

EVALUATION OF FOUR ECOMMERCE WEBSITES FOR  
SPECIFIC WEBSITE DESIGN FEATURES

BY

KIRUBASHIN NADARAJH PILLAY

Submitted in partial fulfillment of the requirements for the degree of  
MASTERS IN BUSINESS ADMINISTRATION

Graduate School of Business, Faculty of Management  
University of Natal (Durban)

Supervisor: Advocate L. Gibson

September 2003

# CONFIDENTIALITY CLAUSE

10 September 2003

TO WHOM IT MAY CONCERN

RE: CONFIDENTIALITY CLAUSE

Due to the strategic importance of this research it would be appreciated if the contents remain confidential and not be circulated for a period of ten years.

Sincerely

  
K.N. Pillay

## DECLARATION

This research has not been previously accepted for any degree and is not being currently submitted in candidature for any degree.

Signed \_\_\_\_\_

K.N. Pillay

096401

Date 10 September 2003

## ABSTRACT

Many companies involved in the seed industry have launched ecommerce ventures, these include amongst others, Starke Ayres, Johnny's Selected and Opposition 1. Amazon.com is the undisputed leader in ecommerce retailing. There are various website design features that are available that can be used to enhance the users online experience; however the implementation of these features are inconsistent across ecommerce websites. The websites of Starke Ayres, Johnny's Selected, Opposition 1 and Amazon.com were evaluated against a list of website design features (best practices model) that would enhance the user's online experience when interacting with the website. The best practices model was setup considering the user enhancing website features that would satisfy the website functional requirements of Content, Communication, Commerce and Community, as well as user enhancement through the use of navigation features. The cluster analysis was conducted to establish the relatedness of the four websites for the implementation of the website design features identified in the best practices model. It was found that the websites used a varying number of website design features that would enhance the user's online experience. Also, none of the sites satisfied the best practices model completely, thus there is room for improvement even for Amazon.com. It was recommended that Starke Ayres and Opposition 1 commence the improvement of the website with the implementation of the low cost features which are relatively easy to implement as these would significantly improve the website without the requirement of large amount of capital. Significant investment of capital will however be required to improve the website so that it is at the cutting edge of website design. The website needs to be developed into a cutting edge website in the industry so that the company can develop its ecommerce venture into a strong competitive advantage.

## **ACKNOWLEDGEMENTS**

I would like to thank the following for their assistance in conducting this study:

1. Starke Ayres (Pty) Ltd for allowing me opportunity to conduct this study.
2. To my loving wife Nirvana, for her assistance in compiling the report.
3. Lee Gibson for his supervision of the study.

## CONTENTS

		<b>PAGE</b>
<b>CHAPTER 1</b>	<b>:</b> <b>INTRODUCTION</b>	<b>1</b>
<b>CHAPTER 2</b>	<b>:</b> <b>LITERATURE STUDY</b>	<b>6</b>
<b>CHAPTER 3</b>	<b>:</b> <b>METHOD</b>	<b>24</b>
3.1	Comparison Websites	24
3.2	Measurement Instrument	26
3.3	Best Practices Model for Website Design Features	26
3.4	Statistical Analysis	28
3.5	Assumptions	29
3.6	Limitations of Study	29
<b>CHAPTER 4</b>	<b>:</b> <b>RESULTS AND DISCUSSION</b>	<b>30</b>
4.1	Content	32
4.2	Communication	37
4.3	Commerce	43
4.4	Community	55
4.5	Navigation	59
<b>CHAPTER 5</b>	<b>:</b> <b>CONCLUSION</b>	<b>63</b>
<b>REFERENCES</b>		<b>65</b>
<b>APPENDIX A</b>		<b>I</b>

## LIST OF TABLES

		PAGE
<b>TABLE 1.1.</b>	Summary of Ecommerce Business Models	4
<b>TABLE 2.1.</b>	Summary of Ecommerce Business Models	9
<b>TABLE 4.1.</b>	Presence or Absence of Content Website Design Features	34
<b>TABLE 4.2.</b>	Presence or Absence of Communication Website Design Features	39
<b>TABLE 4.3.</b>	Presence or Absence of Commerce Website Design Features	47
<b>TABLE 4.4.</b>	Presence or Absence of Community Website Design Features	57
<b>TABLE 4.5.</b>	Presence or Absence of Navigation Website Design Features	61

## LIST OF FIGURES

		<b>PAGE</b>
<b>Figure 2.1.</b>	Internet Marketing Strategy Grid	7
<b>Figure 2.2.</b>	The Stages of Development for an Ecommerce Website	15
<b>Figure 4.1.</b>	Dendrogram of Website Relatedness based on overall Website Features	31
<b>Figure 4.2.</b>	Dendrogram of Website Relatedness based on Contact Website Features	33
<b>Figure 4.3.</b>	Dendrogram of Website Relatedness based on Communication Website Features	38
<b>Figure 4.4.</b>	Dendrogram of Website Relatedness based on Commerce Website Features	44
<b>Figure 4.5.</b>	Dendrogram of Website Relatedness based on Product Information in Commerce Website Features	46
<b>Figure 4.6.</b>	Dendrogram of Website Relatedness based on Customer Service in Commerce Website Features	50
<b>Figure 4.7.</b>	Dendrogram of Website Relatedness based on Community Website Features	56
<b>Figure 4.8.</b>	Dendrogram of Website Relatedness based on Navigation Website Features	60



## CHAPTER 1

### INTRODUCTION

The South African seed trade is valued at over R900million annually. Of this amount, 65% is accounted for by agronomic seeds, 18% by vegetable seeds, 12 % by forage seeds and flower seeds is at 5% of total market (Sansor, 1997). There are many seed companies in the country competing for a share of this market. The level of competition is increased in recent years with the competitors looking for new ways to gain a competitive advantage.

The seed companies generally have two segments to its customer base. The first segment is made up of the professional growers and the second tier is made up of the home gardeners. The professional growers account for the majority of seed sales, however, the home-gardeners make a significant contribution to the bottom line of the company and can therefore not be ignored. The home-gardeners are differentiated from professional growers by the lower individual quantities of seed they purchase and the level of service they receive.

The professional grower is characterized by the purchasing of large quantities of seed by a smaller number of individuals than is the case with home-gardeners. The professional growers are serviced by full-time sales representatives. They are also provided with technical backup through a number of Crop Specialist Managers who provide technical support for their respective crops. Should a professional grower experience a problem with the product, he has access to a network of support staff that will be able to assist him and resolve the problem to prevent a recurrence. Often the problem is not with the product but with the management of the product and it is up to the technical advisors to give the professional grower possible remedies to the suboptimal performance of the varieties.

The home-gardener does not have access to this support structure. The home gardening segment is characterized by a large number of individual customers

that purchase small quantities of seed. As a result of the large numbers of customers, it is difficult to provide support for each of these customers. The information available to the home-gardener from the company is limited to that printed on the back of the packaging. The home-gardener generally purchases the product from the local supermarket or general dealer.

With the advent of the internet, its inherent functionality has added a new dimension to the way companies carry out their business. The seed industry has also been impacted by the trends in information technology. The seed industry has traditionally been very conservative in the adoption of new technologies, the players tend to want a guarantee that their investments in new technologies would provide the required returns. However, the use of the internet in the carrying out of electronic commerce (ecommerce) cannot provide these guarantees. The question that arises is what would happen if the competitors managed to develop their ecommerce initiatives into a competitive advantage? Companies are implicitly forced to enter the ecommerce arena for fear of falling behind the competitors.

Why should Brick and Mortar businesses move to the web? The net enables business to interact with their customers on a more relationship based level than a transactional level. Due to the multitude of customers that a firm is trying to service, it has become almost impossible to build relationships with all the customers. The main limitation in building the relationships is our inability to capture all the information required to develop these relationships in a feasible way. The emphasis in business nowadays is to chase volumes which limits customer interaction time thus further limiting the ability to build relationships with the customers. The net allows for the capture of this enormous amount of information that can be used in customer relationship building. The Net thus allows the emphasis to be placed back on the relationship with the customer rather than just the transaction, as was the case about 100 years ago. With the Net, companies can concentrate more resources on customer relationship development, reallocating those resources

that would normally have gone into opening a new branch for instance (Rowley, 2002 and Hoque, 2000).

The internet allows the corporates to compete on Reach, Richness and Affiliation. Reach impacts on competition in that the global population that has access to the internet and uses your product forms your potential market. Richness is achieved through the detailed information retrieved about your customer base, and this information can be drilled down to individual transactions if needed. Ecommerce ventures can now affiliate themselves with customers, that is, they have the interests of the customer at the core of the business and not another manufacturer (Evan and Wurster, 1999).

The net has resulted in the breakdown in time and space from the enterprise point of view. Business can be conducted anywhere in the world, 24hours a day 365days of the year. This characteristic coupled to low barriers of entry makes competition on the Web very chaotic and intense. Competitor differentiation comes in the form of price and quality of service, and the ability to market effectively to their customers (Hoque, 2000).

The databanks of information from online transactions is available to the marketers, to target specific market segments and individual buyer needs. The information obtained can be used to identify trends in buying behaviour as a buying history on a per customer basis is available (Hoque, 2000).

The business models that are engaged in ecommerce are Business-Consumer(B2C), Business to Business (B2B), Business to Government (B2G), Consumer to Consumer(C2C), Consumer to Business(C2B), Consumer to Government(C2G) (Napier et al, 2001). Descriptions and examples of ecommerce ventures that use these models are given in Table 1.1. below. The website may receive millions of visitors, however, not all of the visits are converted into sales (Betts, 2001). Approximately 3% of visits actually result in sales, thus there are 97% of visits that need to be converted to buyers. It is important that a higher percentage of visits be converted into

**Table 1.1.** Summary of Ecommerce Business Models (adapted from Napier et al, 2001).

Model	Description	Examples
B2C	Business to Consumer: Sells products directly to consumers	Amazon.com, Incredible.com Kalahari.net
B2B	Business to Business: sells products or services to other business or brings multiple buyers and sellers together in a central marketplace.	Chemdex, VerticalNet
B2G	Business to Government: business selling to local, state and federal agencies.	eFederal, eTax(SARS)
C2C	Consumer to Consumer: consumers sell directly to other consumers	Ebay
C2B	Consumer to Business: consumers name own price which business except or decline.	Priceline.com

sales. A well designed website will help increase the conversion rate of visitors.

The interface between the customers and the company is the ecommerce website. The ecommerce website allows visitors to interact with the website and to allow the company to connect with customers, supply chain members,

off-site manufacturers and employees. This interaction may be simple or relatively complex. The website thus plays an important role in the interaction of the company with these users, as it is the interface between the users and the company (Stimmel, 2001).

A number of seed companies have created an online presence through websites. The features and functionalities that are present on the websites vary and do not necessarily resemble those of well known websites such as Amazon.com or other popular ecommerce ventures. There are various features that a website can have that would influence the interaction of the users with the website. This study is thus conducted to evaluate four websites, namely, Starke Ayres, Amazon.com, Johnny's Selected Seed and Opposition1 , so as to establish whether these have the website design features that a website should have in order to enhance the users' online experience when interacting with the website.



## CHAPTER 2 LITERATURE STUDY

### 2.1. General

Many companies embark on ecommerce ventures without first developing their ecommerce strategies (Saban, 2001). This results in a fragmented and uncoordinated approach to ecommerce. Often, the website launch precedes the strategy development. For the maximization of returns for the investment in an ecommerce initiative, strategic preparedness is a must. Strategic preparedness implies the development of a strategic plan before the launch of the website. To build an effective ecommerce strategy, the firm must adopt an appropriate business model based on factors such as its position in the industry, competitiveness and levels of acceptable risk and so on. The second requirement is to have a flexible strategic planning process for the initiative. The third requirement is the alignment of the ecommerce strategy with that of its conventional business strategy.

Ecommerce has the inherent ability to expand the company's market to beyond its current network. The company is also able to increase its visibility in the sector in which it is participating. As mentioned earlier, customer relationships and responsiveness can be maximized through ecommerce applications. The company could also create new services for consumers as well as reduce costs of completing the sale (Napier, Judd, Rivers and Wagner, 2001).

Many companies have realized that it is important to have an online presence (Watson and Zinkhan, 1997). The question that arises is how aggressively should the company develop its internet strategy? This question can be elucidated by considering two factors, namely, the number of customers that are internet users and the information content of the company's products. These factors and responses are represented in Figure 2.1. below. For companies in the High-High quadrant, it is essential for aggressive development of the firm's ecommerce strategy as the customers would expect

to interact with the firm through its website. Firms in the Low-High category (Top-left quadrant) should use the internet to build brand awareness or encourage online ordering. The firms in the High-Low quadrant (bottom-right), should experiment with their web-marketing strategy as there is time available before critical integration is required. The Low-Low category requires minimal investment in the ecommerce strategy, however, this does not mean no investment. The firm should drive the development of this quadrant and transform it to one of the other quadrants, and eventually into the High-High quadrant.

		<b>Information Content of Products</b>	
		<b>Low</b>	<b>High</b>
<b>Number of Customers with Web Access</b>	<b>High</b>	Image Building or electronic ordering	Critical Integration
	<b>Low</b>	Minimal	Pilot Projects

**Figure 2.1.** Internet Marketing Strategy Grid (Watson and Zinkhan, 1997)

Companies need to at least understand the use of the internet in ecommerce so that they can effectively establish what the impact on the company would be should their opposition adopt the technology and distribution channel. Companies may be forced to participate in ecommerce by the participation of competitors and customers. Should your customers wish to purchase online, and your competitor has the facility and you do not, the customer will

purchase the product from the competitor. It is therefore essential for the company to assess the risks and opportunities of ecommerce so as to establish what is possible. For traditional business, it is quite simple to create a web presence but a web-based business model is more difficult to establish. (Ghosh, 2000).

For ecommerce enterprises to be successful, they will have to include the ability to market, demonstrate and configure their products and services. Real-time information must also be integrated into the back-office systems of both the enterprise and its suppliers. The increase in efficiency along the value-chain of the company allows for an increase in customer satisfaction (Hoque, 2000).

One of the drivers of ecommerce proliferation has been the threat to conventional businesses by ecommerce startups. However, the internet has not seen the demise of the traditional brick and mortar businesses as predicted. These businesses are actually strengthened by the internet by creating a new channel for distribution (Rowley, 2002). Some of the main threats and opportunities related to ecommerce are given in Table 2.1. below.

It was also thought that the internet would realize the death of the middleman (Carr, 1999). This outcome could be realized, as the manufacturers would be able to supply directly to the consumers. Thus there would be a reengineering of the supply chain which would result in disintermediation, thus draining profits from distributors and returning them to the manufacturers. This has however, not occurred, the opposite is actually true. Consumers prefer to have choice, that is a broad selection of goods, which would not be supported by manufacturers. Transactions over the internet require a number of intermediaries for processing to be completed, this leads to hypermediation being the opposite of disintermediation.



**Table 2.1.** Threats and Opportunities for Ecommerce (Rowley, 2002).

**Threats**

Increasing customer expectations about choice.

Pressure on product margins

Barriers to entry are minimal

Size does not matter as small to medium enterprises can adapt easily.

Disintermediation, direct relationship between producers and customers

Conflicted legal environment

**Opportunities**

Opportunity to choose a new business model.

Redefinition of business relationships

Cost savings on transactions

Opportunity to redefine relationships with customer

Access to new global markets

Customer knowledge

Increased speed and accuracy of information exchange

Brick and Mortar businesses generally make similar mistakes that result in the demise of their ecommerce ventures. The reason for the collapse of these ventures range from the lack of commitment of resources to a lack of understanding that ecommerce requires the use of non-conventional strategies in conjunction with conventional strategies. These non-conventional strategies are very volatile and have short life-cycles which traditional managers are not comfortable with. Most companies try to emulate the Brick and Mortar models in the same form online, this follows from a lack of understanding of the functionality of the internet and its requirements (Kanter, 2001). The entire organization must also go through an attitude change to help with the implementation of the ecommerce strategy (Maruca, 1999 and Couto, 2000). The benefits of the ecommerce venture must be communicated to all stakeholders as its success is dependent on their positive support and not their negative attitude.

The question of how to sell is generally a complex issue for a company (Nunes, Wilson and Kambil, 2000). The avenues available to companies to sell their goods are somewhat limited in that the choice of one avenue tended to exclude another. Also, with the increase in the number of transaction mechanisms used, there is an increase in the administrative burden placed on the company. With the advent of the internet this limitation has been removed. The company now has a number of alternate mechanisms, that are not necessarily mutually exclusive and the multi-mechanism transactions can be concluded efficiently without the administrative burden. Some of these mechanisms include Dynamic Pricing, Static Pricing, Auctions and Spot, amongst others. The company can include all of these mechanisms if it wished to, as the internet would allow for the relatively easy conclusion of the transactions.

The internet allows the business to transform customer relationships and to displace traditional sources of value (Treese and Stewart, 1998). Using these principles, four strategies are evident, namely, the Channel Master, the

Customer Magnet, Value Chain Pirate and the Digital Distributor. The Channel Master works by developing deeper relationships with its customers, through the use of the internet; the strategy is concentrated around products, and concentrating on the best possible way to distribute the products. The customer magnet strategy is used to attract new customers or customer groups to the company. This strategy is moulded around the customer and focuses on the delivery of a broad range of products and services to these customers; the company adopting this strategy seeks to be the destination of choice for the products and services required by the specific customer group. The Value Chain Pirate captures someone else's profits by displacing them from the value chain. The focus here is on the value-chain, looking for opportunities to bypass upstream and downstream suppliers in an attempt to bring the consumer closer to the supplier in the value chain. The digital distributor attempts to reorganize its products so as to distribute what it can digitally.

It was thought that the internet would be a haven for bargain hunters resulting in severe downward pressure on prices (Brynjolfson and Smith, 2001). This is however being dispelled by the like of Amazon.com and similar ventures which do not subscribe to the ultra-discount model. These companies have shown that brand equity is still an important factor in concluding deals with customers, that is, customers do not necessarily go for the cheapest price that they can find the product at. Branding development is still an important strategic issue, even in ecommerce.

## **2.2. Business to Consumer (B2C) Ecommerce Applications Models**

These markets are characterized by the large number of relatively low value transactions by a large consumer base. The transactions are also less regular which makes it more difficult to predict the growth (Rowley, 2002).

### **2.2.1. E-Tailing**

These applications are aimed at selling goods and services using the Net as a medium. The main aim is to maximize profits through sales conducted only

over the internet. E-Tailers have two main goals, that is, increase revenue through new sales and aggregate a community of buyers for targeted one to one marketing to stimulate impulse buying (Hoque, 2000). A key advantage E-tailers have over conventional retailers is that a well designed portal can create opportunities for multiple revenue streams. Customers also have unlimited access to the companies products and services (Hoque, 2000)

### **2.2.2. Bidding and Auctioning**

In this application, consumers bid for items placed by suppliers with the highest qualifying bid that secures the purchase of the product or service. Using the bidding system, suppliers are placed in contact with millions of buyers, and almost anything can be put up for auction. The Net has allowed auctions to be conducted with ease and has expanded the auction method to many more participants than the traditional form of auctions. The online auctions have become so popular that traditional E-Tailers are including auctions as part of there revenue generating activities (Hoque, 2000).

### **2.2.3. Customer Care and Customer Relationship Management**

Customers have been given access to vast amounts of information and access to knowledge with the advent of the internet. They are thus continually comparing products and making decisions relative to competitor's products. As such, retailing involves interaction with the individual customers to ensure that their needs are being met. As such, the individual customer is central to the whole process of retailing. In this, the digital economy, Customer care applications are required by necessity to support a wide range of consumer processes and functionality in an attempt to promote the relationship building experience. Examples of customer care applications include customer profile management and custom content delivery (Hoque, 2000).

### **2.2.4. Electronic Bill Payment**

Benefits of this application are two-fold, payment of accounts can be managed more effectively by the consumer and the need for physical payment delivery, which is often mismanaged by delivery services, is eliminated (Hoque, 2000).

## **2.2.5. Critical Success Factors for B2C Applications**

### **a) Branding**

Traditional advertising is a one way medium, in that we see an advert which then influences our actions. In ecommerce, advertising is a two-way medium, there is listening to customer needs as well as telling customers what you have to offer. Branding in the digital economy has actually transformed into the “encapsulation of actual experienced value,” as opposed to who has the biggest advertising budget in traditional marketing. However, traditional advertising is not excluded from the marketing campaign, as this is required to reach millions of who are not yet on the internet or may be visiting competitors’ sites because they are not aware that you exist. Ecommerce brands are developed by listening and responding to customers’ needs and not catchy advertising (Hoque, 2000).

### **b) One -to-One Marketing**

The most valuable asset in an ecommerce venture is the customer. The customer is however just a click away from the competitors site and the customer can easily be lured away. It is thus very important that customer’s demand for personal and courteous service is exceeded by the company’s one-to-one marketing efforts. One-to-one marketing is about personalizing the service to the customer, providing the customer with relevant product information, knowing his needs and guiding him through the purchasing process. This type of personalized service for the entire customer base is not possible in traditional retailers as the businesses would have to incur tremendous overheads (Hoque, 2000).

In one-to-one marketing, the supplier must aim for economies of scope rather than economies of scale, which means that the business must try to get the customers whole business rather than to have one-time relationships with a large number of customers. Customers also need to be managed individually as their needs are vary. The products and services must be brought to the targeted consumers, thus promoting

impulse buying (Hoque, 2000). One-to-one marketing is directed at producing repeat customers from a pool of customers who you know have an interest in the product.

### **c) Online Communities**

The building of online communities with similar interests in order to generate consumer interest is not a new phenomenon. Regional newspapers served a similar function. The major difference being that individual consumers are not able to customize the newspaper further. Once the readers belonged to the community, they were then subjected to the one way flow of information. The web on the other hand allows consumers to easily generate their own content according to their needs. For success of community building, the following principles need to be adhered to: shared space (a website), shared values, shared language, shared experience and shared purpose (Hoque, 2000).

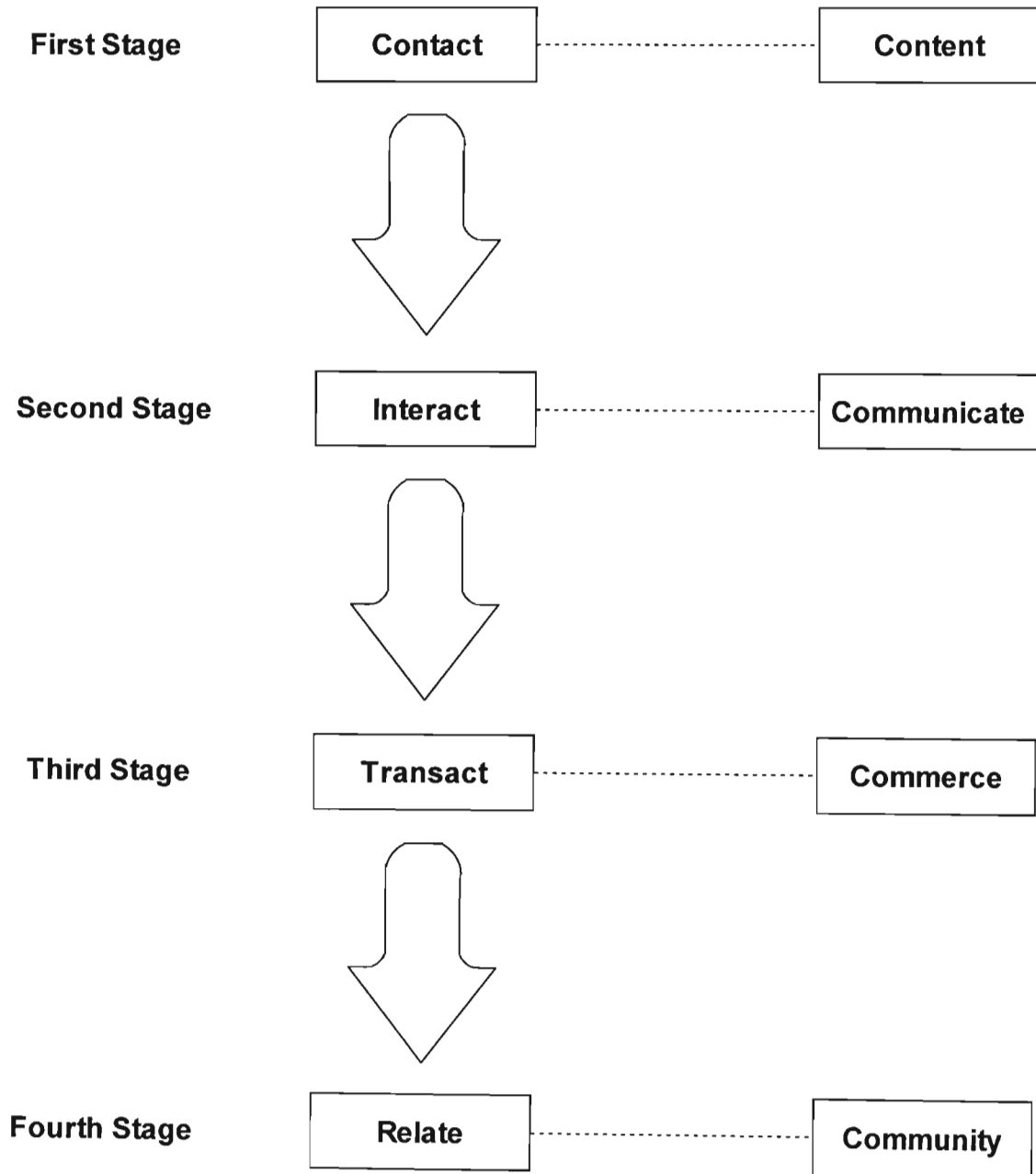
### **2.3. The Website: The Ecommerce Customer-Company Interface**

The website serves different purposes in the development of ecommerce services (Figure 2.2.). In the first stage, it is a means of contact. In this stage of development, the website through its content conveys the corporate image of the company, information about the company and provides contact information. In Stage 2(Interact stage), the website acts as a communications tool that allows the consumer to interact with the company and the company to engage in some targeted marketing. Stage 3(Transact stage) is the commerce stage with the initiation of transactions. The fourth stage (Relate) in the development of ecommerce services is community development, which helps a company relate to its customers (Rowley, 2002).

Visits to a website by consumers can be classified as being (Betts, 2001):

- a) directed-purchase visits where the consumer is ready to purchase right away;
- b) search and deliberation visits where the consumer is researching products, price and terms and will eventually buy;

- c) hedonic-browsing visits where the consumer is doing electronic window shopping;
- d) knowledge-building visits where the consumer is engaged in exploratory browsing to learn about the marketplace, this pursuit may affect the long term purchasing patterns of the customer.



**Figure 2.2.** The stages of Development for an Ecommerce Website (created from Rowley, 2002).

For a successful website, Content, Communication, Commerce and Community are essential prerequisites. The development of the website through the different stages adds functionality to the site, with additive functionality with each additional stage. As the company progresses to the relate stage, the tools used in content and communications are likely to increase in complexity (Rowley, 2002). The website needs to address the needs of each of the types of visits listed above. This can be done by ensuring that the design of the website satisfies the requirements of Content, Communication, Commerce and Community.

The goals, objectives and purpose of the website must be established at the outset. Without these goals, the website could fall short of where it needs to be as a result of the lack of focus (Napier et al, 2001). An important determinant in the setting of these objectives is the target audience, that is, who is going to use the website, is it going to be staff or customers, are the users highly internet literate or illiterate and so on. The function of the website needs to be determined (Stimmel, 2001), the website can function as

1. a storefront for the firm through which it can sell products or services.
2. a place to provide interactive information or to facilitate the gathering of people with similar interests.
3. a means to connect the company to the supply chain
4. a means to connect the company to external manufacturing.

The functions and features of a website can be classified broadly into pre-sales, online sales and after-sales. Efforts that are used to attract customers to the site such as advertising and public relations activities can be classified as being pre-sales functions. The customers purchasing and payment for these purchases over the internet is considered to be online sales and functions such as customer service is considered to be post-sales activities (Liu, Arnett, and Capella, 1997). A well designed ecommerce website will attract customers, and will make them feel that the site is dependable, reliable and trustworthy and creates customer satisfaction (Liu, Arnett and Litecky, 2000, and Anderson and Earl, 2000). Information quality(for example,



relevant, accurate, timely information), learning capability(for example, interactive function between customers and business, help function), playfulness(for example, enjoyment, feeling of participation, charming), system quality( for example, security, rapid accessing, quick error recovery) , system use(for example, low confidence requirement, control, ease of use, track online order status), and service quality(quick responsiveness, assurance, empathy, follow-up service) have all been positively related to a well designed website, that is, taking into account these factors will improve the design of the website and enhance the customer online shopping experience.

There is a discrepancy in what web design experts and website users consider important because users view design factors with different priorities to the designers (Turban and Gehrke, 2000), this may explain why some fancily designed sites are ineffective. A design feature that must be present in the website is feedback on website design by users. This will allow improvements in features that users want to see improved or included in the website. It can also be seen that the “cool stuff” used in website design such as fancy banners and extravagant multimedia effects are on the way out. Consumers are placing emphasis on content and service and they want it fast rather than the glitter that has been associated with websites in the past. This emphasis will direct website design towards speed, navigation efficiency, simplicity, and elegance with an emphasis on customer focus and security.

The online customers experience your website as if they are walking into your place of business (Kienan, 2000), and the user's first impression is a lasting one. The user would probably not return to a poorly designed site especially where the first impression was a negative one. The viewer generally formulates an impression of the website on their first visit, and they are able to gauge whether the site was designed effectively or not (Napier et al, 2001). Good design enhances the probability of a favourable impression by the user. A viewer that has a favourable impression of the website is more likely to become a loyal customer. Site design is an important consideration for

satisfying consumers' requirement of a pleasurable online shopping experience (Szymanski and Hise, 2000). Websites that are fast, uncluttered and easy to navigate have been associated with high levels of customer satisfaction.

In designing the website, the website must exhibit a high degree of usability. The website must communicate the appropriate marketing message to the customer in line with the companies marketing strategy. The site must further support the required functions necessary for effective communication, customer service and transactions. The design of the website is crucial in that the site would not attract and capture regular visitors if it is not user friendly, easily accessible, interesting and the information is value-adding from the users' perspective (Rowley, 2002). The website must show the user what information the site has to offer, how the user can quickly access the information they want and need and where additional information is available if needed (Napier et al, 2001).

Consumers are becoming increasingly intolerant to delays in the processing of websites (Hoque, 2000). Sites with slow download times are being abandoned by users as there are faster more efficient sites available elsewhere. It is thus essential that websites be kept simple thus allowing for quick downloads. However, the site must still be visually attractive to hold the visitor's interest. The site needs to be aesthetically pleasing but not to the extent that it significantly increases download time.

Customers that engage in online purchasing prefer site features that make the shopping experience pleasurable and requiring very little effort (Bellman, Lohse and Johnson, 1999). Thus websites must be directed towards convenience with regards to the purchase process. This implies a requirement for an interface that requires an easy to use purchase interaction. Most ecommerce sites have convenience features such as shopping carts and security features, however, most consumers wanted information on product

availability and the ability to track the order status of their purchases which a large number of sites lack (Kagan, Post and Messier-Noel, 2000).

There are underlying latent factors that influence the consumers to make purchases over the internet (Vellido, Lisboa and Meehan, 2000). These include information privacy, affordability, customer service capabilities and the ability encourage and develop long term relationship building to enhance repeat purchases.

In general, the following measurable factors are used by consumers to evaluate ecommerce websites (Post, Kagan, Burkink and Schmitz, 2002):

1. ease of use and information content in terms of product description.
2. the ability to identify whether an item is in stock or not
3. the ability to track a purchase
4. a privacy policy
5. access to customer services

From these factors consumers place more emphasis on very detailed product descriptions and the ability to check stock availability (Post, Kagan, Burkink and Schmitz, 2002). Although consumers may claim that privacy is important, their online purchasing behaviour, however, does not reflect this. However, it is still important for companies to maintain high privacy levels as this enhances corporate image. Although interactive order tracking and privacy statements are not critical to the consumers decision to purchase over the internet, these features should be included in the design as they are relatively inexpensive to implement and consumer requirements for these features could easily change.

Privacy is a fundamental requirement for online customers (Kiely, 2000). Many consumers are afraid to make purchases online because of the privacy issue. Businesses need to allay the fears of the consumers with regard to their privacy concerns. Customers can be forewarned about the information that will be collected from them and how it would be used in the current and future

transactions. The customers could be offered the choice as to whether the vendor can collect data on the purchaser or to resell the data to third parties. The vendors can make and keep the promise of securing of the data collected from abuse by third parties. Consumers should be allowed access to inspect the data collected about them, to make sure that they are in agreement with the information being stored; the vendor should allow for easy access to this information by the purchaser.

For online internet transaction processing, the vendor requires the purchaser to supply information for payment. For the transaction to be completed, a credit card is preferred as this allows for real time transaction processing. Thus, sensitive information is being transmitted over the internet in the form of credit card numbers and authorization numbers. These transmissions may be intercepted by fraudsters who will then use this information to defraud the purchaser. It is therefore essential to use the highest form of encryption over the internet which at present is 128bit Secure Socket Layer(SSL) encryption. This will protect data interception by unauthorized persons. Besides defrauding the purchaser, the order information could be used to steal customers and orders away from the intended supplier. Thus SSL encryption is to the benefit of the vendor as well as the purchaser (Power, 2001).

Trust has been identified as a factor that influences the user to carry out purchases over the internet (Lee and Turban, 2001). The trust that the user has in the merchant and the user's propensity to trust have an influence on purchasing behaviour over the internet. Trust is important in the developing of Community as can be seen at Ebay, where feedback is the main indication of the trustworthiness of the supplier. Untrustworthy suppliers can be weeded out of the system as consumers would be reluctant to purchase from them because of the negative feedback by previous customers.

The ecommerce website needs to show some form of personalization. Personalization can be overt and covert. In the overt form, the personalization can be a personal greeting using the user's name. In the covert form, the

website can display items that are of interest to the user based on previous visits and items purchased. This personalization allows for one-to-one marketing (Gutzman, 2001). However, excessive or extreme levels of personalization may inhibit online purchasing (Ovans, 1999). Consumers may become uncomfortable with the amount of personal information being stored in a machine that may be compromised by unscrupulous individuals. There may be room for personality detection of the users and the site responds in a form that is line with the users personality, for example an aggressive website with strong marketing may not appeal to a user with a timid personality, thus reducing the chances of a purchase.

With websites, companies would want to attract customers and retain those customers. To encourage customers to return to the site, the use of dynamic content is promoted. Dynamic content changes periodically to encourage the customer to revisit the site regularly (Rowley, 2002). Dynamic content also alleviates the problem of information overload on the part of the user (Gupta and Mathur, 2002). With dynamic content, relevant information can be made easily accessible to the user based on the user's historic profile at the site. The user is not confined to a specific part of the site, and can carry out searches anywhere in the site. These new searches can be added to the profile to provide updated relevancy the next time the site is visited by the specific user. Dynamic content also gives the ability to carry out one-to-one marketing.

Advertising may increase traffic to the site, but it is the improved features that make the online shopping experience pleasurable that keep the customers coming back to the site (Saeed, Hwang and Grover, 2003), thus maintaining the long term growth in customer purchases which translates into increased revenue. Advertising and website features thus have a complementary role.

Another essential design feature that needs to be satisfied in website development is site navigation. Users that link to a site are looking for information. Thus it is important that they find the required information at the

website easily and without fuss. The site will therefore need an effective navigation system that allows the user to easily orientate and find their way around the site. The three click principle, that is where a user requires only three clicks to get to the information required, should be implemented (Rowley, 2002).

The navigational support should enhance the flow of the website, that is, should increase the ease with which users find the information they require. Navigation involves designing and structuring the individual pages, choosing an appropriate site structure, and offering the users tools to find their way around the site (Rowley, 2002). Navigation is also improved by adhering to the principles of consistency, simplicity and context. The user interface should be consistent throughout the website as this will help the user maintain familiarity with the way to get around the site. The hierarchal structure of the menus should not be too deep which may allow the user to get lost. The deeper the structure, the more clicks the user needs to get to the desired information, therefore a flatter structure is preferred (Napier et al, 2001). Context is maintained to show the user where he is in the site, and this is done by using signposts (Rowley, 2002).

Navigation through the sites can also be enhanced by including search tools. These tools are similar to search engines like Yahoo!, but the scope of the search is limited to the contents of the site. This allows the user to quickly navigate to the information required (Rowley, 2002).

Navigation elements are very important in website design. When a user enters the site, from a search engine for example, he will not necessarily enter at the homepage. He will still require the information that he was searching for when he arrived at the page. Effective navigation elements such as a consistent menu that is applied throughout the site, will allow him to do this without having the need to enter the site through the home page (Napier et al, 2001).

It is essential that the website has a site map. A sitemap allows the user get an overall view of the site giving him the opportunity to orientate with the information available on the site. Besides orientating the user, the site map allows the user to skip directly to page of interest. This helps reduce the time that the user needs to find the information required (Napier et al, 2001).

There are various website design features that can be used to enhance the online experience of the user. For a website to be customer or user orientated it needs to adopt as many of the design features that enhance the user's online experience. The number of the design features that need to be included is dependent on the resources available. Some of the design features are easy to implement and have low implementation costs, for example, the privacy statement, whereas other features are more difficult to implement and at much higher costs, for example, website personalization software. Designers of ecommerce websites must ensure that the websites that they build, especially but not exclusively for ecommerce, need to be user orientated so as to enhance the online experience.

## **CHAPTER 3**

### **METHOD**

This is a qualitative study of the websites of Starke Ayres, Amazon.com, Johnny's Selected Seed and Opposition 1 to determine whether these websites conform to the best practices model that has been developed for ecommerce websites. All four websites namely, Starke Ayres, Amazon.com, Johnny's Selected Seeds and Opposition 1 would be evaluated against the best practice model which is indicated by a list of design features that websites should have to satisfy the requirements of Content, Communication, Commerce and Community. Also included in the best practices model are navigation tools that should be used in the designing of the website. Although Amazon.com operates in a different industry to the other three companies in the study, it is at the forefront of e-tailing ecommerce website design feature implementation and as such it is a relevant comparison website in this study.

#### **3.1. Comparison Websites**

##### **3.1.1. Amazon. Com (<http://www.amazon.com>)**

Amazon.com can be considered at the forefront of the e-tailing movement. The success of the company is due to its philosophy of meeting the needs of the consumers of its products, which was initially books but has subsequently expanded to a host of products. The founder of Amazon.com initiated the project with a significant investment in customer relationship management (CRM) and making the online shopping experience pleasurable for the customers. With the CRM software, the store could be customized for each visitor, to the extent that each visitor would have their own custom store that they would visit. The philosophy of Amazon.com emphasized convenience, selection, price and customer service as core to the success of the company. Convenience and customer service are effected through the company's website and the website is the main interface that is available to the customers to connect to the company. Selection and price are satisfied through their operations, where they have direct links to suppliers of their products thus increasing operational efficiencies which allows Amazon.com to



have a wide product selection without the need to carry the inventory; and procurement costs are reduced which places downward pressure on prices. (Rayport and Jaworski, 2002).

### **3.1.2. Johnny's Selected Seed (<http://www.johnnysseed.com>)**

Johnny's Selected Seed is a well established seed company. They have vast experience in the mail-order business. Their services extend to both the home-gardener and professional growers. Their traditional means of sales was through a catalogue that was mailed to clients, these clients then placed orders via fax, mail, email or telephonically. The orders were then shipped to the clients as per the order. With the advent of the internet and its ecommerce functionality, the company implemented a website that would act as a further channel through which consumers could interact with the company. The company has the ability to ship throughout the world, thus making the ecommerce initiative ideal as this medium would give Johnny's exposure to world markets using its current infrastructure.

### **3.1.3. Starke Ayres**

Starke Ayres is a leading South African seed company with the main focus being the supply of high quality vegetable seed to the vegetable industry. Starke Ayres has been conducting its business since 1875. In this time, the company was able to acquire in-depth knowledge about the seed industry and has leveraged this knowledge to keep it at the forefront of the industry. As with a number of companies in the country, Starke Ayres has started to expand its operations beyond the borders of South Africa. The company is now competing in a number of foreign markets. The corporate head office for Starke Ayres is located in Cape Town. Sales functions are distributed throughout the country and there is a seed processing facility based in Kaalfontein in Gauteng. This decentralized marketing and distribution structure creates significant management challenges for the company.

### **3.1.4. Opposition 1**

This company operates directly in South Africa and has a similar distribution network to that of Starke Ayres. This company can be considered a direct competitor to Starke Ayres. Both companies want to exploit the features of the internet to improve efficiencies and to exploit the new channel. Opposition 1 also has a website through which it hopes to communicate with its customers. The inclusion of this competitor in the analysis was essential with the aim that weaknesses in Opposition 1's website could be exploited so as to maintain Starke Ayres's leadership position not only in the brick and mortar operation but in cyberspace as well.

### **3.2. Measurement Instrument**

The measurement of the relatedness of the websites has been done using a Website Evaluation Sheet (Appendix A). This Website Evaluation Sheet is comprised of a list of design features, which constitute the best practices, that are necessary for user orientated ecommerce websites. The evaluation sheet would be completed by the researcher when evaluating each of the sites in the study.

The data obtained will be of a binary nature that is, the website design feature was either present or not. The resulting data will therefore be nominal in type. Being an exploratory study, the nominal data would be sufficient to identify the relationships that are present among the websites in the study.

The measurement scale is reliable and valid. It is reliable in that if it is repeatedly applied to the detection of the site design features, the results would be repeated. The measure does indicate the relatedness of the websites, as websites that have the same value for the design features would show the presence of a relationship.

### **3.3. Best Practices Model for Website Design Features (Design Features to be Investigated)**

The presence or absence of the following website design features would be investigated.

### **3.3.1. Content Features (Contact)**

- Company History
- Contacts and key people
- Achievements
- Employment opportunities
- Maps to physical locations
- New content update (date)
- New products
- Press releases
- News
- Company and Industry Events

### **3.3.2. Communication (Interact)**

- Targeted Marketing
- Frequently asked questions
- Customer Polls
- Newsletters
- Content Update Reminders
- Webcasts
- Product Feedback
- Website Design Feedback

### **3.3.3. Commerce (Transact)**

#### **a) Product Information**

- Product Catalogue
- Product Information and Specifications
- Product Evaluations
- Stock Levels and Delivery times
- Order Tracking
- Special Offers

#### **b) Customer Service**

- Online Transaction Processing
- Shopping Cart
- Secure Online Sales
- Order Processing Support
- Returns Policy and Support
- Personalized Website Content
- Product Support
- Help Desk (Email, Website, Telephone, Fax)
- Toll-free Number

#### **3.3.4. Community (Relate)**

- Privacy Statement
- Trust Statement
- Security Statement
- Chat rooms
- Expert Forums
- Bulletin Boards
- Links to Other Sites with Useful Information

#### **3.3.5. Navigation**

- Three Click Principle Used
- Consistent (Same throughout site)
- Simple (Shallow Hierarchal Structure)
- Context (Signposts)
- Search Tools
- Site Map

### **3.4. Statistical Analysis**

The data obtained from the evaluation sheet will be tabulated and then analyzed using hierarchal cluster analysis for each main aspect above namely, Content, Communication, Commerce, Community and Navigation. The clustering will be done using the rules of the Average Linkage Method, with the Simple Matching binary measure used for the calculation of the

distance to be used in the clustering. The cluster analysis will be used to generate dendrograms. These dendrograms will be used to graphically display the degree of relatedness amongst the different websites in the analysis for the main aspects of interest. The statistical analysis will be done with the aid of the SPSS statistical analysis package.

### **3.5. Assumptions**

- a) The website design features that have been identified in the Best Practices Model reflect features that would enhance the user's online experience.
- b) Each of the features identified in the best practices model have an equal weighting in the analysis.

### **3.6. Limitations of the Study**

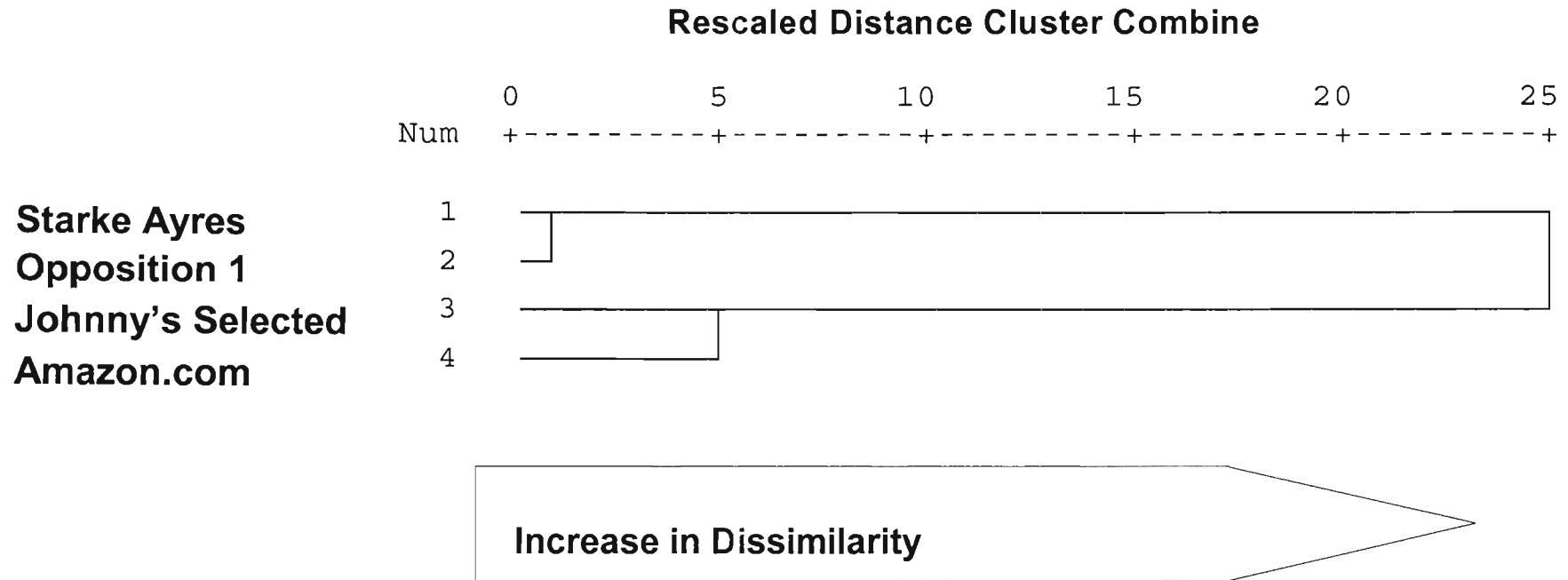
- a) Since the study is being based on only four websites, the results reflect a fixed model which implies that generalizations are not valid and that the analysis is only valid for this group of websites.

## CHAPTER 4

### RESULTS AND DISCUSSION

As can be seen in tabulated results (Table 4.1 to Table 4.5), the different websites may make use of a varied number of website design features. The established websites such as Amazon.com can be seen to use a number of the design features in its website. However, not all design features are being used for example, Amazon.com do not have a toll-free number for customer support, all the customer support is done through the website or via email. This is a result of their strategy to develop the use of the website as their main interface to customers. The tabulated results indicates that Starke Ayres's website is lacking a number of the features that Amazon.com utilizes, the Opposition 1 is also faced with a similar situation. Johnny's Selected also uses a number of the design features that are found in the best practices model. Of the website design features identified in the best practices model the utilization by the different websites is: Amazon.com use 78%, Johnny's Selected use 59% , Starke Ayres use 26% and Opposition 1 use 26%.

Figure 4.1. is the dendrogram of the relatedness of the websites in general, using the criteria listed in the Website Evaluation Sheet (Best Practices). From Figure 4.1, it can be see that there are two clusters that can be identified. The first cluster groups Starke Ayres and Opposition 1 together and the second cluster groups Johnny's Selected and Amazon.com together. The dissimilarity between the two clusters is large, indicating that there are significant differences between the two clusters. Since Starke Ayres and Opposition 1 are in the same cluster, this implies that these websites are more similar to each other in terms of design features than to Johnny's Selected and Amazon.com (which are in turn more similar to each other). If best practices model is assumed to be the standard requirement for website design features for an ecommerce website, then Starke Ayres and Opposition 1 are far away from this standard, whereas Johnny's Selected is much closer to the standard and Amazon.com is the closest to the standard relative to the websites included in the study.



**Figure 4.1.** Dendrogram of Website Relatedness based on overall Website Features

In general, the Starke Ayres and Opposition 1 website caters for the professional growers in the vegetable industry. The home gardeners have not been considered in the design of the site. The website gives Starke Ayres and Opposition 1 the perfect opportunity to give more support to the home gardener without having to spend money on the impossible task of product support to the multitude of home gardeners through sales representatives. This support can be given to a growing number of users of the product through the website as a growing number of home-gardeners have access to the internet. Johnny's Selected has been able to accommodate both the home gardener and professional gardeners by providing websites that meet the needs of the different segments. The Johnny's website shows that the implementation of ecommerce to satisfy both the home gardener and professional grower is relatively simple and that both segments can be satisfied over the internet.

#### **4.1. Content**

From the point of view of content features, there are significant differences amongst the various websites in the study. In Figure 4.2., two clusters can be identified. Again, Starke Ayres and Opposition 1 are clustered together and Johnny's Selected and Amazon.com are allocated to the same group; there is a significant difference between the contact design features used between these two clusters.

Starke Ayres is lacking information about the history of the company. The current company information is just a very brief offering of what the company does, without any detail about how the company has been established and its growth towards becoming a market leader. This information will indicate to users that the company is not a fly-by-night operation and has a reputation that has developed over a long period, which may ease the customers concern about dealing with the company. Information on the achievements of the company are also lacking, publication of the achievements of the company would highlight and reinforce why the company is a market leader, and the





**Figure 4.2.** Dendrogram of Website Relatedness based on Contact Website Features

**Table 4.1.** Presence or Absence of Content Website Design Features (✓ - Present, X – Absent)

<b>Content Features (Contact)</b>	<b>Starke Ayres</b>	<b>Opposition 1</b>	<b>Johnny's Selected</b>	<b>Amazon.com</b>
Company History	✓	✓	✓	✓
Contacts and Key People	✓	✓	✓	✓
Company Achievements	X	X	✓	✓
Employment Opportunities	X	X	✓	✓
Maps to Physical Locations	X	X	✓	X
New Content Update Notice	X	X	✓	X
New Products	X	✓	✓	✓
Press Releases	X	X	✓	✓
News	✓	✓	✓	✓
Company and Industry Events	X	X	✓	✓

website would be a suitable medium in which to publish this information. The other websites give more detail on the history of the company.

Amazon.com and Johnny's Selected are the only two companies that give access to press releases on their websites. Press releases also promote the company's image, when something new is done, the press can be used to promote the new service or product. Press readers may miss the articles in the press and may never be informed of the new product or service. An archive of the press releases is probably kept at the company but this is not easily accessed by the public. The website provides a convenient means of making these press releases available. Being included in press articles can have a positive spin-off from a marketing point of view. Articles that have been published may be included in the website, with the permission of the relevant authors. This extends the life of the articles as the website users may access these articles a considerable time after the paper publication.

Although the Starke Ayres, Opposition 1, and Johnny's Selected website has contact telephone numbers, these are limited to the numbers for the regional offices and the head office. Amazon.com provides email contacts as a result of its internet based strategy. The details of sales representatives and customer service representatives are not given. By providing these details, customer contact can be enhanced as the customer can contact exactly who they wish to thus reducing the potential of being shuffled around. In this way, the customer's service experience can be enhanced.

Although Starke Ayres and Opposition 1 have employment opportunities available, they are not using the website to promote these opportunities. Many potential candidates would visit a company's website to investigate the company as a potential employer. This can be used to the advantage of these companies to make contact with potential employees. The website can also be used to advise potential employees as to the recruitment process that is prevalent in the company. Johnny's Selected and Amazon.com have implemented recruitment strategies that make use of their websites.

The display of company and industry events is an effective means of encouraging potential users to visit the site. For instance, if there is a detailed calendar for gardening events in the country, then home gardeners will want to visit the site to lookup this information, when they are at the site, they may then browse through the rest of the site and this provides an opportunity to market some of company's products to these visitors. Although other sites may have the information, people prefer to visit sites where more aggregated information is available so that they do not have to visit many different sites to get the information they require, also it is easy to remember the addresses of a few sites than many. Starke Ayres and Opposition 1 do not implement any information of company and industry events whereas Johnny's and Amazon.com have made an effort to implement this feature.

The website can also be used to promote new products and services that have been added to the range. Although Starke Ayres has a catalogue of products, new products cannot be easily identified especially to the user who is unfamiliar with the company's products. Products that have been added to the range should be highlighted; this is done quite effectively by Opposition 1 and Johnny's Selected through their website. Also, product specific marketing is absent from the site. A possible way to do this is to choose a specific product or product group, for example cabbage, and highlight the cabbage range for a period of time say, a month or just prior to planting season. Amazon.com uses website personalization to highlight new products.

In general, the ecommerce website of Starke Ayres and Opposition 1 do not satisfy the Content requirement for an ecommerce website. There are a number of content design features that have not been implemented. The website is not being used effectively or to its full potential to communicate corporate image, innovativeness and market leadership. The cost and effort required to implement these features are low, but the gain in customer satisfaction and corporate image is potentially high. The implementation of these features is a must for the future development of this site.

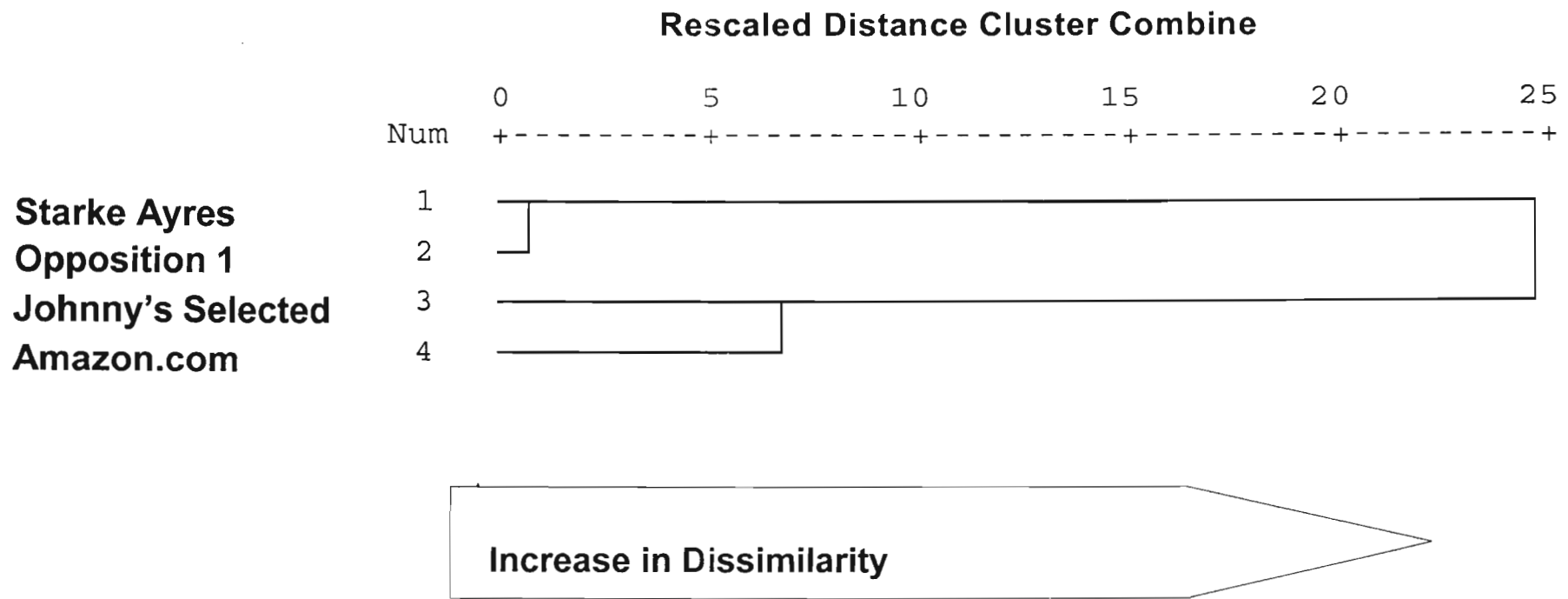
## 4.2. Communication

The websites are clustered into two groups, as can be seen in Figure 4.3., based on website communication features, the first cluster includes Starke Ayres and Opposition 1, and the second cluster is formed by grouping Amazon.com and Johnny's Selected. There was a significant dissimilarity between the two clusters which indicates that the members of the clusters used different numbers of the website communication features. Starke Ayres and Opposition 1 were closely related to each other, mostly as a result of the lack of use of communication features.

In Table 4.2., we can see that Starke Ayres does not employ any of the design features identified that go towards satisfying the Communication function of the website. On the other hand we have Amazon.com that makes use of all the design features listed. Opposition 1 uses only one of the design features listed whereas Johnny's Selected uses six of the eight communication features.

Targeted marketing is an important advantage which is made possible by ecommerce. With targeted marketing, marketing messages for specified customer groups can be easily delivered to the target consumers. With marketing on the website, marketing messages will be exclusively that of the company and the website users will generally be users of the company's products. In the case of Starke Ayres, marketing information that deals exclusively with the company's products could be delivered, similarly for the other companies. All the sites except that of Starke Ayres use some form of targeted marketing, and Starke Ayres should consider implementing this feature.

A more in-depth form of targeted marketing is one-to-one marketing. Here marketing messages are directed towards a single user. This type of marketing requires the user to register on the site and create a profile. Customer interests and purchase history are part of the customer profile that is stored. Whenever a customer makes changes to his interest or makes a



**Figure 4.3.** Dendrogram of Website Relatedness based on Communication Website Features

**Table 4.2.** Presence or Absence of Communication Website Design Features (✓ - Present, X – Absent)

<b>Communication (Interact)</b>	<b>Starke Ayres</b>	<b>Opposition 1</b>	<b>Johnny's Selected</b>	<b>Amazon.com</b>
Targeted Marketing	X	✓	✓	✓
Frequently Asked Questions	X	X	✓	✓
Customer Polls	X	X	X	✓
Newsletters	X	X	✓	✓
Content Update Reminders	X	X	✓	✓
Webcasts	X	X	X	✓
Product Feedback	X	X	✓	✓
Website Design Feedback	X	X	✓	✓

purchase, the customer profile is updated. In this way, if the customer purchases cabbage seed of a specific cultivar, say Green Star, the customer profile will be updated to include the purchase of Green Star. The next time the user logs in to the site, recommendations of other cabbages in the range could be made as well as provide directions to information on cabbage production issues, other related products such as fertilizers and so on. In the same way, recommendations could be made for other crops and products that the customer purchases. In this way, information on cabbage will not be sent to someone who only produces tomatoes; this user will benefit more from tomato specific information. This makes the distribution of marketing information more efficient and gives the customer the impression that a lot of effort is given to understanding what crops he is interested in and that he is being saved time by not having to deal with unfocussed marketing material. Amazon.com and Johnny's Selected use one-to-one marketing extensively. The internet and website allow for the easy implementation of a one-to-one marketing strategy because of the significant reduction of the administrative burden that prevents extensive use of this strategy in traditional marketing. This will be an effective functional marketing tool for Starke Ayres and Opposition 1 to implement.

Customers require support on the products that they buy. However, the degree of support varies from product to product and customer to customer. Often the queries have already been resolved for another customer. The common questions can be placed into a frequently-asked-questions section of the website. Customers are encouraged to consult the frequently asked questions section of the website first before contacting the call-centre or sales representative. This will allow valuable resources to be released that can deal with new queries and an increased marketing effort. The frequently-asked-questions section of the website is an effective support communications tool. The customers are resolving their problems by themselves and this is done in real time. The inclusion of this feature by Amazon.com and Johnny's Selected allows for resources to be freed that can be used on dealing with new queries



whereas Starke Ayres and Opposition 1 have to repeatedly deal with similar or the same queries by different customers.

Electronic newsletters have become a very effective marketing tool. Users of the website subscribe to a mailing-list for the mailing of an electronic newsletter to their email inbox. This allows the company to maintain contact with the customer. The electronic newsletter is also an effective way to keep in contact with customers that are unable to access the website but who have email. Also, the newsletter is delivered directly to the inbox of the target customers; therefore the marketing message is being delivered without the need for the user to visit the website. Of the four websites, Johnny's Selected and Amazon.com are the only websites to include this feature.

Webcasts are broadcast of multimedia messages over the internet. Starke Ayres is involved in a television marketing campaign that is directed towards the home gardeners. However, not all potential viewers are able to enjoy the television broadcasts because of time constraints and time of broadcast. These messages can be transmitted over the internet to accommodate these potential customers at any time. Webcasts can be used to provide regular programming to customers in a more cost efficient way when compared to television broadcasts. Amazon.com uses webcasts to communicate with customers on new features, company information and so on. Johnny's Selected and Opposition 1 do not use webcasts although this may be an effective way of communicating with their customers.

Amazon.com and Johnny's Selected both make use of the content update reminder to maintain contact with their customers. The content of website will change over time because of new technologies be adopted, or the addition of new products or services, and so on. For customers to appreciate the changes to the website, they need to experience the changes for themselves. Messages can be placed on the website regarding these changes, but it is also advisable to create an email message that informs users of updates to the website. These emails can be part of the electronic newsletter or

independent of it. Starke Ayres and Opposition 1 should consider implementing this feature.

Customer polls are an easy way to get opinions back from customers. This feedback can be on general issues in agriculture or specific issues about the company. This is an effective way to carry out a survey online. Also, this is an easy way to identify the needs of customers. Amazon.com uses polls for specific products and uses the information to check trends and customer requirements. Online polls also add a degree of interactivity between the customer and the company, the customer may get enjoyment by participating in the polls.

Customers can provide feedback on product performance through the website. A limiting factor to gathering this information previously was the cost of collecting this information, which resulted in word of mouth type of information. With the website, the information gathered is already in an electronic format and has been submitted by the first person. Positive feedback can be used in marketing and efforts can be made to resolve issues with customers that have given negative feedback. The Starke Ayres and Opposition 1 website do not allow for the gathering of product feedback information which is a severe shortcoming of these sites.

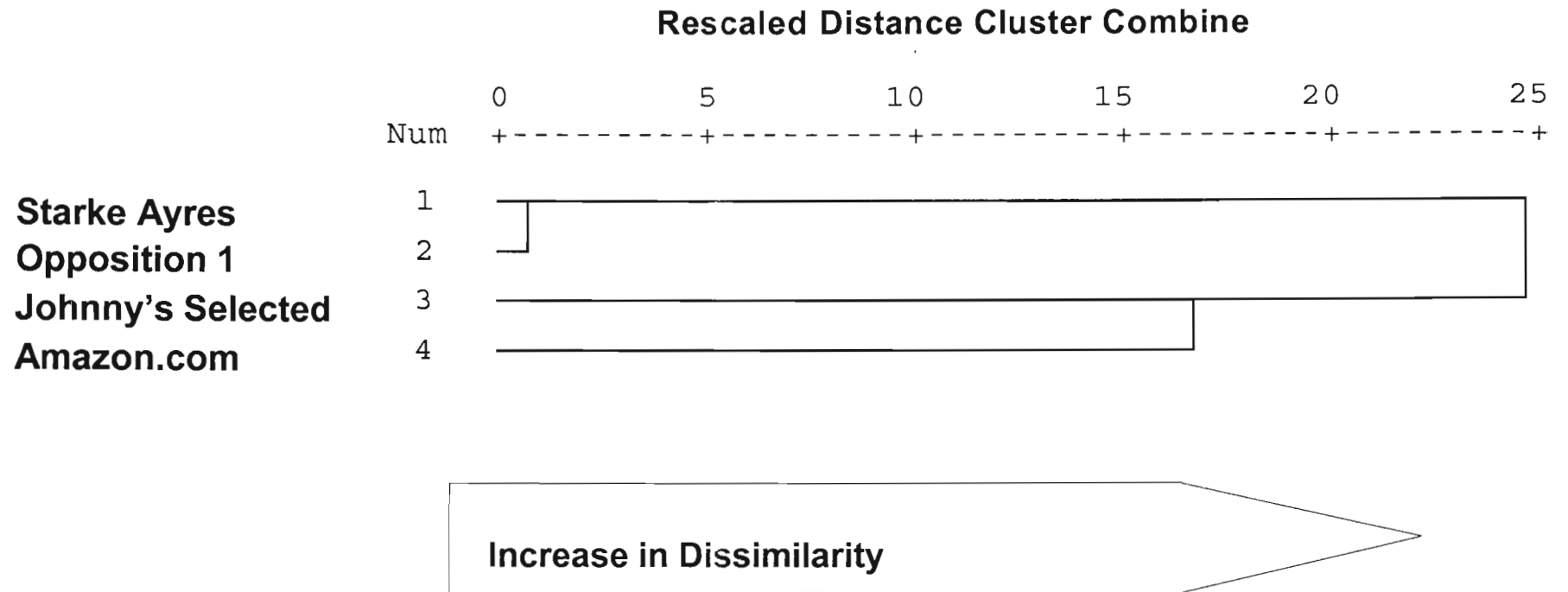
Besides product feedback, the customer must be given the opportunity to provide feedback on website design. In this way, the features the customers would like to see on the website can be determined. This allows the website user to be in the driving seat with regards to site design. Amazon.com and Johnny's Selected request information on website design from customers, this improves the companies relationship with the customer by providing the customer with the impression that the company cares about the needs of the customer.

It is unfortunate to see that Starke Ayres is not making use of any of the communication features of their website and that Opposition 1 is making very

minimal use of this feature. The communication features may be a little more difficult to implement than the content features discussed above but once the software has been implemented, efforts can be concentrated on analyzing the data collected. These features have the benefit of taking the online relationship with the customer a leap forward because the website can now be used as a means of two way communication with the customer. This two-way flow of information is important for the development of customer relationship. The importance of the use of the communications function of the websites can be seen in the fact that all of the listed website communication design features have been implemented by Amazon.com and the philosophy of Amazon.com accentuates customer relationship. Johnny's selected also implemented a number of the communication features, and can easily be brought up to the standard of Amazon.com by implementing webcasts and online polls. Starke Ayres and Opposition 1 require significant effort to improve on the use of communication features in the design of its website.

### **4.3. Commerce**

In Figure 4.4., clustering of the different websites is based on the similarities with regards to the commerce features of the different websites. As can be seen in Figure 4.4., the websites are categorized into two clusters. The first cluster includes Starke Ayres and Opposition 1 and the second cluster Johnny's Selected and Amazon.com. There is a significant difference in the similarities between the websites of the two clusters. However, the similarities between Johnny's Selected and Amazon.com is lower than the similarities of the features previously discussed. This indicates that there are more differences in features adopted by Amamazon.com and Johnny's Selected in the Commerce aspects of the websites than other aspects discussed thus far. To further resolve where these differences among all the websites exist, the Commerce function of the website was divided into two categories, namely, Product Information and Customer Support.



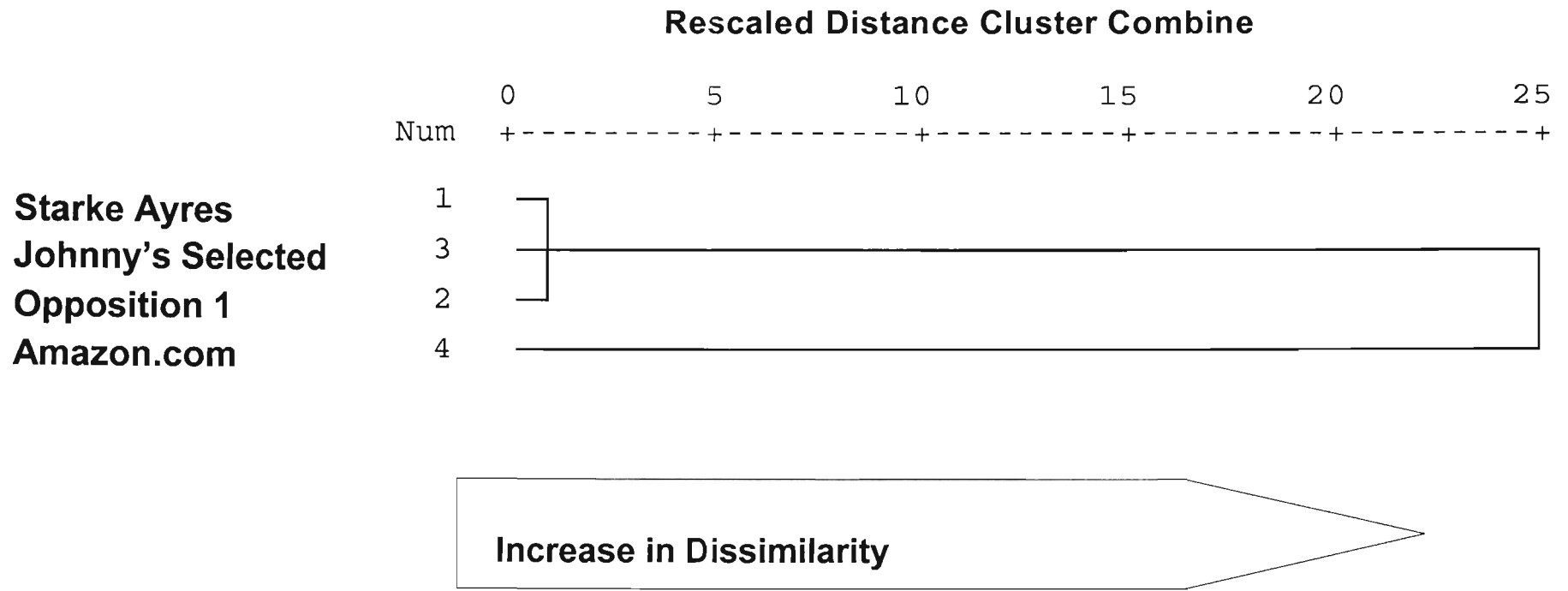
**Figure 4.4.** Dendrogram of Website Relatedness based on Commerce Website Features

#### **4.3.1. Product Information**

The similarity of the websites for product information is given in Figure 4.5. This figure indicates Johnny's Selected was not found in the same cluster as Amazon.com, this was the first time in the analysis thus far that this has occurred. From Figure 4.5., two clusters can be identified, the first cluster includes Starke Ayres, Opposition 1 and Johnny's and the second cluster has only one member, that is, Amazon.com. In Table 4.3., it can be seen that Amazon.com adopts a number of product information features that are not adopted by the other websites. In fact, Amazon.com adopts all the product information features described by the best practices model.

Starke Ayres and Opposition 1 lack two of the listed product information features. These features deal with informing the customer about products stock levels and providing the customer with an interactive order tracking process whereby the customer can check on the status of their various orders. These two features have been identified in the literature as essential features that are required by consumers. In various studies, these features consistently came up as features that users would want to have in an ecommerce website. In addition to the two features lacking in the websites of Starke Ayres and Opposition 1, Johnny's selected lacks information on product reviews.

The Stock Levels and Delivery Time features are important to the consumer when making a purchasing decision. The consumer would like to know the stock availability of the product as this would allow the customer to judge what the potential delivery time would be. This would give the customer the opportunity of sourcing the product elsewhere where stock is available. The delivery times also goes into the calculation of the expected delivery date. If customers cannot wait for the item, then they have the opportunity to source it where delivery times are within their acceptable level. This feature gives some control back to the customer in that it provides them with some important information to help them make an informed decision regarding the purchase. The only website to offer this information to the customer is Amazon.com.



**Figure 4.5.** Dendrogram of Website Relatedness based on Product Information in Commerce Website Features

**Table 4.3.** Presence or Absence of Commerce Website Design Features (✓ - Present, X – Absent)

Commerce (Transact)	Starke Ayres	Opposition 1	Johnny's Selected	Amazon.com
<b>a) Product Information</b>				
Product catalogue	✓	✓	✓	✓
Product Information and Specifications	✓	✓	✓	✓
Product Reviews	✓	✓	X	✓
Stock Levels and Delivery Times	X	X	X	✓
Interactive Order Tracking	X	X	X	✓
Special Offers	✓	X	✓	✓

**Table 4.3. Continued**

<b>b) Customer Service</b>	<b>Starke Ayres</b>	<b>Opposition 1</b>	<b>Johnny's Selected</b>	<b>Amazon.com</b>
Online Transaction Processing	<b>X</b>	<b>X</b>	<b>✓</b>	<b>✓</b>
Shopping Cart	<b>✓</b>	<b>X</b>	<b>✓</b>	<b>✓</b>
Secure Online Sales	<b>X</b>	<b>X</b>	<b>✓</b>	<b>✓</b>
Order Processing Support	<b>X</b>	<b>X</b>	<b>✓</b>	<b>✓</b>
Returns Policy and Support	<b>X</b>	<b>X</b>	<b>X</b>	<b>✓</b>
Personalized Website Content	<b>X</b>	<b>X</b>	<b>✓</b>	<b>✓</b>
Product Support	<b>X</b>	<b>X</b>	<b>✓</b>	<b>X</b>
Help Desk (Email, Website, Telephone, Fax)	<b>X</b>	<b>X</b>	<b>✓</b>	<b>✓</b>
Toll-free Number	<b>X</b>	<b>X</b>	<b>✓</b>	<b>X</b>



The only website to offer the online order tracking feature is Amazon.com. The Interactive Order Tracking feature would allow the customer to check on the status of the order online. This is a useful feature for the customer as it provides the customer with real-time information on the status of the order. If there are potential delays in the shipment, the customer can view this information by visiting the website. There is no need to contact the call centre if the information on the online order tracking system can answer the questions relating to the order. This reduces the load of order queries directed to the call-centre, which allows for more efficient use of the call-centre resources.

#### **4.3.2. Customer Service**

The second subsection of the commerce function is directed towards customer service features. Similarities of the different websites are reflected in Figure 4.6. It can be seen that there are two clusters present. The first cluster includes Starke Ayres and Opposition 1, and the second cluster includes Johnny's Selected and Amazon.com. There were significant dissimilarities between the two clusters. In Table 4.3., it can be seen that the only feature that the Starke Ayres website has in common with that of Amazon.com is the inclusion of a shopping cart feature. The shopping cart adds familiarity to the shopping process for online customers as they can equate online shopping with shopping at the local grocery store. From Table 4.3., it can be seen that Opposition 1 and Starke Ayres have not geared their websites to utilize the customer service features.

Online shopping involves the processing of orders in real-time. The order processes that need to be processed online is the purchase order from the customer, the checking of whether the stock is available by the supplier, the collection of customer information and shipping information, the payment for the order, and this is followed by the dispatch of the order. Online Order Processing involves the order information being captured directly and the relevant departments given the information so that the order can be completed. The Online Transaction Processing system allows for the



expedited conclusion of transactions and adds efficiency to the transaction process. The payment can be carried out by debiting customer credit-cards or the accounts of customers that have extended credit by the company. Payment is an important aspect for the conclusion of online transactions. For retail sales, it is important to have a credit card debiting facility as these clients would want to pay for their purchases at time of purchase, and the direct depositing of money into the company's bank account is discouraged as this is inconvenient for the customer and adds to the administrative burden for the company. Amazon.com and Johnny's Selected allow for the processing of orders and transactions online. The Starke Ayres approach has been to get customers to request quotations for products, after which the order processing and transaction processing are carried out manually. The Opposition 1 website does not use any of design features associated with customer service.

Seeing as the transactions are being conducted over the internet, sensitive information is being transmitted between the two contracting parties. From the customer's side, personal information is being provided which includes residential address, I.D. numbers, credit card numbers, account numbers and so on. If this information is intercepted by criminals, it can be used to the detriment of the customer. The criminal element may use the information to defraud the customer (especially applicable to credit card details) or to identify targets for scams and physical attacks. From a company point of view, the transfer of customer and order information is valuable to not just the company but to opposition companies as well. If the opposition companies behaved unscrupulously, they can intercept customer information and orders and make contact with the company's customers, this is obviously not desirable. Therefore, online order and transaction security is essential for any ecommerce site. The minimum security standard to be used for online transaction and order processing is 128bit SSL, which is the standard at present. This security provides the customer with the confidence to provide credit card details and order details over the internet, as the risk of fraudulent use of this data is minimized. From a company side, this security provides for

096401

the protection of its customer base and customer profiles. If everybody uses the information on customers that you have collected, then this does not create a competitive advantage. Amazon.com and Johnny's Selected have adopted the minimum security standard for the processing of online order and transaction processing.

The only website to implement a returns policy is that of Amazon.com. The returns policy of the company must be included in the information on the website. This information allows the customer to assess the risk associated with ordering the wrong items. The returns policy will increase the customer's attention towards the transaction to ensure that the correct item is being ordered. This benefits both the customer and the company. The company benefits in that they do not have to worry about undue returns because the customer did not take the time to purchase the right item, and the customer benefits in that they get the right item the first time round. A statement of the returns policy also goes towards the terms of the contract, without it being given, the returns policy is open. The returns policy will also indicate to the customer that the company is concerned about the customers' convenience and advises the customers to take their time in making the purchases.

Personalized web content is becoming more and more popular in ecommerce. This is a relatively expensive exercise to implement. In the case of Amazon.com, they invested significant amounts of money in ensuring the personalization of their website. When you log into the site, the website content is directed by your customer profile, which has been developed by your purchase history and other interest information that you have provided them. They also go so far as to group people with similar interests so that you can view what other customers with similar interests have been purchasing. This personalization goes a long way to helping you find the products that you would be interested in without having to sift through all the products available in the site. The dynamic content of the website keeps the customer checking in on the website even if not to make a purchase but just to see what the recommendations are and what is new. Johnny's Selected has some degree

of website personalization for its users. Starke Ayres and Opposition 1 should consider implementing such a software package as adoption of this feature by one over the other would give the one a competitive advantage. This feature will also keep the customers visiting the website just to see the updated content. Although expensive, the benefits of such a system will improve customer relationships, especially in the online environment and this improved customer relationship would transfer to the customer's direct interaction with the company's sales representatives and customer-care representatives.

The customers purchase products from the company, however, the company's responsibility does not end there. There are a number of consumers of products that experience after-purchase problems with their purchased products. This support can be given by the company online through a query. The seed companies can use this medium to receive information on seed complaints, technical information requests and so on. The support request can then be directed to the correct support staff first-time, which translates into improved customer service. There is also a record of all correspondence on each query which can be used to evaluate the levels of service being given to the customers. The website thus forms an important communication channel for product support. Johnny's Selected is the online website that allows for product support. Amazon.com cannot provide support on specific products because they act solely as channel marketers in most transactions however, support can be obtained from the manufacturers of the products; but they will be able to manage warranty issues. Starke Ayres and Opposition 1 should consider implementing a system for online product support.

Although the users may be familiar with website browsing, they may still experience problems when browsing the website. It is thus important to have a Helpdesk to assist users with technical information about using the website. The support staff can help with information on getting registered on the site, how to place orders and so on. This is an added level of customer service. The helpdesk should be able to be contacted by telephone, email, fax or

through the website. This helpdesk is purely to deal with technical issues with the website and not for such queries as product information and credit account information. Amazon.com has implemented an email based help desk in keeping with its strategy to maintain customer support online therefore they do not provide access to a telephonic helpdesk. Starke Ayres and Opposition 1 should consider implementing a help desk to assist customers that are experiencing technical difficulties.

A telephone contact number for customer services is essential. It is preferable for this number to be toll-free. This allows the customer the freedom to interact with the company. In the case of Amazon.com, the strategy is to deal with clients via email thus they do not have a telephone contact number. Johnny's Selected has a toll-free number that customers can call for support on issues dealing with products and service and this number is displayed on the website. Starke Ayres has a shared-cost toll number in place, however this number is not displayed on the website. The website user must be given this number so that contact can be made in real-space as well.

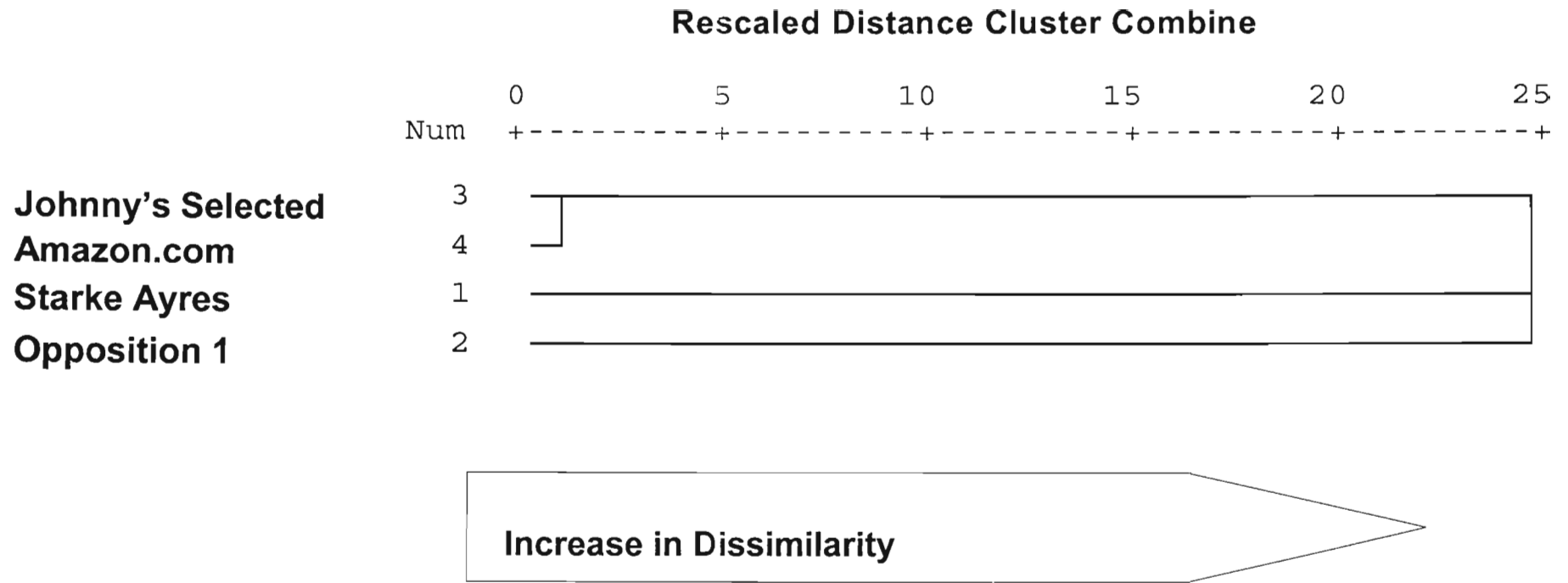
In the Commerce requirement of the website Starke Ayres and Opposition 1 have not implemented a number of important website design features, with a fewer number of commerce features not implemented by Johnny's Selected. For product information, two essential features that are absent from the Starke Ayres, Opposition 1 and Johnny's Selected websites, are product stock levels and delivery times, and online order tracking. These features being one of the few positively identified by customers as what they would like to have in an ecommerce website, make it essential that these companies implement these features. Starke Ayres has also not implemented many of the customer service features that have been implemented by Amazon.com and Johnny's Selected. The one commerce feature that Starke Ayres did implement was the Shopping Cart. Opposition 1 did not implement any of the customer service features. Some of the other commerce features may be easy to implement such as returns policy, whereas features such as personalized website content may be more difficult and expensive to implement; these features may

cost a significant amount of money to implement, but should Starke Ayres implement these features, they will have competitive advantage over Opposition 1 and vice versa.

#### **4.4. Community**

The relatedness of the websites based on the development of Community is given in Figure 4.7. As can be seen in this figure, there are three clusters that can be identified. The first cluster includes Amazon.com and Johnny's Selected, the second cluster includes Starke Ayres and the third cluster includes Opposition 1. In Table 4.4, it can be seen that Starke Ayres did not implement any of the features that have been identified to develop a community of users. The Johnny's Selected and Amazon.com cluster implemented different features to the features that were implemented by Opposition 1. There are simple implementations that can be done to improve the community building efforts of all the websites, there are also other features that require more effort. In general, it can be seen in Table 4.4 that none of the websites in the study have emphasized community development through the implementation of website design features that encourage online community development. Of the aspects considered thus far, namely, Contact, Communication, Commerce and Community, it seems that community development has received very little attention even by a leading website such as Amazon.com.

The Privacy Statement, Trust Statement and Security Statement are all easy to implement. These statements go towards building a community by giving the users the confidence to use and interact with the site. Without these statements, users may feel that the developers of the website have not given enough attention to the personal needs of the users with regards to security. Users may come to this conclusion even if the company has invested in the security measures, it is therefore important to inform users of these measures and this can be done through the statements in the website.



**Figure 4.7.** Dendrogram of Website Relatedness based on Community Website Features



**Table 4.4.** Presence or Absence of Community Website Design Features (✓ - Present, X – Absent)

<b>Community</b>	<b>Starke Ayres</b>	<b>Opposition 1</b>	<b>Johnny's Selected</b>	<b>Amazon.com</b>
Privacy Statement	<b>X</b>	<b>X</b>	<b>✓</b>	<b>✓</b>
Trust Statement	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Security Statement	<b>X</b>	<b>X</b>	<b>✓</b>	<b>✓</b>
Chat rooms	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Expert forums	<b>X</b>	<b>✓</b>	<b>X</b>	<b>X</b>
Bulletin boards	<b>X</b>	<b>✓</b>	<b>X</b>	<b>X</b>
Links to Other Sites With Useful Information	<b>X</b>	<b>X</b>	<b>✓</b>	<b>X</b>

A very important aspect for community development is the ability for members to communicate with each other. The website should be able to facilitate communication between the members of the community. Opposition 1 has implemented two features that allow for interaction among community members, that is, Expert Forums and Bulletin Boards. These two facilities allow for members to initiate discussions on topics of interest to the community and through this medium, opinions of experts can be inputted on certain issues. Another feature that has similar functionality is the Chat Room, here users can interact with other users in real time. This medium also allows for the company to gather information on the company's products, get ideas on new products and keep in touch with the dynamic needs of customers. This information can be used to make the company proactive in addressing the shortfall of their products and addressing the needs of the customers. The information mined from this facility can be used to give the company a competitive advantage. Besides being a source of information to the company, these features will assist in keeping customers coming back to the website.

It will be difficult to provide up-to-date information on the company's site especially for technical information, therefore it becomes less efficient to provide up-to-date data on non-core functions. Often information is provided on other sites, the company can provide links to these informative sites through their site. The company's website can be used as a portal to these other sites. The company must however be careful in implementing these links. They must not redirect traffic to other ecommerce websites, as these websites may poach customers from the company. The links must only be to information that the company cannot provide and cannot see itself providing in the near future. To help curb the potential loss of users, the company can make arrangements for the information to be displayed in the company's website, thus the user does not have to leave the company's website and the company is not faced with the difficulty of maintaining up-to-date information on non-core functions. The presence of the links to these sites shows that the company has the interest of the user in mind and that they would like to

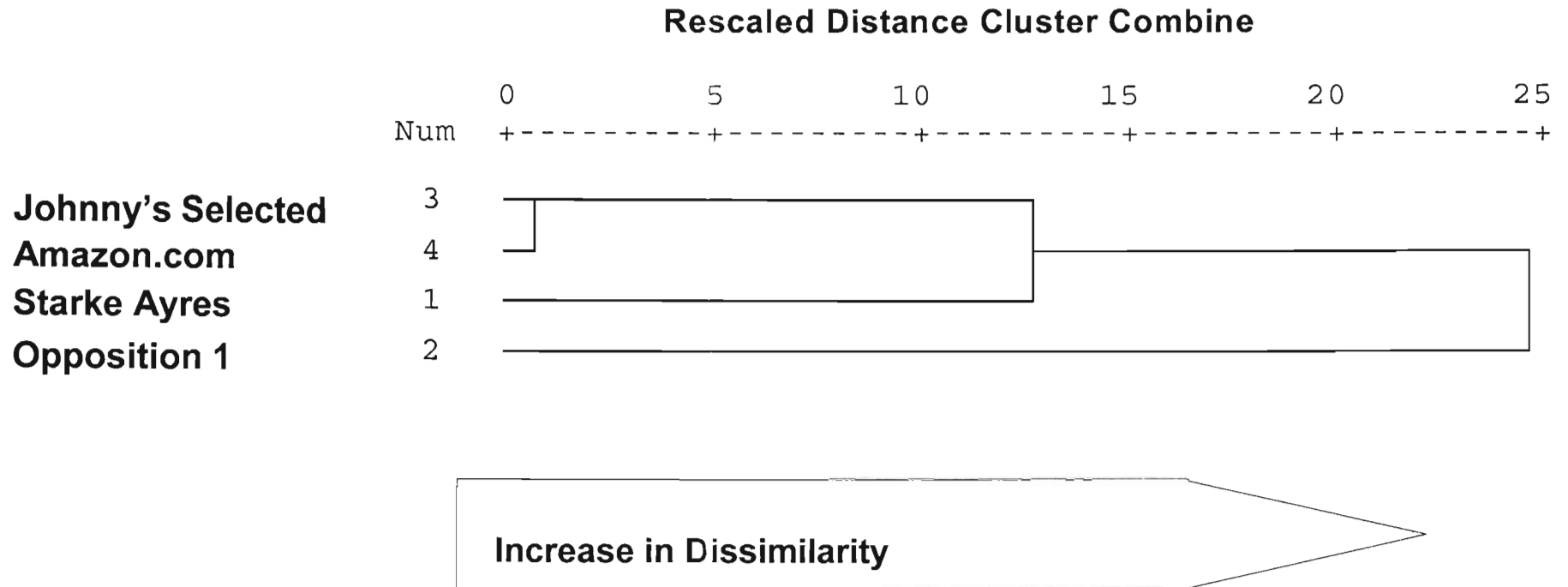
provide the latest information to the community. This will create a sense of community among the members and this will translate into loyalty towards the company.

The companies in the study need to put more effort into features that build community. By building the community, the companies are developing an almost captive audience. Besides the benefits of directly marketing to these users, the companies can expect some degree of loyalty from the members which would translate into increased repeat sales. The company will become part of the community developed and would be in a good position to sense changes in sentiment and customer needs compared to its opposition.

#### **4.5. Navigation**

The relatedness of the websites for navigation features is given in Figure 4.8. In this figure, two clusters can be identified, the first cluster incorporates Johnny's Selected, Amazon.com and Starke Ayres and the second cluster includes Opposition 1. The navigation features implemented on the Starke Ayres website closely resembles the navigation features on that of Amazon.com and Johnny's. From Table 4.5., it can be seen that Starke Ayres has not implemented two features for navigation, namely, Signposts and a Site Map whereas Opposition 1 has not implemented four features. None of the sites implemented a sitemap.

As the websites become more complex and more information is included on the website, it becomes more difficult for users to find the information. User may even get "lost" in the website, and this leads to them looking for an easier website to use. A complex website does not have to be difficult to use as long as the users are given the opportunity to orientate themselves in the website. In addition to the navigation features already implemented, user orientation can be given effectively in the form of signposts. These signposts give the user a guide as to where he is in the website.



**Figure 4.8.** Dendrogram of Website Relatedness based on Navigation Website Features

**Table 4.5.** Presence or Absence of Navigation Website Design Features (✓ - Present, X – Absent)

<b>Navigation</b>	<b>Starke Ayres</b>	<b>Opposition 1</b>	<b>Johnny's Selected</b>	<b>Amazon.com</b>
Three Click Principle used	✓	X	✓	✓
Consistent (Same throughout site)	✓	✓	✓	✓
Simple (Shallow Hierarchal Structure)	✓	✓	✓	✓
Context (Signposts)	X	X	✓	✓
Search Tools	✓	X	✓	✓
Site Map	X	X	X	X

An example of a signpost is one that appears at the top of the webpage:

[Home](#)>[Seed](#)>>[Vegetables](#)>>>[Beans](#)>>>>

The user will be able to interpret the above signpost as he is “in the bean section, which is part of the vegetable section under seed products and the initial entry point was the home page. Each of the words between the arrows is a hyperlink to the pages under the respective sections of the website. In this case, if the user wanted to look at other vegetable seed, he would just have to click on the word Vegetables, which would take him to the Vegetables page. This type of signpost acts as a trail of how the user got to the point that he is at, and this allows the user to find information more efficiently.

The site map is also another effective way of allowing the user to become orientated with the website. This is a map of all the sections in the site and how they are linked together. By looking at the sitemap, the user can access the desired page without having to have to link through other pages. This also allows the user to find the required information quickly. As can be seen in Table 4.5, none of the websites in the study implemented a site-map. The site-map would add functionality to all these websites.

All the websites except for Opposition 1 have generally implemented the required navigation features into its website. The Starke Ayres website can be effectively navigated, however the implementation of two additional features, namely, signposts and a site-map would enhance the users’ online experience. The navigation of the websites of Amazon.com and Johnny’s Selected can be improved with the implementation of a sitemap. The inclusion of signposts and a site-map on the website are not difficult to implement and will allow the user quicker access to the information required. Opposition 1 needs to redesign the site to implement the suitable navigation features.

## CHAPTER 5

### CONCLUSION

To enhance the user's online experience, the ecommerce website needs to satisfy Content, Communication, Commerce and Community requirements of website functionality. In addition, the improved navigation features also enhance the user's online experience. In general, the websites in the study do implement website design features that enhance the user's online experience. However, the number of website design features implemented, which enhance the user's online experience, varies from website to website. Amazon.com implements most (just under 80%) of the features identified in the best practices model whereas Starke Ayres and Opposition 1 implement the least number (less than 30% of features), with Johnny's Selected in an intermediate position (just under 60% of features). It follows that Amazon.com enhances the user's online experience the most, with Starke Ayres and Opposition 1 enhancing the user's online experience the least.

The community building design features of websites was neglected the most by all the websites including Amazon.com. The companies will have to look at implementing features that would enhance community building as this will increase the probability of long term success of the ecommerce venture.

Some of these website design features are simple to implement whilst other are more difficult. There are also cost implications for the implementation of the various features. There is no reason for simple features such as the privacy statement not to be implemented. For website features that are more expensive and difficult to implement, such as website personalization, these can be implemented as soon as capital is available. In the case of Starke Ayres and Opposition 1, significant improvement can be made in their websites by implementing the relatively simple and cheaper features, thus this should be the starting point for the improvement. However, the ultimate goal is to create a cutting edge website that incorporates the more expensive features that will enhance the user's online experience. This cutting edge

website would develop into a competitive advantage for the company that implements the website.



## REFERENCES

- Anderson, J., Earl, M.J. (2000). Lastminute.com: B2C ecommerce. *Business Strategy Review*, 11(4): 49-60.
- Belman, S., Lohse, G.L., Johnson, E.J.(1999). Predictors of Online Behaviour. *Communications of the ACM* 42(12):32-38.
- Betts, M. (2001). Turning Browsers into Buyers. *MIT Sloan Management Review*, Winter 2001:8-9.
- Bigdoli, H. (2002). *Electronic Commerce: Principles and Practice*. Academic Press: San Diego.
- Brynjolfsson, E., Smith, M.D. (2001). The Great Equalizer? Customer Choice Behavior at Internet Shopbots. <http://e-commerce.mit.edu/papers/tge>
- Carr, N.G. (1999). Hypermediation: Commerce as Clickstream. *Harvard Business Review*, January-February 2000: 46-47.
- Couto, D.L., (2000). Too Old to Learn? *Harvard Business Review*, November-December 2000:37-42.
- Evans, P., Wurster, T.S. (1999). Getting Real About Virtual Commerce. *Harvard Business Review*, November-December 1999: 84-94.
- Ghosh, S. (2000). To Assess the Risks and Opportunities, You Need to Know What's Possible. *Harvard Business Review*, March-April 2000: 126-135.
- Gupta, A., Mathur, A. (2002). Adaptive Delivery of E-commerce Websites. *Intelligent Data Analysis*, 6(2002): 469-480.

Gutzman, A.D. (2001). *The E-Commerce Arsenal: 12 Technologies You Need to Prevail in the Digital Arena*. Amacom: New York.

Kagan, A., Post, G.V., Messier-Noel, C.(2000). Selling the Web: Web Features used by retailers. *Journal of Applied Business Research* 16(1):15-26.

Kanter, R.S.(2001). The Ten Deadly Mistakes of Wanna-Dots. *Harvard Business Review*, January 2001:91-100.

Kiely, T. (2000). Fear and Shopping in Cyberspace. *Harvard Business Review*, July-August 2000: 13-14.

Kienan, B. (2000). *Small Business Solutions: Ecommerce*. Microsoft Press, Washington.

Lee, M.K.O., Turban, E. (2001).A Trust Model for Consumer Internet Shopping. *International Journal of Internet Commerce*, 6(1): 75-91.

Liu, C., Arnett, K.P., Capella,L. (1997). Websites of the Fortune 500 Companies: Facing Customers through Homepages. *Information and Management*, 31(1):335-345.

Liu, C., Arnett, K.P., Litecky, C. (2000). Design Quality of Websites for Electronic Commerce: Fortune 1000 Webmasters' Evaluations. *Electronic Markets*, 10(2):120-129.

Maruca, R.F. (1999). Website Blues. *Harvard Business Review*, March-April 1999: 24-35.

Napier, H.A., Judd, P.J., Rivers, O.N., Wagner, S.W. (2001). *Creating a Winning E-Business*. Thomson Learning, Australia.

Nunes, P., Wilson, D., Kambil, A. (2000). The All-in-One Market. Harvard Business Review, May-June 2000: 19-20.

Ovans, A. (1999). Is your website socially savvy? Harvard Business Review, May-June 1999: 20-21

Power, T. (2001). E-Business to the Power of 12. Pearson Education:London.

Post, V.P., Kagan, A., Burkink, T.J., Schmitz, T.G. (2002). Analyzing Consumers' Preferences on Commercial Website Attributes. Quarterly Journal of Electronic Commerce, 3(2):111-123.

Rayport, J.F., Jaworski, B.J. (2002). Cases in e-Commerce. McGraw-Hill:Boston.

Rowley, J. (2002). E-Business: Principles and Practice. Pargrave, Great Britain.

Saban, K.A. (2001). Strategic Preparedness: A Critical Requirement to Maximize E-Commerce Investments. Electronic Markets, 11(1): 26-36.

Saeed, K.A., Hwang, Y., Grover, V. (2003). International Journal of Electronic Commerce, 7(2): 119-141.

Schneider, G.P. (2002). E-Commerce. Thomson Learning: Australia.

Stimmel, A.C. (2001). The Nuts and Bolts of Moving into E-Commerce. Consulting to Management, 12(4):46-50.

SANSOR. (1997). Workshop for Plant Breeders. Pretoria.

Szymanski, D.M., Hise, R.T. (2000). E-satisfaction: An initial examination. Journal of Retailing, 76(3): 309-322.

Treese, G.W., Stewart, L.C. (1998). *Designing Systems for Internet Commerce*. Addison-Wesley, Massachusetts.

Vellido, A., Lisboa, P.J.G., Meehan, K. (2000). Quantitative characterization and prediction of online purchasing behaviour: A latent variable approach. *International Journal of Electronic Commerce* 4(2): 105-130.

Watson, R.T., Zinkhan, G.M. (1997). Electronic Commerce Strategy: Addressing the Key Questions. *Journal of Strategic Marketing*, 5:189-209.

**APPENDIX A  
WEBSITE EVALUATION SHEET**

	<b>Content Features (Contact)</b>	<b>Mark Appropriate Block with an X</b>	
Q1	Company History	Present	Absent
Q2	Contacts and Key People	Present	Absent
Q3	Company Achievements	Present	Absent
Q4	Employment Opportunities	Present	Absent
Q5	Maps to Physical Locations	Present	Absent
Q6	New Content Update Notice	Present	Absent
Q7	New Products	Present	Absent
Q8	Press Releases	Present	Absent
Q9	News	Present	Absent
Q10	Company and Industry Events	Present	Absent
	<b>Communication (Interact)</b>	<b>Mark Appropriate Block with an X</b>	
Q11	Targeted Marketing	Present	Absent
Q12	Frequently Asked Questions	Present	Absent
Q13	Customer Polls	Present	Absent
Q14	Newsletters	Present	Absent
Q15	Content Update Reminders	Present	Absent
Q16	Webcasts	Present	Absent
Q17	Product Feedback	Present	Absent
Q18	Website Design Feedback	Present	Absent

Appendix A Continued

	<b>Commerce (Transact)</b>	<b>Mark Appropriate Block with an X</b>	
	<b>a) Product Information</b>		
Q19	Product catalogue	Present	Absent
Q20	Product Information and Specifications	Present	Absent
Q21	Product Reviews	Present	Absent
Q22	Stock Levels and Delivery Times	Present	Absent
Q23	Interactive Order Tracking	Present	Absent
Q24	Special Offers	Present	Absent
	<b>b) Customer Service</b>	<b>Mark Appropriate Block with an X</b>	
Q25	Online Transaction Processing	Present	Absent
Q26	Shopping Cart	Present	Absent
Q27	Secure Online Sales	Present	Absent
Q28	Order Processing Support	Present	Absent
Q29	Returns Policy and Support	Present	Absent
Q30	Personalized Website Content	Present	Absent
Q31	Product Support	Present	Absent
Q32	Help Desk (Email, Website, Telephone, Fax)	Present	Absent
Q33	Toll-free Number	Present	Absent

Appendix A Continued

<b>Community (Relate)</b>		<b>Mark Appropriate Block with an X</b>	
Q34	Privacy Statement	Present	Absent
Q35	Trust Statement	Present	Absent
Q36	Security Statement	Present	Absent
Q37	Chat rooms	Present	Absent
Q38	Expert forums	Present	Absent
Q39	Bulletin boards	Present	Absent
Q40	Links to Other Sites With Useful Information	Present	Absent
	<b>Navigation</b>	<b>Mark Appropriate Block with an X</b>	
Q41	Three Click Principle used	Present	Absent
Q42	Consistent (Same throughout site)	Present	Absent
Q43	Simple (Shallow Hierarchal Structure)	Present	Absent
Q44	Context (Signposts)	Present	Absent
Q45	Search Tools	Present	Absent
Q46	Site Map	Present	Absent