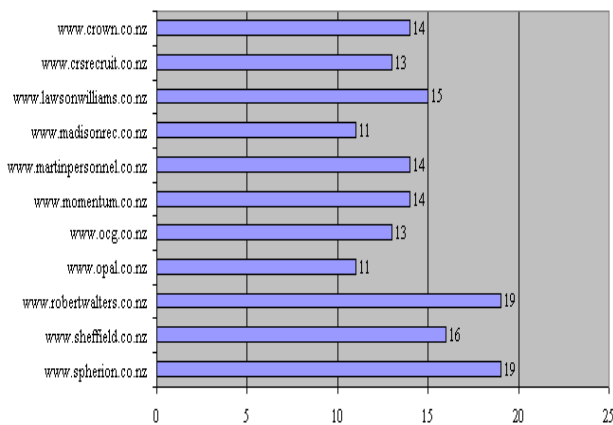
Figure 1: IT specialist recruitment site scores

Figure 2: Generalist recruitment site scores

4.3 Site Score Analysis

The average number of elements by the seven IT specialist recruitment agencies was 15.4 (108/7) per site, more than 12.5, the 50% mark for representing all the elements identified in the evaluation model. The average number of the utilised elements per web site for the eleven general recruitment agencies web site was 14.5 (159/11). The two figures are not significantly different; they reflect that the overall adoption of elements measured on both IT specialist and general recruitment agencies was acceptable, but still of a moderate degree indicating low utilisation of the potential of the Internet for recruitment organisations.

4.4 Element Score on Recruitment Agencies Web Sites

The same method was applied to calculate the presentation of scores gained by each element across the recruitment agencies sites. Bars labelled with the data value indicated how many sites presented the specific element. The elements with higher scores reveal the importance accorded them by the agencies in designing their recruitment web sites. The selected sites (7 and 11 respectively) determine the maximum value.

4.5 Element Scores Analysis

Figures 3 and 4 indicate that there is wide variation across both categories of sites with respect to the use of the different elements of the model. Both categories paid relatively more attention to the information and trust categories. In contrast, the organisations did not pay much attention to transaction services and promotion.

4.6 Key Findings

Both the IT specialist and general recruitment agencies web sites received low and medium scores (Table 5). Overall, the findings show that the online recruitment agencies web sites are performing poorly, as measured by this model.

Table 5: Site classification as to effectiveness

Site Score	IT specialist sites (7)			General sites (11)		
	Low (0-13)	Medium (14-18)	High (19-25)	Low (0-13)	Medium (14-18)	High (19-25)
Count/ (Percent)	3 (42.9%)	2 (28.6%)	2 (28.6%)	4 (36.4%)	5 (45.5%)	2 (18.2%)

Table 6: Analysis of Dimensions

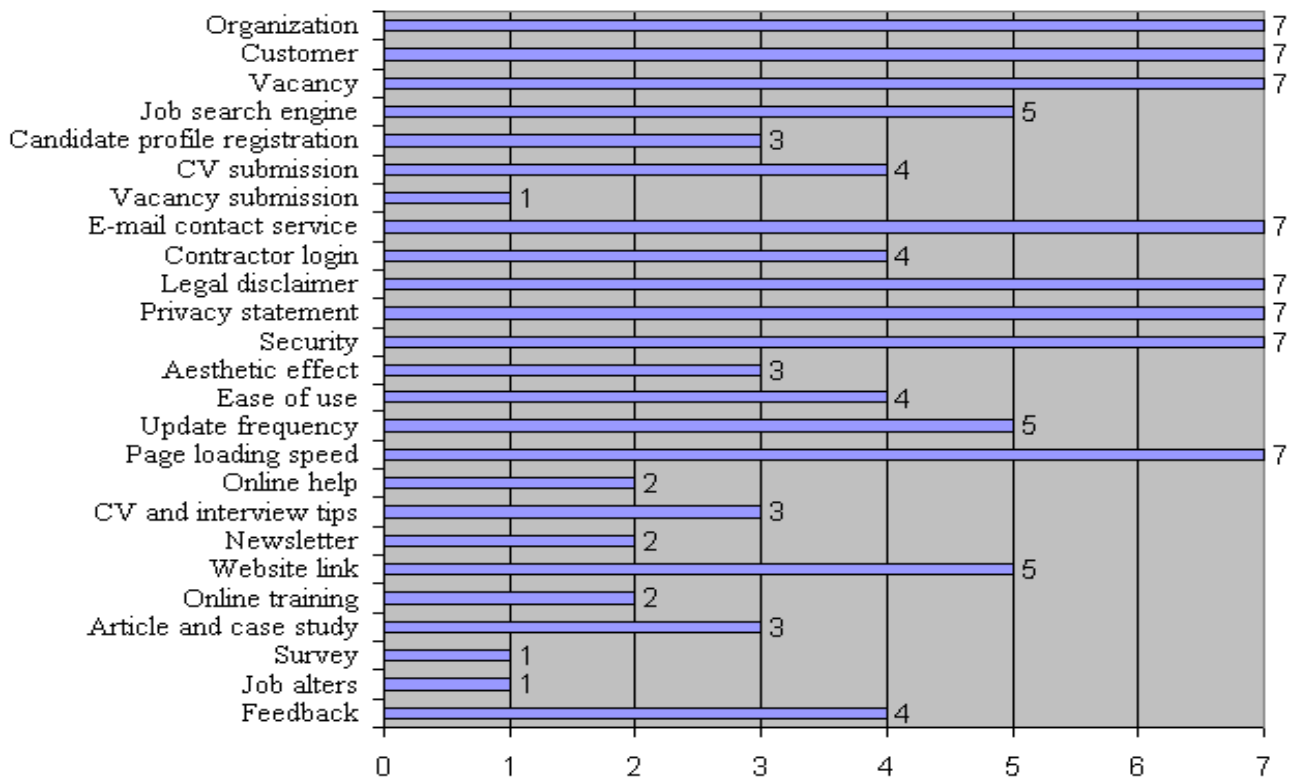| Type	Dimensions	*Dimension Scores*				
			Element			
		Total	Number	Average	Maximum	Percent
IT specialist	Information	21	3	7	7	100
	Transaction Service	24	6	4	7	57.1
	Trust	21	3	7	7	100
	Non-Function Requirement	21	5	4.2	7	60
	Promotion	21	8	2.6	7	37.1
General	Information	30	3	10	11	90.9
	Transaction Service	33	6	5.5	11	50
	Trust	32	3	10.7	11	97.3
	Non-Function Requirement	40	5	8	11	72.7
	Promotion	24	8	3	11	27.3

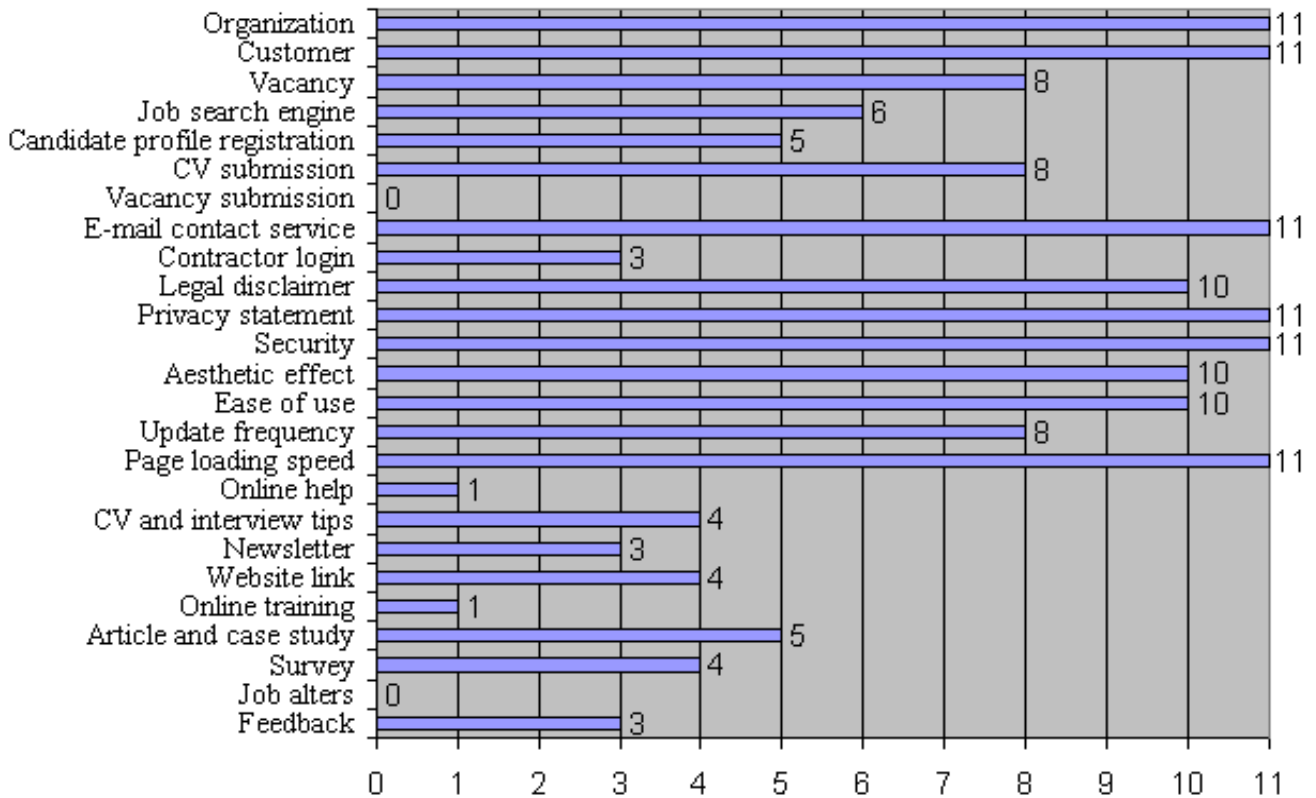**Figure 3: IT specialist recruitment element scores**

Figure 4: Generalist recruitment element scores

Both IT specialist and general recruitment agencies web sites contained elements of all five dimensions used in the study. However, the performance of each dimension varies significantly. Information and trust were the most frequently implemented elements. The findings indicate that the recruitment agencies web sites are informational rather than transactional. The recruitment agencies emphasise the information available at the site. It is also good to see that the trust dimension is considered as a high priority. This is a sound strategy as job seekers are highly concerned about the privacy of their applications. For instance, they might not want their current employer and colleagues to know that they are looking for jobs. In the same way, organisations might not want their employees to know that they are recruiting or if they are, what the remuneration packages might be. However, the lack of transaction service and promotion in both types web sites should be noted.

The requirements of candidates were considered in most recruitment agencies web site, such as job search, and candidate profile registration. Only one web site provided a function to allow client organisations to enter the candidate database. Most web sites have not realised that the web can provide more services for the organisations recruiting employees. The promotion dimension was implemented quite differently among all recruitment agencies web sites. For example, CV format and interview guide are offered by several sites. They are very attractive factors to candidates. The recruitment agency web sites with high scores tended to do to well on the promotion dimension. Overall, the recruitment agency web sites did not provide many options for both candidates and client organisations.

5. Discussion

This section is divided into a discussion of the analysis of the web sites, and some recommendations for the organizations and their web site developers.

5.1 Recruitment Agencies Web Sites Assessment

As the online recruitment agency web sites play important roles in the organisation's business strategies, it is important to evaluate what has been achieved and what challenges are still to be faced. The previous section presented the findings based on content analysis. The evaluation results were based on the site scores and element scores across the IT specialist and general recruitment agencies web sites. The findings indicated the performance of both types of web site were similar.

When looking at the five dimensions - information, transaction services, trust, non-function requirements and promotion, both put the most attention on the information and trust. Sites did quite well on the organisation information and vacancies available, probably due to the fact that recruitment agencies are information-oriented. The organisations try to make a good and confidential impression based on the content of the information and the display of the conditions of the site. In contrast to that

achieved by the online recruitment agencies web sites to date, the challenges faced by the online recruitment services are severe. For example, the web sites evaluated did not make much use of transaction service nor for promotions.

Most recruitment web sites provide some services for job seekers, such as job search, candidate profile registration and login. As this key functionalities improve, the web sites become rich and effective, the candidates can get more value from them. However, the client organisations cannot do too many things by using the recruitment agencies, the reason probably is, the client organisations are more likely to have face-to-face communication with recruitment agencies. They are more passive entities. Only one recruitment agency web site examined offers a service to allow client organisations to enter the candidate database. This allows the clients to access candidates directly, and can seek more suitable people preventing the bias of recruitment agencies.

Performance in the promotion dimension varied significantly. Some sites did well with respect to this dimension, but some sites did little. The promotion dimension can attract the customers to visit the web site. For example, online training and learning, CV format and interview guide, newsletters and web sites link are very useful to candidates. By visiting the web sites that tend to have more promotional elements, the job seekers can get not only current job information but also future career advice. They are more likely to revisit and the agency retain their custom.

5.2 Recommendations

The focus is on the evaluation of online recruitment agencies web sites in New Zealand. The findings represented the recruitment agencies web sites as of poor performance. What should an effective recruitment agency web site contain? We should take into account the needs of the customers and the purpose of the web sites.

The customers want recruitment agency web sites with sufficient and timely information, confidential service and quick response. In order to interact effectively with the customers, the transaction services and promotion need to be enhanced on the recruitment agencies web sites. In addition, some elements, such as CV format, should become standard.

6. Conclusion

The focus of the study is on content analysis of online recruitment agency web sites. By examining the current achievement of these web sites, we may enhance our understanding of how to better develop an online recruitment agency web site. The evaluation of recruitment web sites in this study was based on a previously developed usability model featuring five major dimensions – information, transaction service, trust, non-function requirements, and promotion. Each dimension comprises different elements. The findings from scoring the sites and elements respectively indicate

that the online recruitment agency web sites studied do not perform in a uniform manner, and most are of poor presentation. Transaction services and promotion should be improved to enhance the effectiveness of the web site. However, the single evaluation method, and the small (although exhaustive) sample size may limit the generalisability of the study. The job recruitment industry's use of web sites for this purpose is in its infancy. A longitudinal study would provide a more comprehensive and thorough examination of the use of the Internet by this industry.

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