

**VENDOR RELATIONSHIP MANAGEMENT:  
Re-engineering the Business Process Through B2B Infrastructure to Accelerate the  
Growth of Small Businesses in Geographically Isolated Areas.**

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December 2001**



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## Acknowledgements

We would first like to thank Dr. Philip Johnson for giving us the opportunity to work on this project. His experience and support have guided us through the many obstacles that came our way. Thank you for believing in us and for pushing us past what we thought was possible.

We would like to thank Susan Linn and the members of the Collaborative Software Development Laboratory (CSDL), Major Mike Staver, Jitender Miglani, Weifang Miao, David Liang. Susan was there for us in the first days of writing “hello world” ASP pages. We thank you for the countless times we talked story while living in the lab, and for listening and giving feedback on our many presentations.

We would also like to say “Mahalo” to the following companies that have participated in this research: City Bank, FedEx, Hilo Hattie, and United States Postal Service (USPS). In particular, we would like to send big mahalos to the 10 local businesses that took the time out of their busy schedules to talk with us. All these companies supplied us with essential business knowledge, which we so lack. Without them, our research would not be complete.

Thanks to City Bank and the UH New Economy Research Grant Program for funding our research. They provided the monies that paid for our research assistantships.

Last but not least, we would like to thank our parents, who have shown us nothing but unending support and encouragement. And also to our siblings, who helped foster our competitive spirits needed to complete this project.



## **Executive Summary**

This research on Vendor Relationship Management (VRM) explores the requirements needed to create a new business process, and the associated technological infrastructure, for local businesses in Hawai'i that wish to exploit the global reach of the Internet. In order to understand the requirements and feasibility of this approach, we met with various groups of people that included the host of a virtual mall, a financial service provider, two shipping providers, several local companies, and two e-commerce research organizations.

From these meetings, an initial set of specifications was defined. These specifications were used to build a software prototype called the VRM System. The intent was to have a metamediary provide a virtual mall and advertising, vendors or virtual merchants manage product inventory and prepare orders for fulfillment, a shipping provider supply order fulfillment and order tracking, and a financial institution distribute funds.

After interviewing ten vendors, we learned that the majority were interested in selling products using the VRM System. While the system is designed to operate by drop-ship and generate many small sales, over half of the companies preferred large, wholesale orders. Furthermore, if the system only generated small orders, fulfilling the orders would be time consuming and create only a small increase in revenue. In addition, most companies were not interested in loans or other financial services, but preferred to grow slowly and reinvest their previous profits.

Once the business process was defined and the software prototype created, two business owners and three employees of a local bank were asked to critique the process and prototype. They believed the main benefit of the process was that each partner could concentrate on what they do best. On the other hand, the system could be improved by adding product sales reports and daily logs. The business process should include specifications for contracts between the various partners and more details about the flow of money between the partners.





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# Chapter 1

## Geographically Isolated Businesses and the Internet

### 1.1 The Promise of the Internet

The Internet appears to offer a perfect solution for local, geographically isolated businesses that want to expand their market. An interesting example can be found in Peru. In 1991, journalist Jorge Soriano founded the Peruvian Scientific Network (RCP), which was the first privately funded electronic communications net independent in South America. Because only 2 per cent of Peru's 24 million people own a computer, RCP gradually built numerous public Internet booths in poor rural areas. In an isolated farming village near Chincheros, the RCP, along with local nongovernmental organizations and the Agriculture Ministry, set up an Internet connection for the village in 1996. Once the connection was complete, the village leaders arranged for their produce to be sold in New York by using an international export company [1]. Before the Internet, the village's income was US \$300 a month. In 1998, it was up to \$1,500 a month [2].

Other of examples of using the Internet to overcome geographic isolation and access beneficial information can be found all over the world. In Sri Lanka, farmers have increased their income by roughly 50 percent. By using the Internet to access product prices in Colombo, they were able to negotiate better rates with brokers. In Papua New Guinea, village elders put their storm forecasts, which are created from observations of physical changes in plants and animals, on the Internet to warn the rest of the island's population. In Africa, the Internet allows farmers to be more aware of the state of crops in different regions. [3]. They are able to reduce the risk of famine by possibly sending more food to those regions. In the United States, a doctor in Boston guided a sailor on a solo voyage to operate on his arm using email on an emergency solar-powered satellite communication system [4].

Instead of limiting the business to the local populace, the World Wide Web gives global access to all companies that have made the transition online. Ideally, the Internet

seems to offer vast, untapped markets, lowers the costs of reaching these markets, and frees businesses from geographical constraints. On the flip side, businesses that rush into the global market often ignore the local market. When a company goes online, they also need to consider the local market in their business plans [5]. This report seems to emphasize the importance of businesses using the Internet wisely, or they may become less competitive in the global economy.

What kind of customer base do businesses potentially have on the Internet? Although many surveys differ in the exact number of users on the Internet, all surveys have a common ground – that worldwide Internet users are increasing at a dramatic rate. The following statistics show the number of people going online around the world.

On the global level, 30 percent of online shoppers were from outside North America for the year 2000. This number is expected to grow to 60 percent by the year 2003, according to the International Data Corporation (IDC). In Europe, the compound annual growth rate of e-commerce is estimated to be 138 percent. In Asia and the Pacific region, the number of Internet users is expected to grow from 21 million to 81 million users from 1998 to 2003. According to Forrester Research, Inc, online users in South America will grow from 4.1 million to 26.6 million users from the year 1999 to 2002 [6]. Internet users in Africa are estimated to be at 4 million in 2001 [7].

According to the Computer Industry Almanac Inc, the United States had 33 percent of the worldwide Internet users at the end of the year 2000. Worldwide Internet users have grown from 200 million in 1998 to 400 million in 2000. Asia, Latin America and Eastern Europe are responsible for the majority of the Internet user growth [8]. As the two following tables show, Internet users are distributed worldwide and are expected to continue growing in the immediate future.

Table 1.1. Top 15 Countries in Internet Users at Year-End 2000 [8].

Rank	Country	All Internet Users (#M)
1	U.S.	134.6
2	Japan	33.9
3	Germany	19.9
4	Canada	15.4
5	U.K.	16.8
6	South Korea	19.0
7	China	22.5
8	Italy	12.5
9	France	9.0
10	Australia	7.6
11	Taiwan	7.0
12	Netherlands	5.5
13	Sweden	4.4
14	Spain	5.6
15	Russia	7.5
--	Top 15 Countries	321.2
--	Worldwide	413.

Table 1.2. Internet users in 1995 and projections for 2000 and 2005 [9].

Internet Users by Region	1995	2000	2005
Worldwide Internet Users (#K)	44,324	349,242	765,776
North American Internet Users (#K)	30,771	150,850	231,451
W. Europe/Scandinavian Internet Users (#K)	8,713	87,743	213,670
East European Internet Users (#K)	375	10,806	45,472
Asia-Pacific Internet Users (#K)	3,547	72,066	189,651
South/Central American Internet Users (#K)	410	19,629	56,051
Middle East/African Internet Users (#K)	508	8,160	29,481

## 1.2 E-commerce in Hawai'i

As the central hub of the Asia-Pacific region, Hawai'i is trying to expand into the global marketplace through the Internet. Even the state government is involved. For example, Governor Ben Cayetano declared the second week of March 2001 as "E-Commerce Week in Hawai'i" [10]. Furthermore, the Governor has an online "Governor's E-Commerce Awareness Campaign", which urges businesses to be a part to the "Internet's explosive global growth", instead of being "left behind in the old economy" [11]. The web site has a tutorial on how to add e-commerce to one's business, a list of computer technology companies that might be helpful, links to upcoming e-commerce events, and links to computer technology support organization. E-commerce in Hawai'i is also promoted by the High Technology Development Corporation (HTDC), an agency of the State of Hawai'i which promotes the development and growth of commercial high technology industry in Hawai'i since 1983 [12].

With all this support from the state government, are businesses in Hawai'i having any success using the Internet? According to a statewide survey of businesses in 2000, roughly 37 percent of small companies in Hawai'i have a website. (The average for the United States is 35 percent.) Of the companies that had a website, 12 percent had a site for more than 5 years and 43 percent had a site for 2 to 5 years. Although a few companies that exist only in cyberspace generate 100 percent of their revenue from the

Internet, the majority of companies generate less than 10 percent of their revenues from doing business online [13].

Some of the companies that have gone online try to capitalize on the uniqueness of Hawaiian culture. For example, many web sites cater to selling local Hawaiian food to people on the mainland. One of these companies is Kimo Miller's luauking.com, which sells luau party packages. Another company is Zippy's zippys.com from which you can order anything from pork lau lau to Shintani cuisine. Other websites target a broader market for Hawaiian goods. Epacifictrader.com sells such diverse products as aloha shirts, art, leis, island music, and even aloha shirt inspired pet fashions. Hilo Hattie also has many of their products for sale online at hilohattie.com.

Economists generally agree on eight specific conditions that need to be met in order for e-commerce to be successful. These conditions include industry competitiveness, supply skills, willingness and ability to invest, culture understanding and effectiveness, knowledgeable citizens, cost of living and pricing, access to advanced infrastructure, and the macro-economic environment. According to Dr. Tang Bui, when compared with the seven most industrialized nations, Hawai'i "fares well" in infrastructure, culture, knowledgeable citizens, and supply skills, but lags behind in macro-economic environment, industry competitiveness, cost of living, and willingness and ability to invest [13].

On the positive side, Hawai'i is perhaps the strongest in access to advanced infrastructure. For every major business center in Asia and Europe, Hawai'i has 30 dedicated T-links. Currently, Hawai'i's telecommunication infrastructure includes such technology as 100% digital switching matrix support by fiber optic trunks, cable modem and DSL available statewide, and multiple satellite access. By the second quarter of 2002, Hawai'i will be connected to the Japan/US Cable, which will have a capacity of 5.12 terabits [13].

The inter-cultural atmosphere of Hawai'i is another positive factor for e-commerce. Exposure to international business and politics is a part of this atmosphere. Conversely, more than 50 percent of Hawai'i business leaders felt that the "island" mentality prevents people from looking beyond the local economy for e-business opportunities [13].

Table 1.3. Hawai'i vs. G-7 in 8 Elements Conducive to E-commerce [13].

<b>8 Elements Conducive to E-commerce</b>	<b>Hawai'i</b>	<b>G-7</b>
Infrastructure	8	8
Culture	7	5
Knowledgeable citizens	7	4
Supply skills	5	4
Macro-economic environment	3	9
Industry competitiveness	3	8
Cost of living and pricing	3	6
Willingness and ability to invest	2	9

Hawai'i also fares well with knowledgeable citizens, as 4/5 of the population graduated from high school, putting Hawai'i 11<sup>th</sup> in the United States. Twenty percent of the English-speaking population speaks at least one additional language. According to a study by Qmark Research and Polling in November 1998, 42 percent of adults in Hawai'i have access to the Internet, which is much higher than the national average of 28-35 percent [13].

On the negative side, the majority of the business community believes that computer literacy and basic business knowledge is still lacking in Hawai'i. Only 28 percent of the business community thought that the UH system generates enough qualified workers for the next century's economy. Perhaps a more challenging work environment and more favorable compensation packages would help workers to excel [13].

As for Hawai'i's weaknesses, Bui claims that the macro-economic environment is perhaps limited by the remote geographical location and its natural tourist attractions. Other economic factors are the military presence, tropical agriculture, ocean research, and astronomy. Over 50 percent of the business leaders thought the state government was trying to improve the business environment. In industry competitiveness, Hawai'i does not fare so well as the economy is still heavily tied to tourism. However, products that have been successful online include vacation packages, well-recognized agricultural products and flowers, and research materials [13].

Bui also states that the cost of living in Hawai'i needs to change. In particular, Honolulu's cost of living is lower than most Asian cities. Conversely, it ranks 290<sup>th</sup> out of the top 300 American cities. The high cost of schooling, State taxes, and housing are the main contributors to its ranking [13].

Finally, a willingness and ability to invest must improve locally. Venture capital is essential to having successful e-commerce companies. According to the majority of respondents in Bui's survey, finding venture capitalists in Hawai'i is difficult. In the new economy, successful businesses not only need sufficient funding, but must also be more dynamic. Furthermore, collaboration between companies "will be paramount in the future" [13].

### **1.3 An Overview of Traditional E-commerce Business Models**

A business model is "a unique configuration of elements comprising the organization's goals, strategies, processes, technologies and structure, conceived to create value for the customers and thus compete successfully in a particular market" [14]. It explains how a company makes money and conducts its business. Like traditional businesses, a business utilizing e-commerce must also have a business model. E-commerce business models can be roughly divided into six different groups: merchant, brokerage, advertising, membership/subscription, billboard, and improved efficiency. Each business model has its strengths and weakness. In the real world, most companies use a combination of these models in sometimes successful, sometimes failed attempts to create profits [15].

When most people think about an e-commerce business model, the merchant model is probably the first one that comes to mind. In this model, the company becomes a "virtual merchant" or "web store" by offering its goods over the web. Some companies may be only web based, or virtual, such as Amazon.com, while other companies, such as Barnes & Noble, may have a traditional "brick and mortar" store as well as a web site to sell their products on-line. Usually these kinds of web sites have a "shopping cart", which will keep storing all the products that customers wish to purchase. Once they are ready to "checkout", the web site usually has a secure connection where they can enter their credit

card information and mailing address. The product is then set by a traditional shipping method. Examples of several businesses that use this business model are Hilo Hattie, Levenger, Cdnw, Gap, Lands End, and Dell Computers. The advantages include convenience for the customer, lowered cost, a worldwide customer base, fewer overheads, and no middleman. The disadvantages include security issues, initial costs of creating and maintaining the website, no "hands-on" appeal of what you're buying, taxation issues, fulfillment issues, product returns, and exclusion of those customers who do not have access to the Internet. Companies that would probably benefit from this model are small companies, since the Internet enables them to compete equally with large companies [16].

The second kind of business model is the brokerage model. Subgroups of this model include auction websites, reverse auction, search agents, virtual malls, metamediaries, buyer aggregators, buy/sell fulfillment, distributors, and the classifieds. These subgroups are described in detail in the following paragraphs.

An auction web site is a business based on the brokerage model. This business model brings together buyers and sellers, and charges a fee for each transaction. Possible markets include business-to-business (B2B), business-to-consumer (B2C), or consumer-to-consumer (C2C) markets [15]. Auction sites work by charging the seller a fee, which usually depends on the price of the product sold. The product is sold to the highest bidder. Examples include eBay, Australia's SOLD.com.au, AuctionNet.com, and Onsale.com [15]. In recent years, many large businesses are abandoning websites based on the merchant model and switching to auction websites. Companies such as Xerox Corp., Sun Microsystems Inc., and International Business Machines Corp. are using eBay, a web site that uses an auction concept to sell goods [17]. Even the web-successful J.C. Penny, which had made over \$79 million in sales online as of June 2000 [18], began to auction off its 2001 spring clothes in July 2001 on eBay [17].

A reverse auction, or "name-your-price" business model, works by having the buyer make a final bid for a good or service while the broker seeks fulfillment. These websites usually sell expensive items such as cars or airline tickets. Examples are Priceline.com, Respond.com and eWanted.com [15].



Other brokerage websites use search agents, intelligent software agents or "robots", to find the best price for goods or services. Examples include such sites as DealTime.com, RoboShopper.com, and mySimon.com [15].

Virtual malls are sites that host numerous online merchants. The site usually charges setup, monthly listing, and/or per transaction fees. An example can be found in Yahoo! Store's terms at <http://store.yahoo.com/vw/howitwor.html>. These malls are apparently a cheap and easy way to get exposure for one's e-company. Since one is dependent on the mall's parent company to lure customers to the website, this may be an advantage or a disadvantage depending on how many customers visit the mall's web site [15].

Similar to the virtual mall concept, a metamediary is a business where buyers and online companies can come together. This business processes the transactions, tracks the orders, bills the customers, and collects the money. Quality assurance is provided to the customers by the metamediary, who also charges fees to its merchants. Virtual malls are expected to move more in this direction. Examples are HotDispatch and Amazon's zShops [15].

A buyer aggregator, or "demand aggregation" is a business model started by Accompany.com, in which buyers are gathered together so that they can receive a discount on a product by purchasing in high volume. Each sale is charged a small percentage fee. Other examples are Mobshop.com, VolumeBuy.com, and Etrana.com [15].

Online financial brokerages and travel agents often follow the buy/sell fulfillment business model. In this case, the broker will charge the buyer and/or seller a transaction fee. Examples are eTrade.com, where customers can invest online, and CarsDirect.com, where high volume and low overhead translate into lower prices [15].

The distributor model is usually for the B2B market, where a large number of product manufacturers are connected to volume and retail buyers. Businesses can negotiate not only product pricing, but also delivery schedules. A complex choice of buying and selling options include quotations, auctions, reverse auctions, and structured negotiations. A good example of this model is ConvergeTrade.com [15].

The last subgroup of the brokerage model is the classifieds. Usually local newspapers run these in the same way as traditional classified ads [15].

Like television, radio and newspapers, the Internet also has an advertising model. Advertisements are displayed on various websites that provide content. The web site is used to attract customers who hopefully will click on the advertisements that appear there. The advertisements may be links, banner ads, or pop-up windows. The advertising agency pays for each ad displayed on a web page, or pay for each time the ad is clicked. Most web sites that use this model either have high volume or specialized traffic. Advantages include audience targeting and creating more links between sites. Some disadvantages are that the ads may drive away visitors, visitors may check out the ads instead of looking at your site, and advertising has yet to be proven effective on the web. Subgroups of the advertising model include general portals and the free model [16].

Search engines, such as Yahoo.com, Excite.com, and AltaVista.com, that generate tens of millions of visitors per month are known as general portals. Because of the high volume, advertising is profitable. The sites also often include services such as email, chat, news, and message boards [16].

The free model creates high volume by giving their users something for free. Examples include Hotmail.com's free email, BlueMountain.com's free electronic greeting cards, and FreeDrive.com's free hard-drive space. Incentive marketing works by paying visitors to view certain content or fill in forms. Examples are CyberGold.com, where visitors can earn and spend "CyberCash", and AllAdvantage.com, which pays you to keep a banner ad on your computer while you are surfing the Internet. Bargain Discounters such as Buy.com sell their products below costs while making a profit from advertising [16].

In the membership/subscription model users have a login name and password and pay for access to the site. The Wall Street Journal, Consumer Reports, L.A. Times archives, and various porn sites use this business model. Businesses that offer generic news content, such as Slate.com, have been less successful. According to a 1999 survey by Jupiter Communications, approximately half of all Internet users do not want to pay to view content on the web. Advantages are no advertising is needed and personalize content, but the disadvantages are security issues, frequent content updates, and lack of consumer interest (as most things are free on the Internet) [16].

Those companies who want to promote their business by maintaining a presence on the web use the billboard model. Some examples include subway, Coke, BHP, and McDonalds. Advantages of this model are that you can show a current image of your company on the web, you can access a global market, and you can keep advertising costs down. On the other hand, your web page must be regularly updated and the benefits of this model are difficult to measure [16].

The final category of business models is the efficiency model. By automating information intensive or people intensive business functions with the Internet, business costs can drop dramatically. For example, companies that take orders over the phone spend an average of \$15 per order. If the customer makes an order on the Internet, this will probably cost only around \$4 for an order. FedEx is an example of a company that now uses the web to cut costs. Customers can now log onto the FedEx web site to track their package. Since personnel account for roughly 75% of the cost of a customer services, companies can achieve large savings by automating functions with the Internet [19].

## **1.4 The VRM Business Process**

### **1.4.1 Description**

The VRM business process was designed to maximize resources so that every participant in a metamarket can achieve maximum results. We met with the host of a virtual mall, a financial service provider, two shipping service providers, several small local businesses, and two local e-commerce research companies. From these meetings we found that the most useful approach would be to automate the tasks performed behind the scenes of a metamarket that offered various products made by small local businesses in Hawai'i. The small businesses that provided these products would be the virtual merchants in the business process. While creating a set of initial requirements we discovered that there were many issues that needed to be addressed if our model was to satisfy everyone's needs.

Of the e-commerce business models previously described, no single model can be used to categorize the VRM business process. Instead, the VRM process combines ideas from both the metamediary subgroup of the brokerage model group and the virtual merchant subgroup of the merchant model group, and combines the result with a few separate features. The metamediary subgroup integrates businesses like virtual malls, providers of a virtual location where buyers and online merchants are brought together, with other features like transaction processing and order tracking. The virtual merchant subgroup, on the other hand, refers to a single wholesaler or retailer that conducts its business over the Internet [15].

In the VRM business process, the metamediary provides the small businesses with access to the global market through the metamediary's web site. In addition, the web site maintenance, marketing of products, and processing of customer orders are also responsibilities removed from the small businesses. The payments for customer orders are taken by the "shopping cart" on the metamediary's web site and processed by the financial service provider.

The small businesses, or vendors, operate similar to virtual merchants, but they are no longer concerned about functions provided by the metamediary. However, like a metamediary, businesses also have access to order tracking. From the order tracking, vendors will also be able to track each customer's order history and keep monthly sales reports, characteristics found in neither the metamediary nor the virtual merchant subgroups.

A shipping provider will supply order tracking during fulfillment. This provider should be independent of both the metamediary and the virtual merchants. Information regarding the use of either FedEx or the United States Postal Service (USPS) as shipping providers is discussed in Chapter 3.

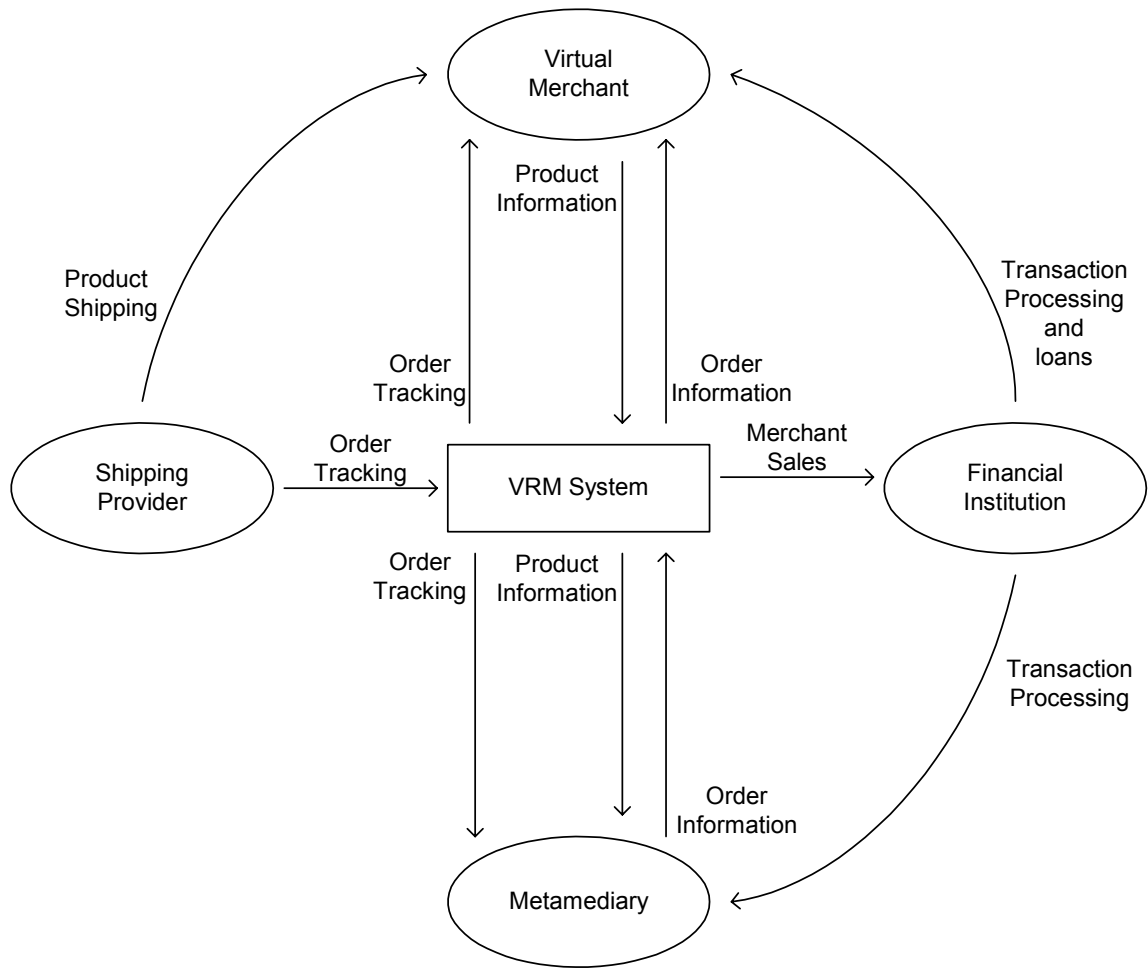


Figure 1.1. VRM partner services

Finally, a financial service provider, or financial institution, has various roles in our process. First, it can handle the merchant account for the metamediary. This means that this institution will process the customer's monetary payments. Second, if every merchant also had an account with the same financial service provider, monies between the metamediary and the merchants could be transferred more efficiently. The additional red tape found between financial institutions when transferring funds would no longer be an issue. Third, a line of credit could be extended to the vendor depending on their current and previous sales records.

## **1.4.2 Strengths and Weaknesses**

After careful analysis of our e-commerce business process, we found various advantages and disadvantages to applying the business process.

### **1.4.2.1 Metamediary**

An important advantage for the metamediary is that after an initial introduction into the metamarket, a virtual merchant is now the one responsible for maintaining the integrity of its information. Since information must always be up-to-date, modifications must be made quickly [20]. With this setup the metamediary no longer needs to employ people to constantly keep up with updating information on its web site. Instead, the vendors that are most familiar with the product are able to supply the most accurate information.

Another advantage is lies in the electronic means of communication. The amount of non-electronic communications, like phone calls, fax messages, etc., are gone. When a customer places an order, the order is sent automatically to the appropriate vendor by email. The VRM process also supplies the tracking number to the metamediary, who can then forward it to the customers.

Also, with the business process centering on drop-ship vendors, the metamediary will no longer have to stock inventory.

An important disadvantage is that with funds transferring electronically through a common financial institution, virtual merchants will be paid faster. In other words, the float time is shorter compared to the case when the metamediary sends the virtual merchant a check.

### **1.4.2.2 Virtual Merchants**

The major advantage for the virtual merchants is an association with the name of a well-known metamarket, or branding. According to Ernst & Young, 82% of online shoppers said that "knowing the product's brand name would be important or very

important in their decision to buy online" while 79% of online shoppers said that being "familiar with their online retailer" influenced their decision to purchase things [23]. Consequently, products sold on the Internet may need to be marketed through established brands or online retailers to ensure customer confidence [24]. Merchants who do not have an established brand may have troubles selling their products on the Internet.

Merchants will not have to become expert web site designers or programmers. Everything will be handled by the metamediary. They just need to know how to log into the system that will allow them to update their information and receive orders.

The shipping provider supplies order tracking. The merchants will not have to send the tracking number to the metamediary.

The disadvantage is that they will no longer be able to control how their product is marketed. Their product could either be easily found on the host website, or it could be placed in a "back corner" where customers would have trouble finding it.

### **1.4.2.3 Internet Access**

Every virtual merchant that uses the VRM business process is required to have Internet access. Without this access, they will not be able to maintain their information on the metamarket. If the metamediary were the one responsible for updating any information, then this would defeat the purpose of the system. In the business process, virtual merchants must keep track of their product information.

Internet access is also the main communication link between the partners. Email notifications are sent between the metamediary and the virtual merchant when customer orders are placed. Tracking numbers for order fulfillment are transferred between the shipping provider, metamediary, and virtual merchant. Vendor sales reports are also available to the financial institution through the Internet. The sales reports can help the merchants receive lines of credit from the financial institution.

However, partners might be concerned about networks going down. For example, if the problem is on the merchant's side, then the merchant can use a computer on a different network and the connection will still be secure. In other words, any online computer should be able to access the system.

## **1.5 Structure of the Technical Report**

The remainder of this technical report consists of the following parts: survey of local businesses, the VRM System design and architecture, preliminary evaluation, future directions, and an appendix. For the survey of local businesses, we interviewed ten local companies to discuss their product(s), Internet ability, views towards E-commerce, and opinions on selling their goods on another company's website. The third section contains a detailed description of the design and architecture of the VRM System, created with ASP and Access and hosted on Microsoft's IIS 5.0. Next, the preliminary evaluation has several expert critiques of the process and system prototype from two local businesses and a financial institution. Finally, the possible future directions of the research will be discussed. The appendix contains transcripts of the ten local company interviews. These have been made anonymous to protect the identities of the interviewees.



## Chapter 2

### Interviews with Local Businesses

#### 2.1 Overview

In order to discover what issues and solutions virtual merchants are having with selling goods on the Internet, vendor interviews were conducted. The first step involved finding companies to interview. One source that we utilized was City Bank, for their business connections in Hawai'i. Konrad Ikei, VP/Business Segments of City Bank, introduced to several local business owners. Another avenue was personal introductions to other vendors from vendors that we previously interviewed. This proved to be the best method of gaining introductions. A third source that we used was the e-List, a computer associated networking social group. Unfortunately, we did not gain any company interviews from this route. A fourth approach was to call companies listed in the "Made In Hawai'i Festival" 2001 brochure without any prior introductions, but this was also not a good approach.

The interviews usually lasted for 30-45 minutes. Notes were taken by hand and the interviews were usually taped. Questions covered the subjects of the company's product, business organization, Internet ability, e-commerce, host, and financial. Goals of the interview were to determine:

1. The degree the Internet is used for sales and marketing. (What percentage of total sales is done over the Internet? How is the Internet used in marketing the product?)
2. The desire, expectation, or need for growth. (What are the current barriers for growth? How would the growth impact their company?)

3. The degree of technological sophistication. (Are they interested in creating their own website? Would they rather let another company host their product so they don't have to deal with the problems of maintaining their own website?)
4. Present and future financial services. (Can they do credit card transactions? Are they interested in loans in order to grow with customer demands?)

After completing the interview, the interview was converted to written form as either transcripts if it was recorded or summaries if it was not recorded. When this was done, the company, people, and product names were changed to such names as Company A, Person B, and Product C, so that the participants remained anonymous. For raw versions of the interviews, see the Appendix.

## **2.2 Results**

We interviewed a total of ten Hawai'i businesses. Seven of the businesses were owned by an individual, a husband and wife team, or family members with 1-2 people. The three remaining businesses had staffs ranging from 5-25 people.

### **2.2.1 E-commerce**

In the area of e-commerce, nine businesses were currently on the Internet. Of these, eight were virtual merchants with individual company websites. Three companies encountered troubles getting their sites noticed. For example, several months would pass before the website would appear on some search engines.

Two companies sold products that did not sell easily online. Often, a customer would prefer to see and touch the actual product instead of just looking at a digital image of it on the computer. This seemed to often be the case with more expensive products. Two companies had no problems with moving online.

As for the percent of total sales that were made from the Internet, three companies received 95% of their sales from the Internet, two companies had 10-30% of their sales from the Internet, and three companies had less than 10% of their sales from the Internet.

### **2.2.2 Future Business Direction**

For future business direction, three companies had no specific plans, but wanted their business to keep growing. Another 3 companies wanted to eventually sell their business, while one company wanted to eventually have a traditional brick and mortar store. Another company wanted to outsource the web site so that more time could be spent creating products. Finally, two companies only wanted to survive and continue business at the same pace.

### **2.2.3 Selling Products on a Metamarket**

We then asked the businesses what would be the advantages and disadvantages of selling their products on a metamediary's (or virtual mall's) web site. Nine companies gave positive comments, while one had nothing good to say. Advantages included high visibility, wider customer base, increased traffic, less hassles, and no maintenance of the web site.

When asked about the disadvantages of using a metamediary, seven companies had negative things to say. These included concerns over setup with metamediary, insufficient time to keep up with production, possible competition with other products hosted on the website, loss of control over advertising, a slower payment process (when receiving the customer's payments), and an increase in the number of small orders. The three companies that already used a metamediary had nothing negative to say about the arrangement.

When asked about product agreement preferences of wholesale, drop-ship, or commission, six companies preferred wholesale. From their perspective, sending one large order is less work than the effort needed to send many small orders, in particular, when fulfilling the orders. Two companies favored a drop-ship arrangement, which is

what the VRM System would also use. One company preferred commission. Finally, one company was completely flexible.

#### **2.2.4 Financial Services**

As for financial services, currently 8 companies accept credit card transactions and 3 have a merchant account with a bank. For possible future financial services, six companies were not interested in any banking services. The business owners of these companies preferred a plan of slow growth and reinvestment, instead of taking out loans. Of all the companies, only 2 were interested in future loans. Two more were interested in other financial services such as business contacts and advice.

# Chapter 3

## The VRM System

After careful analysis of our e-commerce business process, we created a software prototype called the VRM (Vendor Relationship Management) System that demonstrates how the process could be implemented.

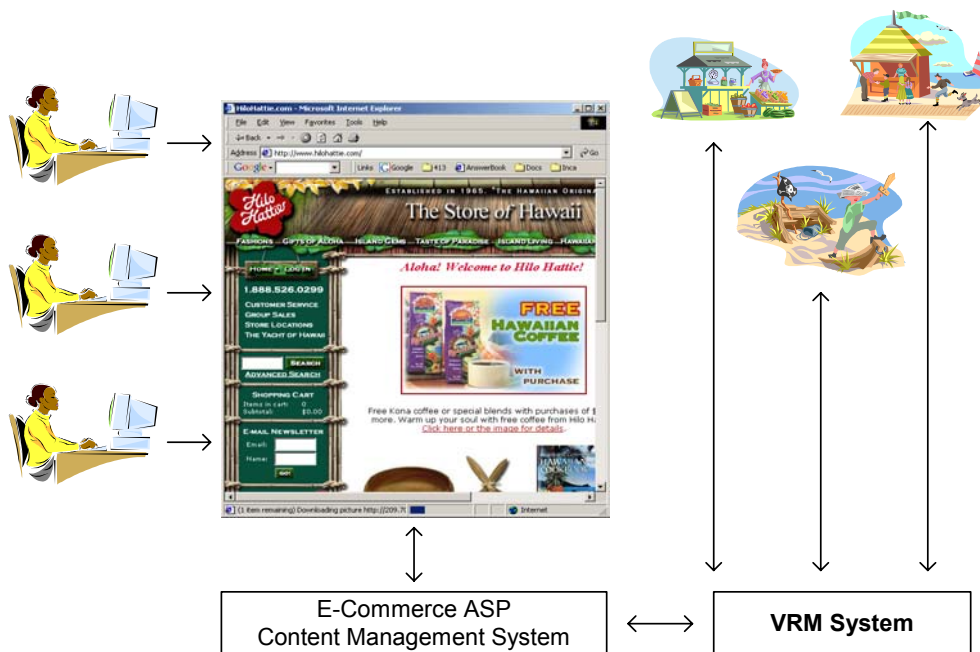


Figure 1.2. The interaction between a CMS and the VRM System

The VRM System interfaces with any arbitrary content management system (CMS) used by a metamediary. (See Figure 1.2) The CMS creates the web pages and processes billing and payment collections, which are front-end features that a customer interacts with. Conversely, the VRM System automates remaining back-end operations between the individual wholesaler or merchant, metamediary, shipping provider, and financial institution that are invisible to the customer. In other words, it addresses the potential problems and bottlenecks that could prevent each partner from operating as efficiently as possible.

The VRM System consists of four main interfaces: three internal interfaces and one external interface. The internal interfaces were created for the metamediary, the virtual merchants, or the small local businesses whose products are sold in the metamarket, and a financial service provider. The one external interface is for the shipping provider.

In this chapter we will begin with a tour of the system and explain its capabilities. Next we will discuss the internal design and architecture. Then we will discuss the external interface. Finally, we will talk about the issues and problems with the current implementation.

## **3.1 A Guided Tour of the System**

Here we begin with the features of the interfaces for the metamediary, followed by the virtual merchants and then the financial institution. Next is a detailed description of the process by which a customer places an order with the metamediary. The tour will end with what we believe should happen when an order needs to be returned due to an arbitrary problem with the product(s).

For the remainder of this chapter, metamediaries, virtual merchants, and financial institutions will refer to the authorized persons that will log into the system as well as the companies that are a part of the system.

Most non-Main Menu screens have buttons that can return a metamediary or virtual merchant to their Main Menu screen, and only the Main Menu screens have a button to log out of the system.

### **3.1.1 Metamediary's Perspective**

Almost every task behind a metamarket's CMS is now automated. After the overhead of manually creating virtual merchant accounts, a metamediary is liberated from the responsibility of adding/updating any information in the virtual merchant's account. However, the responsibility of monitoring the information put into the databases by a virtual merchant still remains a manual operation. To assist with this task, the VRM System can generate email notifications to the metamediary whenever any data

in virtual merchant accounts are altered. Unfortunately, the system does not contain any algorithms to ensure the modifications follow any metamediary standards.

Another automated task is inventory tracking. After an order is received from a metamarket, the inventories for the products ordered are decremented.

When the metamediary has logged on, the first screen displayed is the "Metamediary Main Menu". It is divided into four categories: Contacts, Vendors, Products, and Orders. While the metamediary is logged onto the system, that person will have full access and the ability to change any information in the system.

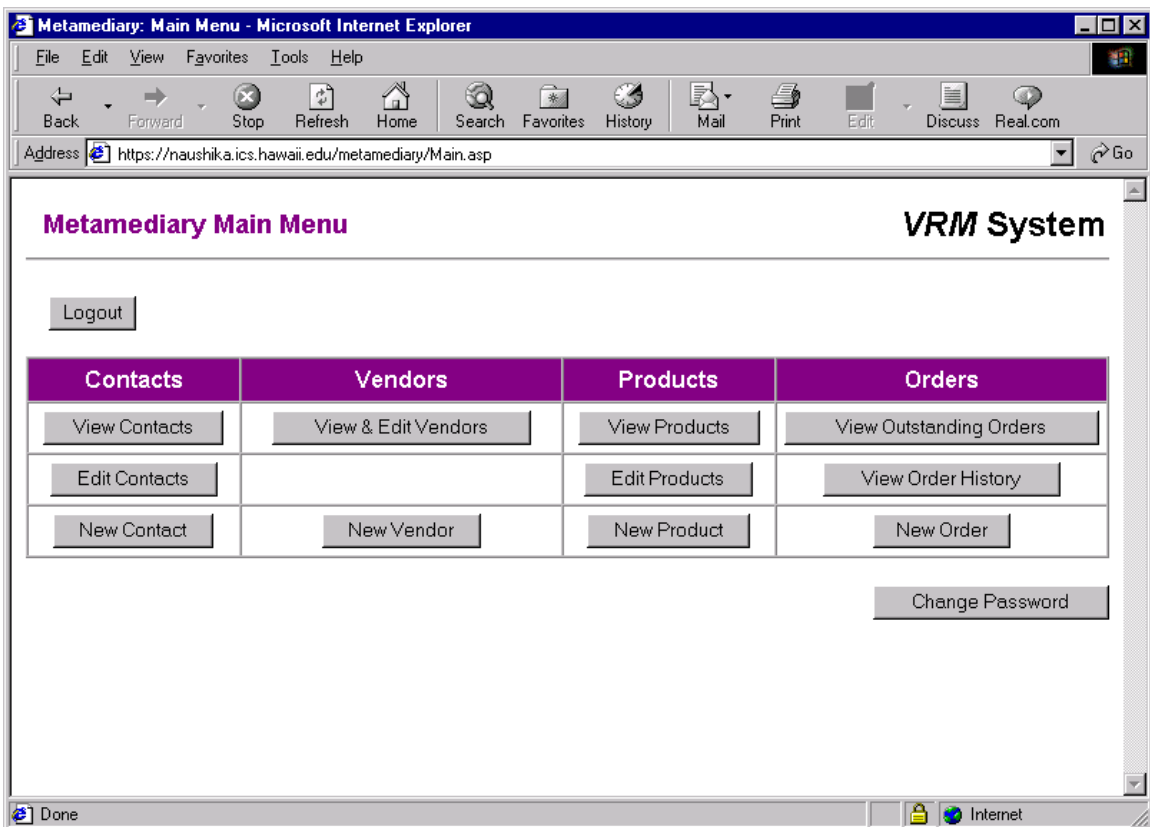


Figure 3.1. Metamediary main menu

### 3.1.1.1 Contacts Category

The *Contacts* category includes options that affect only the metamediary account. There needs to be a record in the database for every email address that is to receive change notifications.

- “View Contacts” displays the contact information for the metamediary. The information shown includes a contact's first and last name, position in the company, mailing address, phone number, fax number, and email address.
- "Edit Contacts" is where any information about a contact can be changed, including the email address for change notifications. The information required for creating a new contact is still holds.
- “New Contacts” allows the metamediary to add contact information. Required information includes a contact's first and last name, mailing address, and email address. The email address specifies where email notifications for changes in virtual merchant accounts will be sent.

### **3.1.1.2 Vendors Category**

The *Vendors* category is a very powerful category. This is where virtual merchant accounts are created. It also gives the metamediary complete access to every virtual merchant’s account in the system.

- “Edit & View Vendors” allows the metamediary to choose which virtual merchant account to access, and then log into that virtual merchant’s account without entering a password. Accessing a virtual merchant's account will present the Main Menu page seen by the virtual merchant upon logging in.

When the metamediary enters a virtual merchant account, this is the only time a “Metamediary Main Menu” button appears. This button allows the metamediary to return to his original Main Menu page.

- “New Vendor” is where the metamediary creates new virtual merchant accounts. This requires the name of a virtual merchant's business, a username that will be used



to log into the system, a password, and password confirmation. As soon as an account is created, the login name and password may be given to a virtual merchant and used instantly.

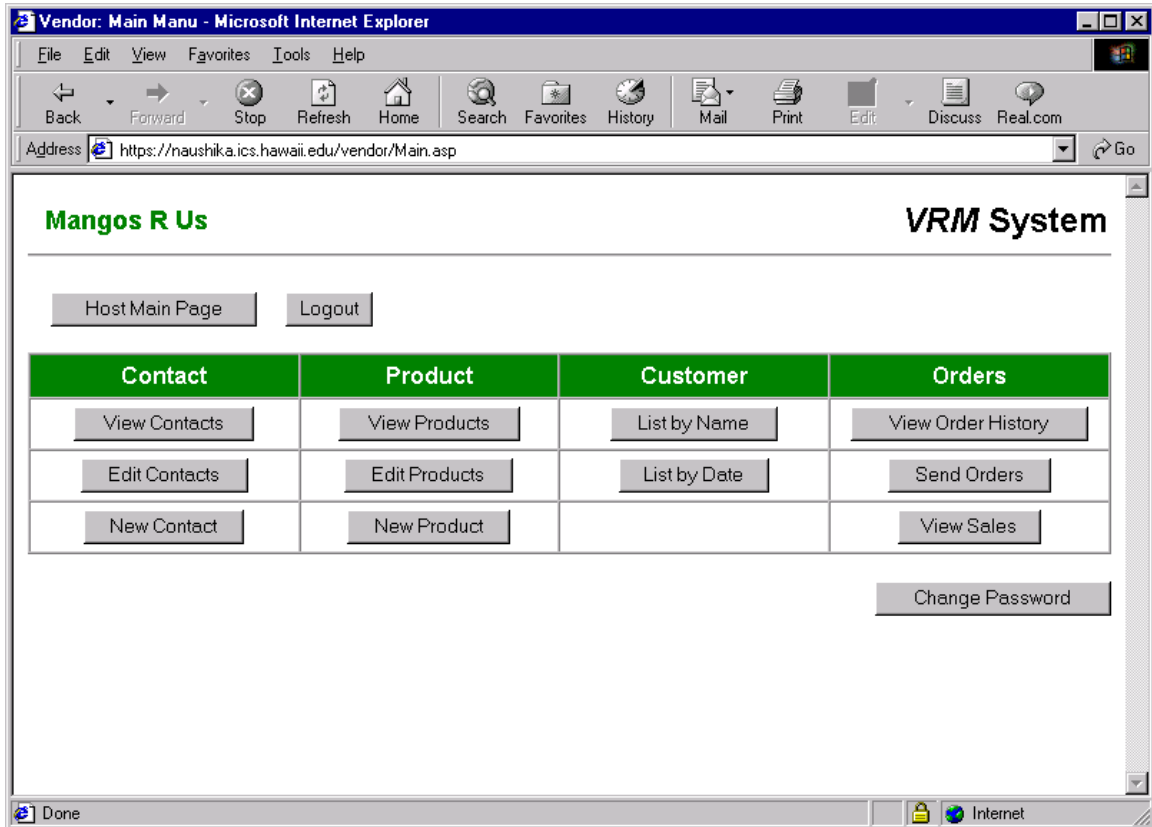


Figure 3.2. Metamediary logged into a virtual merchant’s account

### 3.1.1.3 Products Category

The *Products* category is designed to provide access to every product record in the system. Here the metamediary is able to view information about a certain product, edit current product information, or create new records for products.

- “View Product” allows the metamediary to view information about products in the system. From a table of products displayed, either one product can be viewed at a time or every product profile can be viewed at once. The fields in the table include

the product ID, name, description, and the company that provides the product. Data displayed about a product includes its product ID, name, wholesale price, average inventory amount, average delivery time, order of preferred storage (drop-ship, wholesale, warehouse), photo(s), description, and other miscellaneous information.

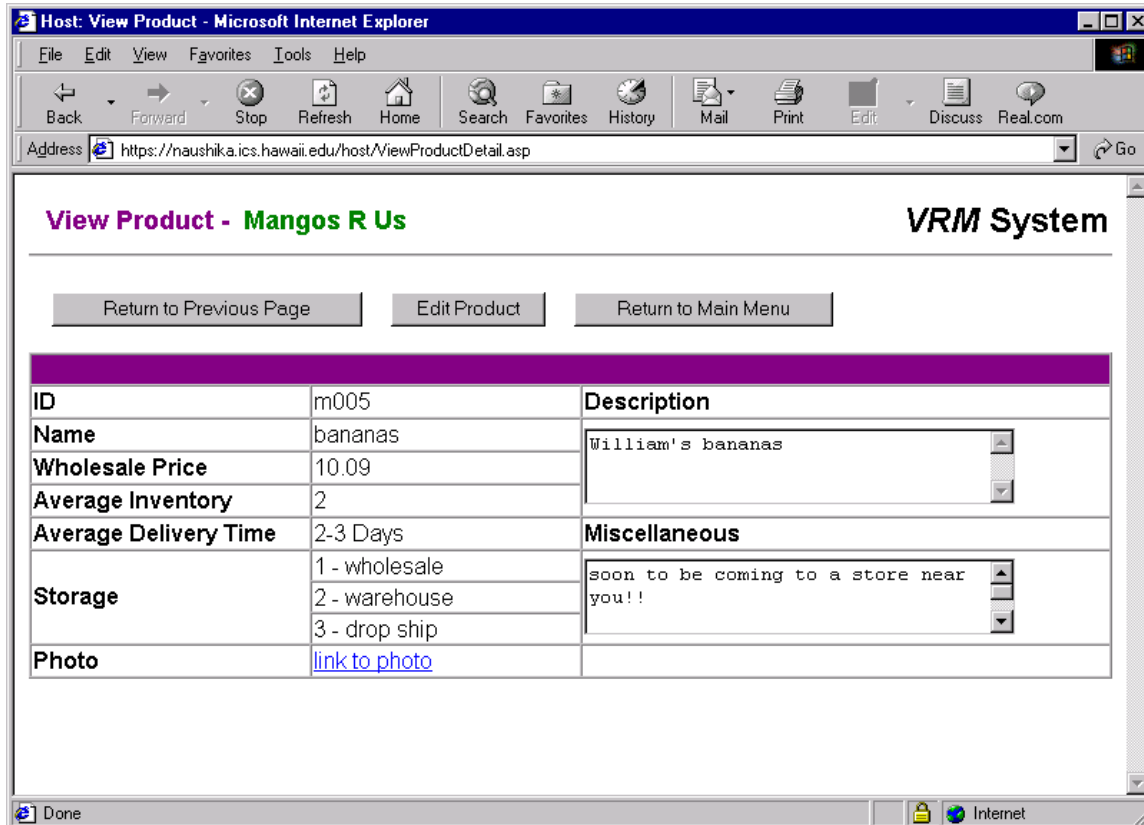


Figure 3.3. Metamediary views profile of a product

- “Edit Products” is where the metamediary changes any information in a product's record. After selecting a product from a table similar to that under "View Products", the metamediary is able to change any information found in a product's profile except for the product ID. Before submitting the changes, all information required to create a new product must also be present.

The metamediary is also able to "delete" products from the system from here. With this option, a product is not physically deleted from the database, but marked "no"

under the display field in the Product table. By deleting a product, the metamediary or virtual merchant will no longer be able to view it from either their "View Products" page or "Edit Products" page, but the product information will still appear in information about orders.

- “New Product” is where new products can be added into a virtual merchant's account by the metamediary. The metamediary selects which business the product will be added to. Information required to create a new product is a product ID, name, description, wholesale price, average amount in inventory, and average delivery time for the product to reach a customer, storage preferences, and a photo. Other information not included here is optional can be added in the miscellaneous text area.

#### **3.1.1.4 Orders Category**

The *Orders* category is for adding orders to the system from the metamarket and for recording the current state of each order. It gives the metamediary access to information about every order taken by the metamarket. All dates listed include the month, day, year (mm/dd/yy), and time created (AM/PM).

- “View Outstanding Orders” shows every order that has not been fulfilled. It includes the order ID, date ordered, product ID, product name, quantity ordered, customer name, and the virtual merchant the order was made to. Orders are sorted in reverse chronological order by the dates they were placed by a customer.
- “View Order History” allows the metamediary to review every order, fulfilled and unfulfilled. The information displayed is similar to “View Outstanding Orders” with the addition of the date sent. An empty Date Sent cell indicates the order has not been fulfilled yet.
- “New Orders” is where all the orders placed by customers are entered into the system. When an order is added, it is divided into purchase order items, one purchase order

item per item ordered. This allows a customer to order products from different virtual merchants simultaneously. An email notification is then sent to the corresponding virtual merchants per purchase order. It is left to the virtual merchant to ship the product to the address specified by the customer.

### **3.1.2 Virtual Merchant's Perspective**

All virtual merchants have individual accounts that allow them access information pertaining to their business only. These accounts enable them to directly update any information about their company or their products at any time. They are now the ones responsible for maintaining the integrity of the information.

When a virtual merchant logs on to the VRM System, the first screen he will see is also a Main Menu. The menu is divided into four categories: Contacts, Products, Customers, and Orders. The company's name appears in the top left corner of the screen.

#### **3.1.2.1 Contact Category**

The *Contact* category refers to the company's contact information. The person(s) listed here will be sent email notifications when a new order is entered into the system. Each virtual merchant needs to have at least one contact person.

- “View Contacts” lists employees of the company that will receive email notifications for orders to fulfill. The information displayed includes name, position in the company, mailing address, phone number, fax number, and email address.
- “Edit Contacts” allows the virtual merchant to update information for any of the contacts listed in the system. A contact may also be removed from the system if that person will no longer receive product orders. Unlike deleting a product, a contact is physically removed from the database.

- “New Contact” is where a new contact is added to the system. The virtual merchant is required to provide the employee’s first and last name, position in the company, mailing address, and email address.

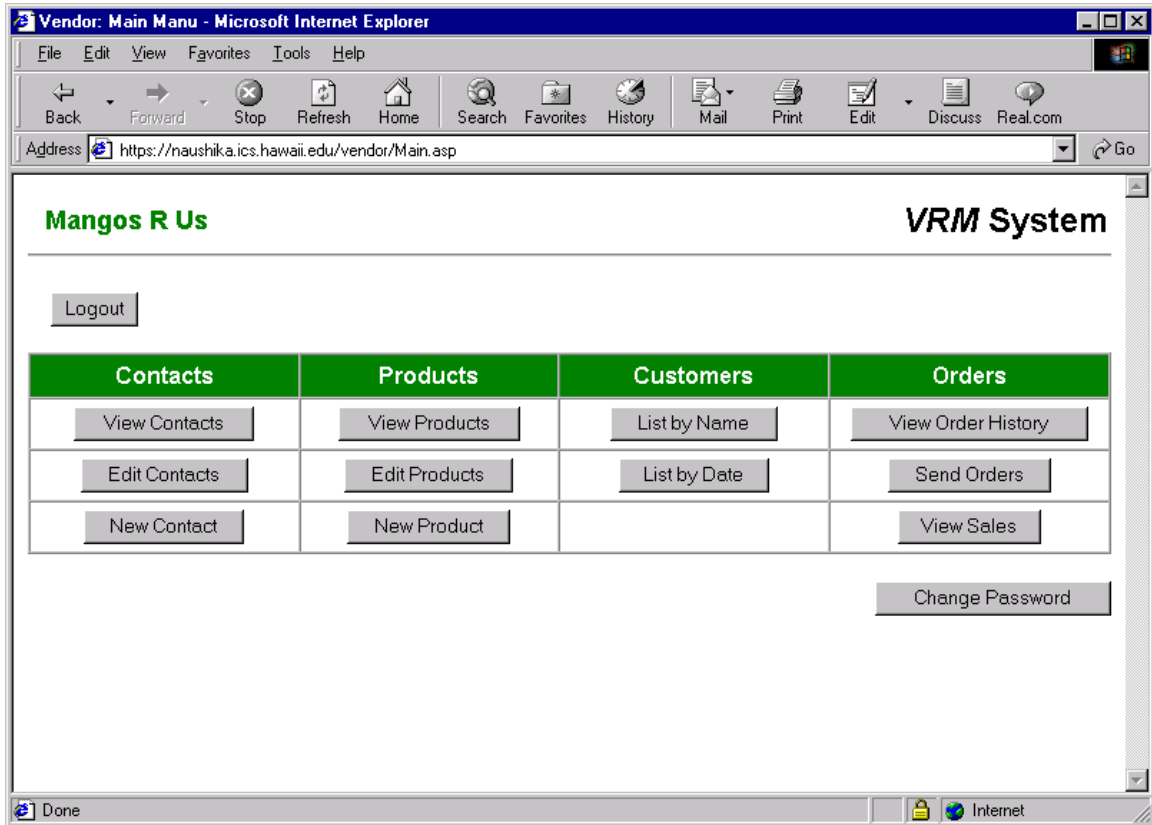


Figure 3.5. Vendor’s main menu

### 3.1.2.2 Products Category

The *Products* category provides access to a virtual merchant’s product records in the system. Here the virtual merchant is able to view information about a certain product, edit current product information, or create new records for a product. Being able to add new products into the system removes the responsibility from the metamediary.

- “View Products” is where a virtual merchant can see the information about their products currently in the VRM System. From a table of products displayed, either one product can be viewed at a time or every product profile can be viewed at once. The fields in the table include the product ID, name, and description. Data displayed about a product includes its product ID, name, wholesale price, average inventory amount, average delivery time, a ranking of the preferred type of product storage (drop-ship, wholesale, warehouse), one photo, description, and other miscellaneous information.

When only one product is selected, it may be edited by clicking on the “Edit Product” button, which is the same as choosing a product to edit under “Edit Products” from the Main Menu.

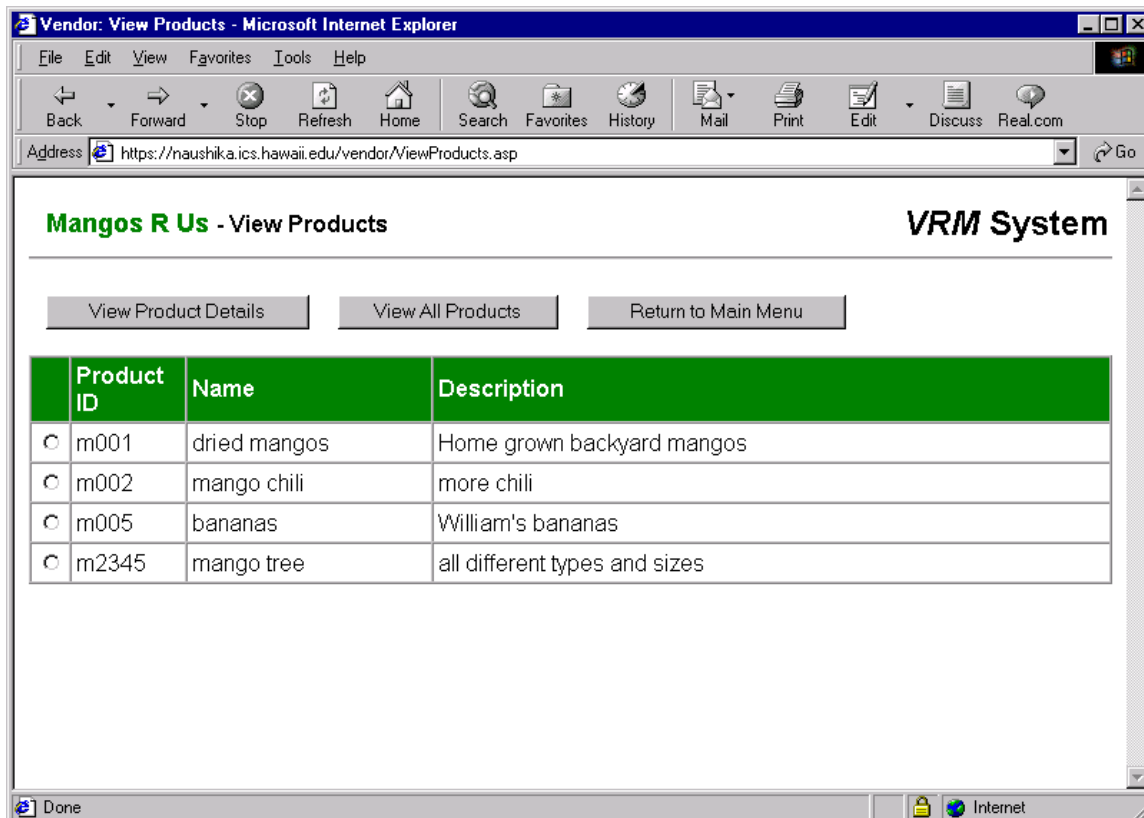


Figure 3.6. List of a virtual merchant’s products in the system

- “Edit Products” is where the virtual merchant changes any information in a product's record. After selecting a product from a table similar to that under "View Products", the virtual merchant is able to change any information found in a product's record except for the product ID. Before submitting the changes, all information required to create a new product must also be present. The only way to undo changes committed to the system is to edit a product again.

If a product is deleted by the metamediary, it is not viewable to a virtual merchant here even though the product is not physically deleted from the database. This ensures the product information will still appear in information about orders.

- “New Product” is where new products can be added into the virtual merchant's account. Information required to create a new product is a product ID, name, description, wholesale price, average amount in inventory, and average delivery time for the product to reach a customer, storage preferences, and a photo. Other information not included here is optional can be added in the miscellaneous text area.

### **3.1.2.3 Customers Category**

The *Customers* category organizes information about the customers that have placed orders with a virtual merchant. A virtual merchant can access this information according to the customer's name or the date on which they placed an order.

- “List by Name” displays information in a table that includes Customer Name and Last Date Ordered and is ordered by last name. The customers displayed depend on all the contact information (first and last name, mailing address, phone number, fax number, and email address) given when placing an order. Choosing which order history to view by clicking on the "View Customer Details" button next to the customer's name will bring up information about that customer. The information includes their contact information as well as their order (product ID, product name, quantity ordered, and date Ordered).

- “List by Date” lists the orders placed by customers in a table under Date Ordered and Customer Name. The difference between this and the previous option is that "List by Name" displays customers by the last date they placed an order. Here, every purchase order item for every customer is listed in reverse chronological order. The virtual merchant may see more details about a customer by clicking the "View Customer Details" button next to a date. This will bring up information about that particular order.

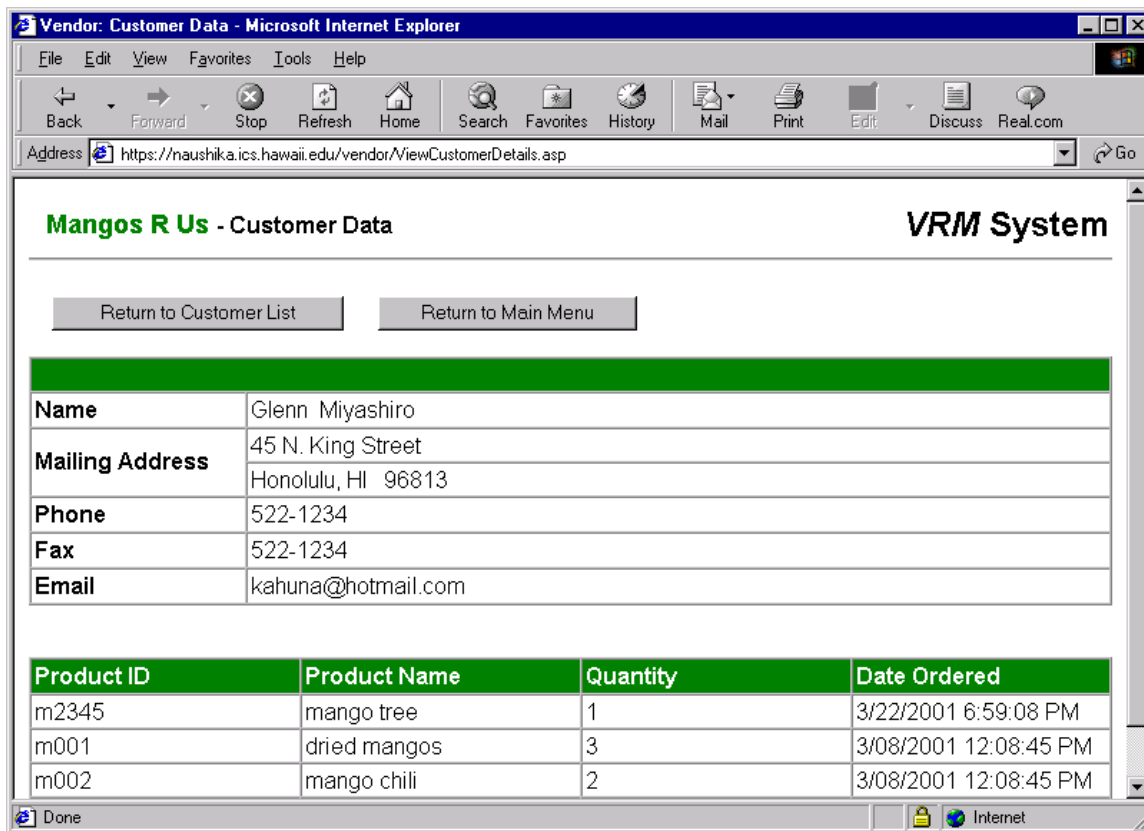


Figure 3.7. View details about a virtual merchant’s customer



### 3.1.2.4 Orders Category

The *Orders* category is a way for a virtual merchant to review information about each order in the system.

- “View Order History” allows the virtual merchant to review every one of his orders in the system, fulfilled or unfulfilled. Information displayed includes purchase order item ID, date ordered, date shipped, customer name, and order details.

A virtual merchant may see more details about an order by clicking the "View Order Details" button in the same row as an order. This will bring up a report of the portion of the order for this virtual merchant. Information includes the date ordered, product ID, quantity, product name, and customer contact information.

- “Send Orders” lists all the virtual merchant’s orders that are unfulfilled. The information displayed includes purchase order ID, date ordered, product ID, quantity, and customer name. When an order is shipped to the customer, the virtual merchant clicks on the box next to the order under Completed Orders and submits the changes to the system.

Vendors are able to see detailed information about a product or customer by following the link under Product ID or Customer Name. Choosing a product ID is the same as selecting “View Product” under the Product category. Choosing a customer’s name displays the customer's contact information and order history.

This feature should be transferred to the shipping provider. Having an independent third party perform the shipping confirmation is essential to ensure that customers will be satisfied with the delivery of their order. This topic will be further discussed in Section 3.3.

- "View Sales" is a report feature for the virtual merchants. This displays a table of totals. The sales, fulfilled and unfulfilled totals are grouped by months with annual totals between the months December and January. Their sales are also viewable to the financial institution for purposes of reducing the amount of time it would take to apply for an extended line of credit or other financial services a merchant may need.

The screenshot shows a web browser window titled "Vendor: Total Sales - Microsoft Internet Explorer". The address bar shows the URL "https://naushika.ics.hawaii.edu/vendor/ViewSales.asp". The page content includes a header "Mangos R Us - View Sales" and "VRM System". Below the header is a "Return to Main Menu" button. The main content is a table with the following data:

Month Year	Sales	Fulfilled	Unfulfilled
January 2001	\$ 0	\$ 0	\$ 0
February 2001	\$ 0	\$ 0	\$ 0
March 2001	\$ 286.98	\$ 286.98	\$ 0
April 2001	\$ 0	\$ 0	\$ 0
May 2001	\$ 0	\$ 0	\$ 0
June 2001	\$ 0	\$ 0	\$ 0
July 2001	\$ 0	\$ 0	\$ 0
August 2001	\$ 0	\$ 0	\$ 0
September 2001	\$ 14.06	\$ 0	\$ 14.06
October 2001	\$ 0	\$ 0	\$ 0
November 2001	\$ 0	\$ 0	\$ 0
<b>2001 Total</b>	<b>\$ 301.04</b>	<b>\$ 286.98</b>	<b>\$ 14.06</b>

Below the table is another "Return to Main Menu" button. The browser status bar at the bottom shows "Done" and "Internet".

Figure 3.8. View virtual merchant's sales

### 3.1.3 Financial Institution's Perspective

The three categories of this interface are Financial Institution, Contacts, and Sales.

Unfortunately, due to customer privacy policies, online services from a financial institution will not be able to directly connect to the VRM System. However, financial institutions will be able to provide an identification number for virtual merchants with regards to lines of credit. This number can be put into a virtual merchant's account under the Financial Services category.

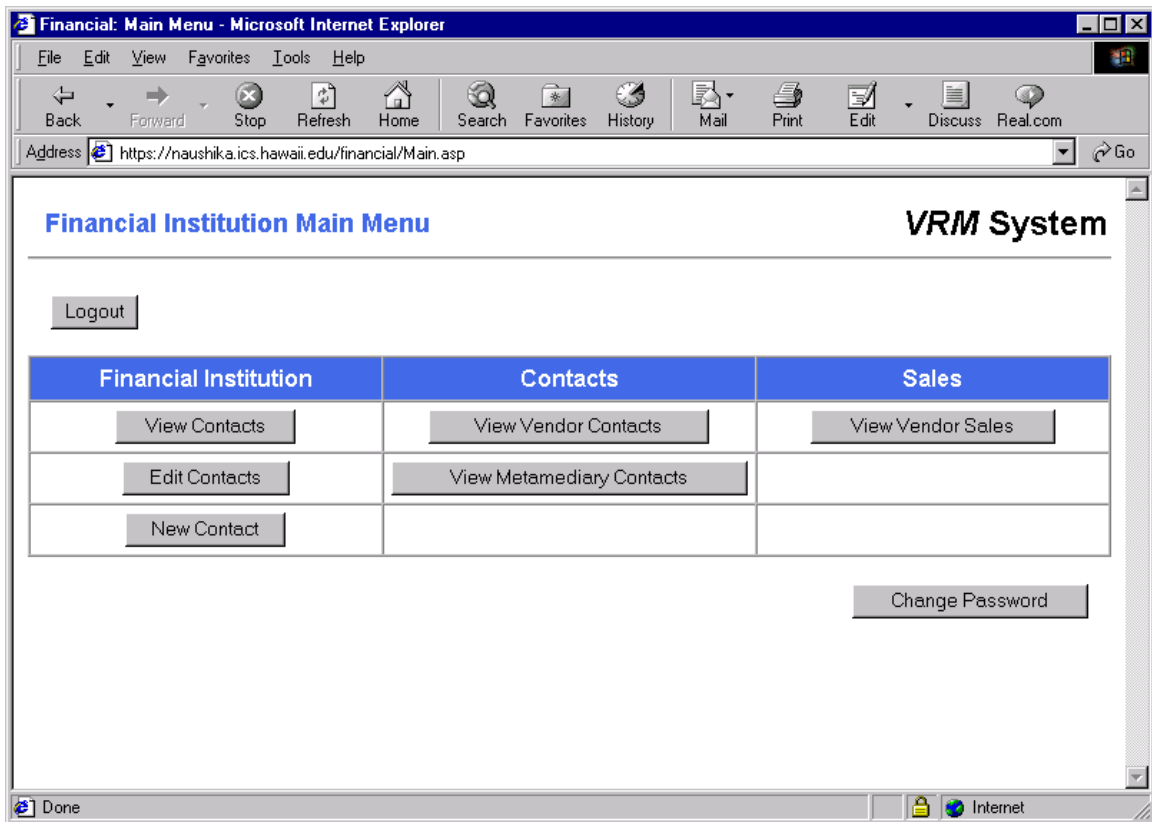


Figure 3.9. Financial Institution main menu

### **3.1.3.1. Financial Institution**

This category provides access to tasks similar to those found in the metamediary and virtual merchant interfaces. The only difference is that there is no email that is automatically generated and sent to the financial institution.

### **3.1.3.2. Contacts**

From here a financial institution can view contact information for both the virtual merchants and the metamediary.

- "View Vendor Contacts" displays a table of the virtual merchants that are a part of the system. After selecting one of them and clicking "View Selected Vendor", a list of all the merchant's contacts in the system will be listed. The information displayed is similar to the information seen by merchants in their accounts.
- "View Metamediary Contacts" shows the contact information for the metamediary. This includes the email address where notifications about changes to merchant accounts are sent.

### **3.1.3.3. Sales**

- "View Vendor Sales" is the only feature listed here. This allows the financial institution to choose which virtual merchant's sales record to review. The data shown corresponding to that displayed by a merchant account.

## **3.2 The Internal Design and Architecture**

The VRM System was developed on a PC running Microsoft's Windows 2000 Professional operating system. We have chosen to implement the VRM System prototype using Active Server Pages (ASP) with Microsoft's Internet Information Server

(IIS) as the web server. Open Database Connectivity (ODBC) was used to access the database, which was created with Microsoft Access.

### **3.2.1 Active Server Pages (ASP)**

ASP is a server-side technology that allows the creation of dynamic and interactive web pages. These pages are written using a combination of HTML code and special tags that embed code written in server-side scripting languages like JScript, VBScript, PerlScript, etc [25]. "ASP is not a normal Windows application development technology. You cannot make executables, pages must be accessed through a browser and they must reside in a virtual directory on a web server" [30].

We decided to use ASP because it allowed us to add pages to the VRM System relatively quickly once we were familiar with the syntax. It is also ideal because it creates web pages dynamically. When a virtual merchant changes information in his account, the changes can be displayed the next time the same web page or another web page displaying the same information is viewed. For example, if a product's data must be updated, a virtual merchant may go into the system and change the data. Once the change is committed to the database, the merchant is able to view the updated product information and make sure it is correct. If there is a typo, etc., it can be corrected quickly.

We were also able to encode a degree of security by using a Session object. A Session object is unique per user session on a web server, [25] and can have variables that contain values accessible to a user "for the duration of his or her [log in] session, even though that session may consist of lots of individual pages" [35]. These objects are by default valid for at most a 20 minute period of non-activity, or until "the session is explicitly abandoned through code" [25]. Because we have not set a period, the default value will be used.

When a user logs into the system, their login name is entered into a Session variable. Every subsequent web page viewed, including the Main Menu, contains script to verify the Session variable is not empty before displaying the web page's contents. If the variable is empty, then the system assumes an intruder is trying to break into an account

and sends the intruder to a logout page. The exact logout page depends on which directory contains the web page the unauthorized person is trying to view.

After implementing and testing our system with the Session variables, we have run into several important scenarios that we believe should be mentioned. First, the person viewing the web pages must be able to accept cookies. Since Session objects are kept track of like cookies by a web server [35], if cookies were not allowed, the system would not be able to set Session variables. Without the Session variables, a user will not be able to view any of the pages in the system.

Second, if a user remains idle for the period of 20 minutes while logged into the system, the Session object will expire. If the user tries to do anything after the Session expires, their activities will be treated as unauthorized activities, and therefore redirected to their logout page.

Third, when a person logs out of the system by clicking the Logout button, their Session is abandoned. This means that they will not be able to make any changes to their account by simply pressing the “Back” button on their browser because their Session object is no longer valid. If they do this, then try to change a product’s information, for example, they will be treated as an unauthorized viewer and sent to their logout page. Instead, they will have to re-log into the system to have proper access to their account.

Fourth, if a user does not log out of the system correctly, there are several things that may happen. 1) If they do not close their browser an intruder may have access to their account. If the Session object is still active, the system has no way of knowing that the user is now an unauthorized person. 2) If the browser remains open for a long period of time until the Session variable expires, an intruder may click on the “Back” button to review the pages the authorized user viewed. 3) If the browser is closed, the Session is no longer active. This means that if an intruder tries to reopen the browser, he will not be able to view any pages in the history. However, within IIS, the Session will remain attached to a thread [31]. If enough users log out of the system this way, in a relatively short period of time, the system will crash. This is due to having multiple threads assigned to Session objects that don't expire correctly and remain idle in the system. They are not free to be assigned by the web server to new sessions [31].

Fifth, although there is an HTML tag that will not allow the caching of pages, using this tag gives undefined results [32]. While testing our system, we found that this tag does not affect the information stored in the history of a browser. So an unauthorized person can simply press the “Back” button if the browser remains open to see web pages that were viewed. However, they will not be able to alter any information, as previously mentioned. This implies that after properly logging out there are two things a person can do to further protect their information. They can first manually clear the history of their browser to erase traces of previous activity before closing the browser, or they can just close the browser.

Finally, aside from implementing the pages is the problem that ASP files are interpreted by IIS before the pages are displayed in a browser [25], not compiled before making them accessible to IIS. This leads to the concern that unless the server is secure, an intruder might be able to see the code that is used to generate the web pages. This could lead to further problems if the intruder decided to find a way to hack into the pages.

### **3.2.2 Microsoft Access**

Microsoft Access was used to create eight tables that make up the database: Business, Product, Contact, Customer, Orders, Purchase Order, PurchaseOrderItem, and ChangeNotifications.

The Business table contains the company name, login name, password, and access code. The access code identifies whether the user logging into the system is the metamediary, a virtual merchant, financial institution, etc. (When logging in, the LoginA.asp page checks which Main Menu page to display.) The access code field was also included for future improvements to the system. If other interior interfaces for the shipping provider, etc. need to be created, they can be given different access codes.

The Change Notification table is where the metamediary will store information about which changes by the virtual merchant will generate an email notification. This table was included for future implementations.

The Contact table keeps track of every business's contact information, including the metamediary's email address where notifications will be sent to when modifications are made.

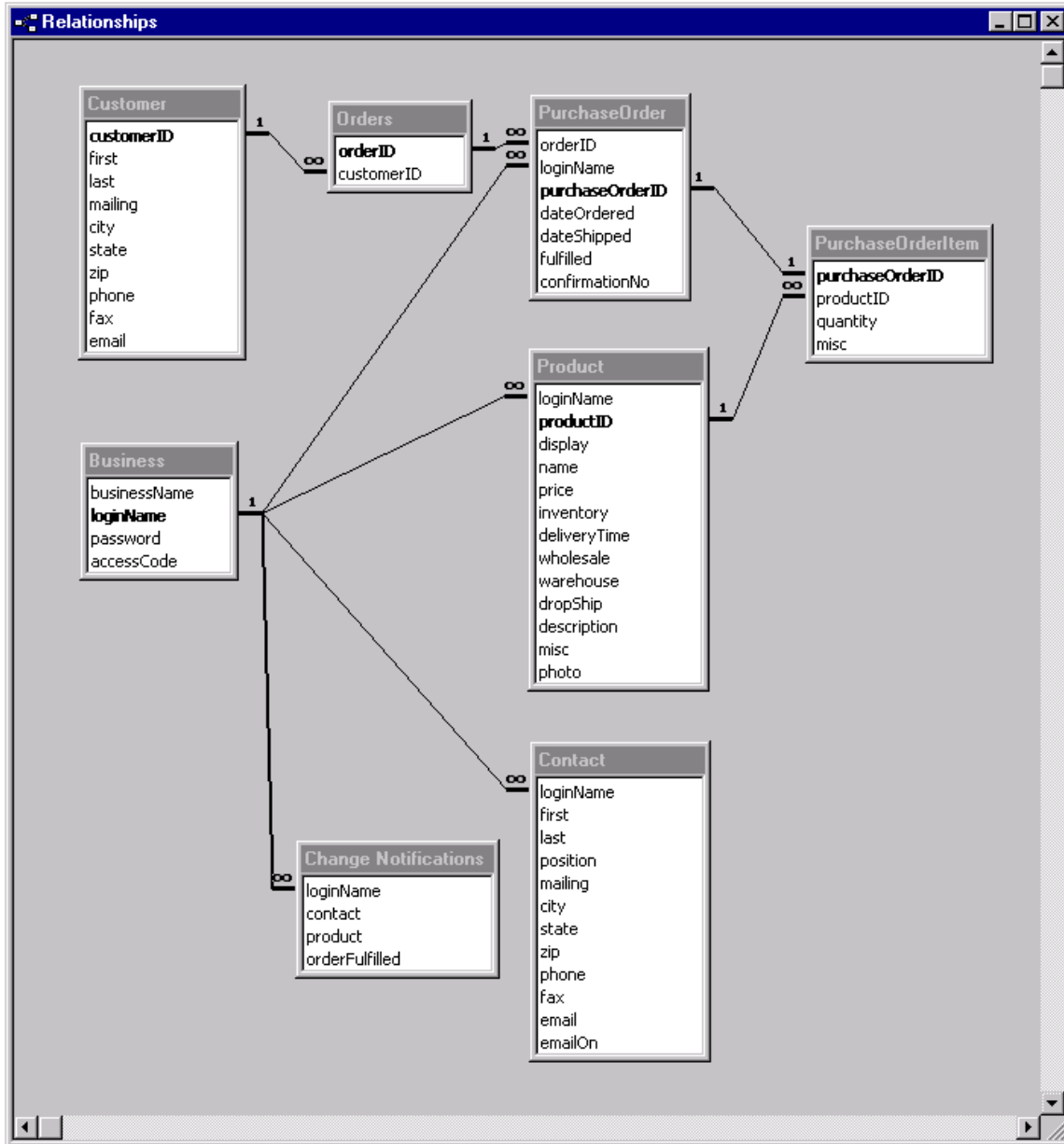


Figure 3.12. VRM System database design



The Product table describes specifics for every product in the system.

The Customer table lists every customer that ever placed an order. Each customer is given an identification number. If any information about a customer changes the next time they place an order, the different information will cause a new customer record to be created.

The Orders table holds every order that is placed in the virtual mall by a customer.

The Purchase Order table keeps track of the orders for each virtual merchant.

The Purchase Order Item table gives specific information about each item that was ordered.

### **3.2.3 Secure Socket Layer (SSL)**

The Secure Socket Layer (SSL) and HTTPS establish a secure connection whenever a connection to the VRM System is made.

From the beginning we decided that this added security was desirable because there will probably be sensitive information sent to and from the system. Since companies exist that sell information about consumers and their buying habits [14], we felt that our system should provide a degree of security during the transmission of such data so that such companies would not be able to get a hold of it. The security should also add a degree of trust from the virtual merchants and metamediary that any unauthorized entity would not have an easy time snooping their information.

To implement SSL, we first went to VeriSign to apply for a Trial Server Digital ID certificate. This certificate is valid for 14 days from the day it is issued and was used for *testing purposes only*. For an actual deployment of the system, a real certificate needs to be obtained from a trusted certificate authority like VeriSign or Thawte.

## **3.3 External Interface**

### **3.3.1 Shipping Provider**

The shipping provider interface was included to provide verification that a virtual merchant fulfilled an order. We learned that this verification is important because it lets the financial service provider know how well a virtual merchant is doing. For instance, by knowing that a virtual merchant is fulfilling his orders, the financial institution would know how much line of credit to extend to the virtual merchant.

The shipping provider will have to upload the confirmation number into the VRM System via a plug-in where it will be associated with the order placed by the customer. From the VRM System, the confirmation number may be sent to the metamediary, where it will be forwarded to the customer. The customer can then check on the status of their order on a metamediary web page that's linked to the shipping provider.

#### **3.3.1.1 United States Postal Service (USPS)**

The United States Postal Service (USPS) has two types of confirmation numbers to track parcels: delivery confirmation and signature confirmation. Delivery confirmation and signature confirmation are similar in that they both include the date, time, and ZIP code the delivery was made to, but signature confirmation uses the signature of the receiver as further confirmation that a parcel was received [26].

USPS offers lower rates to shippers who are able to “send and receive information electronically by [communicating with] the USPS host computer” [26]. To qualify for this discount, a shipper must first have a site D-U-N-S Number. The number can be obtained over the Internet and is free of charge. Then a couple more forms are needed to request access to the USPS host computer and to gather information needed to send files electronically. Finally, after the shipper receives a login ID and password, test transmissions between a shipper and USPS ensure information is exchanged correctly. This qualification process has to be completed for every site that will either transmit files or print labels [26].

A shipper may want to print their own labels for every parcel they ship. (Third party software is available to those who do not want to create their own.) This is especially desirable if a shipper wants to use the Merchandise Return Service offered by USPS. To qualify for this, a shipper needs to have a permit that will allow them to “pay the postage and fees on shipments returned by the permit holder’s customer”. In other words, if a virtual merchant has a permit, then a customer would be able to obtain a label for returning merchandise to the virtual merchant and would not have to pay the postage [26].

The system that USPS has set up seems to be more concerned with confirming when a parcel is delivered versus tracking the delivery starting from the time a parcel is presented at a Post Office.

### **3.3.1.2 FedEx**

FedEx also provides a way to add shipping functionality to their customers’ current systems. They call it the FedEx Ship Manager Server. It gives a company access to national and international shipping, tracking numbers, routing information, and Close or End of Day (EOD) functionality. The server will also provide multiple account and meter numbers, multiple transaction processing, and remote diagnostics functionality [27]. However, a company must provide its own client software to interact with the server. This requirement allows a company to create client software that fully integrates with their current systems or purchase third party software that meets their needs.

To obtain a FedEx Ship Manager Server, a business must first sign an automation agreement with FedEx describing a rating scale for parcels that will be shipped. The rating scale is added to FedEx’s mainframe system. Then a FedEx representative orders all the hardware needed to run the server. The server software is installed on a computer and configured with the company’s account number, meter number(s), shipping information, tracking number range, and report print settings. The computer is then placed in the company’s office. Finally, a URSA file, the rating scale from the automation agreement used by the server to route packages, and the tracking number range is downloaded [27].

The FedEx Ship Manager Server appears ideal for tracking the progress of parcels in transit. From within the Tracking Number tab on the FedEx Configuration screen, a company can see what their start, end, and current FedEx Tracking Numbers are. When approaching the end of an assigned tracking number range, another range of tracking numbers is automatically downloaded during the EOD process [27].

## **3.4 Orders**

### **3.4.1 Process of Placing an Order**

When a customer orders a product from the metamarket, their payment is handled by the metamarket's shopping cart, outside of the VRM System. However, the products ordered, mailing address, etc. are entered into the system. Assuming a customer orders products from different merchants and only one product is offered per merchant, an email is generated per product ordered and sent to the virtual merchant(s) that will fulfill the order.

Upon receiving the order, it is the virtual merchant's responsibility to prepare the product(s) for shipping and mail it to the customer through the shipping provider associated with the system. The shipping provider uploads a confirmation number into the VRM System upon receiving the package. The metamediary can then automatically generate an email containing the confirmation number and send it to the customer. From then on, the customer can track the progress of their order from a web page connected to the metamarket until it is delivered to their specified mailing address. The confirmation web page is generated outside of the VRM System.

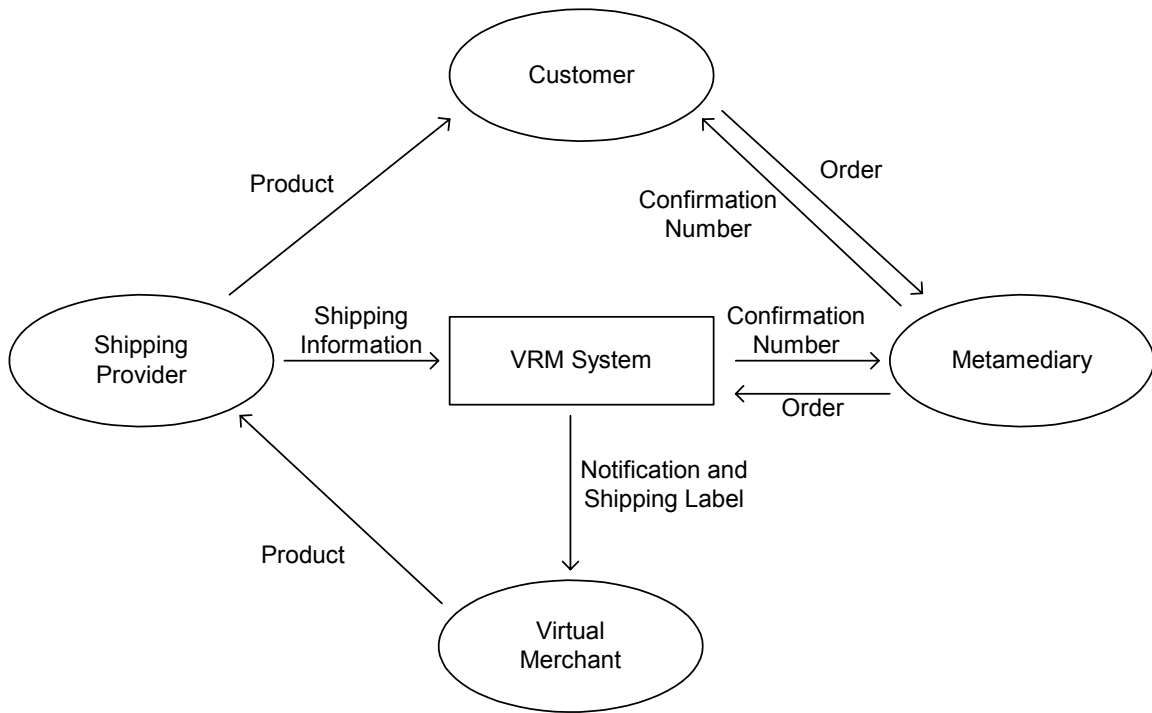


Figure 3.10. Process of placing an order

### 3.4.2 Process of Returning an Order

If a customer orders a product from a metamediary's web site, then a return of the customer's order should also be addressed by the metamediary's web site. Assuming a valid reason exists to return a product received by a customer, the metamediary should have a web page for returning orders. On this web page, the customer can request a return label. To generate a label the web page could request information about the order that is to be returned, i.e., the purchase order ID, the customer's mailing address to which it was sent, etc. The label would then be an generated image containing the address of the virtual merchant to which the order will be returned, the customer's address, a confirmation number, and a "stamp" that allows the customer to send the order back without having to pay postage. The customer then prints out the image and attaches it to the package of the returning order.

After the parcel is prepared for shipping, the customer brings it to the designated shipping provider. There the confirmation number can be scanned and entered into the

VRM System. When this happens, the virtual merchant receives a warning from the system that an order is being returned. Using the metamediary's web site, the merchant can track the package until it is received. When the virtual merchant verifies that he received the correct merchandise, the merchant must then notify the system, which in turn notifies the metamediary. The metamediary can then either refund the customer's money or allow an exchange, which would follow the same process as ordering a product.

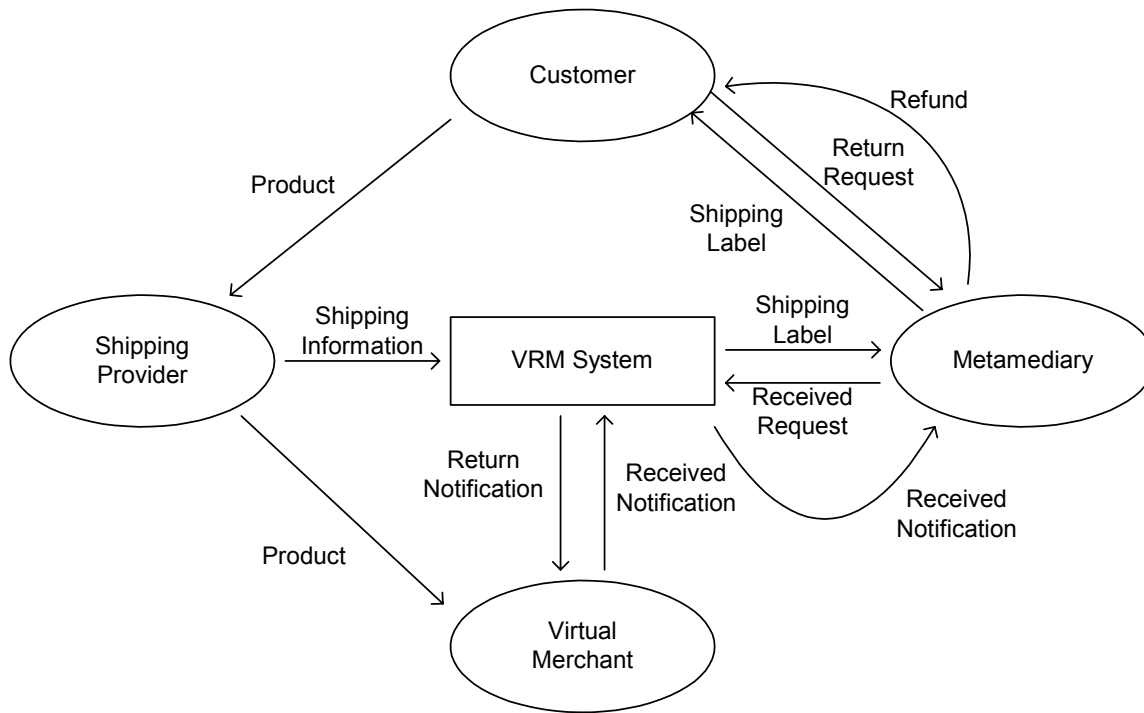


Figure 3.11. Process of returning an order

## 3.5 Issues and Problems With the Current Implementation

### 3.5.1 Two Applications

The VRM System has two scenarios: (See Figure 1.3)

1. Dashed square – a metamediary can use the VRM System as the base for their current system and connect it to any CMS.
2. Dotted square – individual businesses can use the VRM System to bring themselves together and find their own CMS, independent from a metamediary.

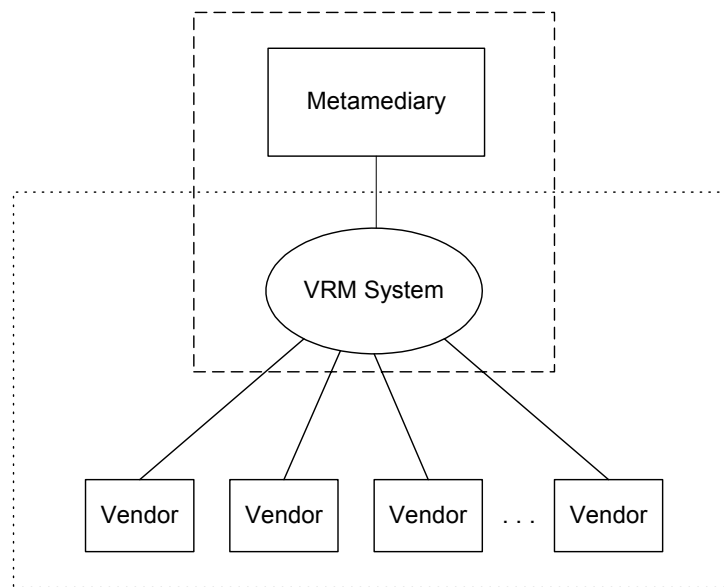


Figure 3.3. Two applications of the VRM System

#### 3.5.1.1 The Dashed Square

The dashed square represents a model where the provider of a metamarket owns the VRM System. The metamediary is responsible for everything. It would have to recruit virtual merchants to provide the products it would like to sell on its web page. It would

need to find a web developer with a CMS. The shipping provider used for fulfillment can be either determined by either the metamediary or left up to each of its individual merchants. The metamediary will need to provide a server to run the VRM System and make sure that all of the virtual merchants have access to the Internet.

One of the advantages for the metamediary is that after the initial setup, a virtual merchant is now the one responsible for maintaining the integrity of its information in the VRM System. Since information must always be up-to-date, modifications must be made quickly. This setup removes the pressure of constantly keeping up with changes from being placed on metamediary employees [20].

In addition, web consultants and their CMS come at a very high price. Presently, it is a \$20 billion business, and is expected to become a \$60 billion-plus business by 2003 [21]. If a metamediary is paying an average of \$300,000 to \$500,000 for their CMS [22], it should be safe to assume that they would like to get their money's worth. And if the metamediary finds that it is not, then because the information is now separated from the CMS, a metamediary would have an easier time switching to another CMS that is more suitable to their needs.

In this case, an advantage also exists for the virtual merchants. They will be associated with the name of a hopefully well-known metamarket. The disadvantage is that they will no longer be able to control how their product is marketed. Their product could either be easily found on the host website, or it could be placed in a "back corner" where customers would have trouble finding it.

### **3.5.1.2 The Dotted Square**

The dotted square represents a model where virtual merchants own the VRM System. They place all of their information into the system and then can either find a web developer and a CMS to create their own metamarket, or virtual storefront, or find a metamediary to present themselves as a package deal.

If they follow the first option, the advantages lie in the merchants' ability to control the presentation of their web pages. They are able to decide how their products will be marketed and where the products will be placed on the website.



The disadvantages lie in the merchants' ability to control everything as well. The more people involved in the decision making process, the harder it may be to come to a decision that will satisfy everyone's needs.

In addition, according to Ernst & Young, 82% of online shoppers said that "knowing the product's brand name would be important or very important in their decision to buy online" while 79% of online shoppers said that being "familiar with their online retailer" influenced their decision to purchase things [23]. Consequently, products sold on the Internet may need to be marketed through established brands or online retailers [24]. Merchants who do not have an established brand may have troubles selling their products on the Internet.

However, if they decide on the second option, the disadvantage will be similar to the dashed square. The advantage, though, would be the possibility of being more attractive to a potential metamediary. Instead of just having one business with at least one product, the merchants could bring together five businesses with at least five different products.

### **3.5.2 Problems**

The main weakness with the VRM System prototype is the degree of trust that needs to exist between the metamediary and the virtual merchants. Because the CMS will automatically create web pages using information from the VRM System, the metamediary will need to trust that the virtual merchants will not abuse this advantage to the metamediary. A virtual merchant should only provide information about products previously approved to appear on a metamarket. Although an email notification can be sent to the metamediary whenever a virtual merchant makes any changes, the metamediary cannot constantly monitor changes if there are large amounts of products in the system. As mentioned previously in the Section 3.1.1, the VRM System does not have algorithms implemented to assist the metamediary in ensuring only approved information is in the system.

Trust needs to also extend from the virtual merchants to the metamediary because the metamediary account has complete access to read or alter any information in the system. This means that the virtual merchants need to believe the metamediary will always be acting in the virtual merchants' best interest if their information is altered in any way.

### **3.5.3 Future Additions**

As with any other type of software, improvements are always needed. After working on this system for the past eleven months, we have found several features that should be included in the system:

- Email. Right now only the metamediary is only able to turn email confirmations on and off.
  1. It could be useful for every contact person under a virtual merchant's account to also have this option. This would allow a virtual merchant to have a list of contacts in the system that is also available to the metamediary and financial institution.
  2. The metamediary should have a menu of different email notification choices. For example, they could decide which information changes they would prefer to be informed about, like changes to product profiles versus contact information.
- Product summaries. Summaries about customer order histories exist, but no summaries exist for information about the product(s) provided by virtual merchants.
  1. Vendors could have summaries of the demand for each of their products to better determine if a product is a good seller.

2. Vendors could also benefit from a more flexible reporting feature. For instance, there could be summaries of the total sales per product. These summaries could be grouped by annual, monthly, or daily sales.
- Passwords. Currently passwords are stored in plain text form in the database. If the passwords were encrypted with the secure hash algorithm (SHA-1), for example, this would make it almost impossible for anyone to read the passwords in the database. If a merchant loses a password, since they are encrypted, the metamediary will need to erase their record from the Business table, and create another one with at the same login name. (The same login name is needed to access the merchant's information already in the system.)
  - Shipping interface. Currently, we have an idea about what a shipping interface should contribute. However, due to our limited knowledge about calling C functions from VBScript, we will need to investigate other scripting languages like PearlScript, etc. to implement the TCP/IP protocol and socket API.
  - Traffic. Since the system has yet to be tested with a fully functioning metamarket, we have reservations about the amount of traffic the VRM System can actually handle.

## Chapter 4

### Expert Critiques

In order to receive input as to the advantages, disadvantages, and possible improvements to the process and software, we presented the VRM business process with a power point presentation. Then the VRM prototype was demonstrated with an Internet browser to the owners of two small businesses and three employees of a local financial institution. (We were unable to discuss the process and software with a metamarket/virtual mall provider.) From these meetings, we arrived at the following results.

#### 4.1 Advantages

According to one of the small business owners interviewed, the fact that “everything’s already coordinated” is a huge advantage of the system. A vendor would be able to simply “plug in” to the VRM System and the banking, advertising, ordering, and shipping details would already be setup. It seems that figuring out these details requires much time and effort for small companies, especially for first time business owners. As this business owner put it, “I have an idea, I just go to you guys and all I got to do is login.... You click on stuff, and then you’re not worried about anything.”

The other small business owner said that the VRM System is “attractive to small vendors because they can just focus on what they do best at without having to worry about how to succeed in a whole new market like the Internet.” It leaves the vendor to concentrate solely on making their product and fulfilling orders by relieving them “from the advertising costs, and the whole web site stuff.”

Everyone agreed that another advantage for virtual merchants is that everything would be done electronically. The merchants would not have to keep track of the paper that normally flows between metamediaries, virtual merchants, and shipping providers concerning orders, etc. One of the bank employees stated that since “the VRM would

probably be the hub ... you [would] already have the shipping charge. You know what the total purchase price is. ... The net result is the virtual merchant gets everything [that's left].”

The automation is ideal because it can provide instant confirmation that an order was sent to the customer. It appears that “under credit card rules, you cannot charge the customer’s account until the item has been shipped,” a bank employee told us. So with the instant confirmation, customers can be charged that much quicker, and merchants will be able to get paid that much faster. In addition, another bank employee commented that having electronic funds transfers would be slightly faster because merchants would not have to physically bring checks to their banks. Furthermore, one of the business owners said that he often has to wait considerable time to get paid by some companies that sell his products.

## **4.2 Disadvantages**

From the small business point of view, the vendor still has to do the packing and mailing of the product. This can become quite tedious as the VRM System is designed to give the vendors numerous small orders. “If there was a fulfillment solution that would include transacting, ... shipping ... I think that would be attractive to a lot of current entrepreneurs and would be entrepreneurs” said one small business owner.

Furthermore, some vendors do not wholly create their own product. They may have to order their products or raw materials from different manufactures. As one interviewee observed, “It might be generally true ... that most of the people here in Hawai’i that would be selling stuff, don’t make whatever they sell.”

Another disadvantage from the vendor’s point of view is the possibility that if their product sells too well, the metamediary could “stop buying it from me and start making it themselves.” Furthermore, one vendor’s products might be more visible than another vendor’s products on the metamediary’s web site.

From the metamediary point of view, paying the vendors through electronic means is not desirable. A large company would rather wait, several months, for example, to pay its vendors, as this would result in more funds for the large company to use for its own

means. Even with the quick electronic payment system, companies typically have a contract between them that gives a certain “float time” for the host company to hold onto the money before it is transferred to the vendor’s account.

### **4.3 Suggested Improvements**

One of the bankers claimed that several contracts between the various parties should be addressed. For instance, one contract must be worked out between the metamediary and the shipping company, discussing the shipping prices and conditions. Since the metamediary will be shipping out large volumes of packages, a significant discount can probably be negotiated.

One of the vendors agreed stating, “a lot of it is going to be determined by the contract between the host and the little merchants.” He believes that another contract needs to be created between the metamediary and vendors. Terms of the contract need to include the metamediary’s cut from the products that are sold. This amount could vary depending on the amount of “play” the vendor’s product receives on the metamediary’s web site. Perhaps the vendor needs to sell X per month to stay on the metamediary’s web site. Also, the contract could prevent the metamediary from discontinuing a vendor’s product, only to turn around and produce and sell the same product on their web site.

Finally, a contract or financial arrangement needs to be created between the financial institution, the metamediary, the vendor, the shipping company, and the VRM system to disperse money to the respective parties, another banker added. With the VRM System in the middle, the financial institution would be able to receive a breakdown of the shipping charges, the metamediary’s cut, and the virtual merchant’s remaining amount and dispense the funds appropriately.

Since integrating the FedEx software into VRM is a complex task, third party software, which has already been created, might simplify the integration task.

In the software prototype, several key functions are missing. The bank employees suggested that a summary of vendor sales should be added, and that the information about vendor sales needs to be expanded as in Figure 4.1. For example, what products are selling well and what products are not being sold. In addition, a log of the activities

needs to be made. For example, who logged into the system, what pages they viewed, and what they changed. Other marketing data might also be included.

A log of the activities on the VRM web site also needs to be implemented. For example, who logged into the system, what pages they viewed, and what they changed would be included. (See Figure 4.2)



The screenshot shows a web browser window titled "Mangos R Us - Microsoft Internet Explorer". The address bar is empty. The main content area displays a report titled "Mangos R Us - Product Sales Report". The report is a table with 5 columns: "Month", "Amount Sold", "Total Sales", "Amount Sold", and "Total Sales". The first two columns are for "dried mangoes (m001)" and the last two are for "mango chili (m002)". The data is presented for each month from January to December, plus an "Annual Total" row. The status bar at the bottom shows "Done" and "Local intranet".

	dried mangoes (m001)		mango chili (m002)	
Month	Amount Sold	Total Sales	Amount Sold	Total Sales
January	2	10.00	3	15.00
February	0	0.00	2	10.00
March	0	0.00	0	0.00
April	5	25.00	4	20.00
May	0	0.00	8	40.00
June	3	15.00	1	5.00
July	0	0.00	7	35.00
August	2	10.00	3	15.00
September	0	0.00	0	0.00
October	1	5.00	3	15.00
November	2	10.00	1	5.00
December	3	15.00	3	15.00
Annual Total	18	90.00	35	175.00

Figure 4.1. Product sales report example

**User Log**

Date	Login Name	Page Visited	Changes
11/26/2001 12:09:58 AM	mangosrus	Logout.asp	
11/26/2001 12:09:56 AM	mangosrus	Main.asp	
11/26/2001 12:09:54 AM	mangosrus	ViewContacts.asp	
11/26/2001 12:09:50 AM	mangosrus	Main.asp	
11/26/2001 04:13:50 PM	quilts	Logout.asp	
11/26/2001 04:13:41 PM	quilts	Main.asp	
11/26/2001 04:13:40 PM	quilts	ChangePasswordA.asp	change password
11/26/2001 04:13:35 PM	quilts	ChangePassword.asp	
11/26/2001 04:13:31 PM	quilts	Main.asp	
11/15/2001 1:40:01 PM	CityBank	Logout.asp	
11/15/2001 1:40:01 PM	CityBank	Main.asp	
11/15/2001 1:33:10 PM	CityBank	ViewVendorSalesA.asp	
11/15/2001 1:33:10 PM	CityBank	ViewVendorSales.asp	select Mangos R Us
11/15/2001 1:33:01 PM	CityBank	Main.asp	

Done Local intranet

Figure 4.2. User log example



## Chapter 5

### Future Directions

Before continuing with this research, its feasibility needs to be reevaluated. First of all, is the VRM business process a viable approach? In other words, will implementing such a process through something like the VRM System be profitable for all the partners involved? Most of the small vendors that we spoke with expressed interest in the project, but a larger survey must be done to more accurately reflect the opinions of the local business community.

Another question to consider is under what conditions is the VRM business process viable? Perhaps the system is not appropriate for all businesses. For example, large, expensive paintings usually do not sell well on the Internet. On the other hand, perhaps the VRM process could be expanded to include businesses other than those that offer products made in Hawai'i. For instance, tickets or tours could be sold. Maybe it should be adjusted to sell only wholesale items.

Once these issues are answered, the VRM prototype software and business process need to be revised. Several improvements suggested by two vendors and a financial institution can be found in Chapter 4.3. Future additions, found in Chapter 3.5.2, should also be addressed.

In addition to these improvements, the shipping interface and product return process need to be added to the system. With the current prototype, vendors receive an email with the shipping address; however, FedEx has software that will generate a shipping label. This could be attached to the email, so that the vendor only has to print out the shipping label, attach it to the package, and have FedEx deliver it. The confirmation number can be sent back the VRM System, which will then forward it to the metamediary, who can then send it to the customer via an email.

Likewise, the product return component needs to be implemented. This begins with giving the customer a shipping number that can be fed back into the system and ends with either a refund or exchange; however, the refund process is quite complex. In a nutshell,

the customer first visits a refund page on the metamediary's web site. After filling out a refund form, the web site will automatically ask the VRM System for the confirmation number and shipping address of the vendor. The customer will then print out the shipping label and ship the product through the shipping provider. Once the vendor receives the product, they need to log into the VRM System to confirm that they received the package. Once it is confirmed, the metamediary refunds the customer.

Once the software is improved and the various components are added, the new version needs to be implemented and tested with a metamediary, several virtual merchants, a financial institution, a shipping provider, and, of course, some customers. These customers need to order different kinds of products in different amounts. Furthermore, they need to return some of the products for exchanges and refunds, so that the product return portion of the system will be tested as well. Several rounds of testing and improving the software will need to be made before deploying the software in the real world.

# **Appendix**

## **Interviews**

Note: Transcripts and summaries from every vendor interview mentioned in Chapter 2 are included here. All information that could be used to identify a participant has been removed or substituted. I.e., names, original products, or company names have been substituted with "Person A1", "Product 1A", or "Company A".

## **A.1 Company A**

Interview Notes, February 15, 2001

Attendees:

- Company A: Person A1
- UH: Joy Agustin (J), William Albritton (W), Susan Linn (S)

Interview was recorded.

Notes taken by Susan, William, and Joy

### **A.1.1 Interview Summary**

Person A1's most popular product right now is her books. She has about 20 books available. People are able to buy them at Costco, over the Internet, or directly from her. About 12 of them are handled by a publisher, and the rest she makes copies either at home or at Kinko's. She also sells Product 1A as well as teaches classes on how to make Product 1A.

A person is able to buy her books through Costco, in person at her classes, or the Internet. If someone makes a purchase on the Internet, she prints out an invoice. When a copy of her book is ready to be shipped out, she brings it to the Post Office to have the postage calculated. Then she notifies the customer of the final price. They send her a check, and she waits about 2 weeks for the check to clear. When it does, the book is sent to the customer.

To order Product 1A over the Internet, a person would let her know via email what they want and sends her a check. After the check clears, Person A1 lets the makers of Product 1A she works with know what a customer wants. It takes about a year for Product 1A to be completed.

She is aware of processing credit card transactions, but has not had the time to properly look into it. If this were available to her customers, the waiting period could be shortened by about 2 weeks.

The only thing she is concerned about is time. If making copies of the books by herself takes up too much time, she will find a publisher to handle it for her.

Person A1 has been on the Internet for about 5 to 6 years. In the beginning she asked to have a link to her web site placed on dozens of websites, including the main web site dedicated to Product 1A. Since then, she places her URL in her books and depends heavily on returning customers. Her web site also attracts people by containing background information about Product 1A.

When asked, Person A1 believes the advantage of making her products available on a host's web site would be a wider customer base. The disadvantage would be possibly having enough time and keeping up with production. However, before telling us if she would be willing to do it or not, she needed to know more about what type of agreement would be required. She mentioned that she would be interested in wholesale.

## **A.1.2 Interview**

### **A.1.2.1 Product**

*S: What is your most popular product*

A1: My most popular product is [a book about Product 2A].

*S: How much do they sell for?*

A1: I have 12 different books. The bestseller books sell for \$5.95. Those are books about [Product 1A]. Then I also have one history on [Product 1A] that sell for \$7.95. But I also sell several other published books by [a shop], so I get a royalty from them. Unfortunately, because they're published, their price is higher.

*S: Why is the price higher?*

A1: Because I have to go to Kinko's to make copies at 7 cents a copy. Plus I have to buy the spiral, and I have to make a cover. If you mass-produce it in Korea where it's 10,000 at once, you have a cheaper rate.

*S: How long does it take to create one of these?*

A1: The ones that are done in Korea are done by bulk, so after the graphics is done, they print it up in 1 month, but the self-published ones I can do in less than 5 minutes, depending. I don't have an inventory. When someone purchases it on my site, I print it. I also have a copy machine at home, so if I can do it at home, I'll do it myself.

*S: Is it a big copier?*

A1: It's huge. Well, it's a nice sized copier, so I can print it whenever I want. 'Cause the only inventory I have is the original.

*S: Does it take long to create [Product 2A] that are in the book?*

A1: No, My father's the creator. Actually, he and my mom were the ones that started the business, but he makes [Product 2A], and he's pretty fast. My father's very talented in that part. He's very good at it. If you ask him to [make a Product 2A] something, he's very fast. If I do need special made [Product 2A], he can do that. Of course there's special criteria you have to pass before making a [Product 2A].

*S: And how do you get the [Product 2A] to them? Do you cut it out, take a picture, and then send it to them?*

A1: No, we will [make a Product 2A] it for them, then they send the check to us first. Then when the check clears, we send them the [Product 2A]. It's all like the honor system. The thing is that with [makers of Product 1A], you are dealing with a different group of people. Most of the [makers of Product 1A] I work with are honest, and it's reciprocal. I'm honest with them and they're honest with me, so it works out really well. The only problems I deal with are with other publishing companies. They're the problem. They'll take a [Product 2A], publish it, and then say it was theirs. Then we get into a lawsuit. So the [makers of Product 1A] are not the problem.

#### **A.1.2.2 Internet Ability**

*W: So I'll ask you some questions about your Internet ability. I guess you have a computer?*

A1: Yes, I do.

*W: And Internet access?*

A1: I also have a printer, scanner, and anything else you need.

*W: What do you think about buying products online?*

A1: I buy online. I have no problems. I don't have a million dollars in my checking account. If someone decides to take my checking account number and decides to spend money, be my guest because there's not much money in there.

*W: Just like me.*

A1: The money I take out for Internet reasons are in a separate account from my savings. I purchase everything on the Internet. I purchase books...

*W: You don't have any problems with that?*

A1: No, not with that. But then when I'm purchasing on the Internet, I know that I'm probably not going to be returning it. It's a done deal, because I know if I return it, there may be problems. And I think people need to be smart about what they're purchasing on the Internet.

*W: So you don't buy things from LLBean or anything?*

A1: No, I don't. I'm an Amazon.com person... E-bay.

### **A.1.2.3 E-commerce**

*W: And so you actually sell your own products over the Internet?*

A1: My web site is set up with Netscape. It's called Netopia. Basically, when I first started, my brother-in-law did my website. He set the whole thing up for me.

*W: So the service over Netscape is...?*

A1: Yes, everything is all set up for you. You just plug-in the information, and it does what it needs to do, and your web site is setup. It's very standardized. It doesn't do nice cutesy things.

*W: If you're a business, they charge you a fee?*

A1: Yes, I pay \$19.99. But that's my website. My merchant site is with Freemerchant.com. that you can just set up a gift shop. Now it accepts credit cards, but I haven't done that yet. I'm still concentrating on school.

*W: So gift shop, what do you mean by gift shop?*

A1: I just sell my products. My web site is almost 75% is information on [Product 1A]. I have pictures of [Product 1A], [makers of Product 1A] in our class, history, and superstition. I have a full album. But the 75% information is what sells the site. People are interested in the info, and the history. I have things about Hawai'i, fun and cutesy stuff, out of the world things that people email me. I think "Eh, this is cute, let's put it on the Internet." 25% is the sales.

*S: I didn't see any prices when I went to your website.*

A1: The prices are in the FreeMerchant site. The prices I gave you are local prices, but when I sell on the Internet it's different because of how FreeMerchant works. The postage is weird. I just add the price to the individual product. The books that I sell [costs more] on the Internet. So if you come here to Hawai'i, it's cheaper to take home.

*W: How long does it take for the product to reach the customer? ... From the time they order it.*

A1: It's about 3 weeks. The reason why is that from the time they order it, they need to print out the invoice, write out the check, and then send it to me. I receive it; I wait 2 weeks for the check to clear. Once the check is cleared, I will go ahead and send them their product. If I decide to go into the credit card, then it will be a shorter waiting period. I get very little complaints about it.



*W: And what percentage of your business is done over the Internet roughly?*

A1: Maybe about 25% right now.

*W: So the majority is...?*

A1: Teaching 4x a week. 2x a week we're at the Royal Hawaiian Shopping Center. That's the bulk of my income. Maybe a little over 25%.

*W: How about your books? How many are sold over the Internet, and how many are sold in Hawai'i*

A1: I'm not sure. Our books that are published do well. I don't have an actual number, but I know it's in its third printing. ... I had another publishing company call me yesterday. I said, "No, we're in a contract with [a shop]. Sorry, can't help you, call them." That's why sometimes it's not good to get into contracts. But after a while, when you're in a contract you just say, "you know what, go bother them." I can't do anything about it.

So I think the books I publish, I can sell 20-30 books a week. Most is off the Internet sites. And at the shopping mall where I teach.

*W: Okay. And you would say a majority is from the Internet? Or...?*

A1: It depends. Sometimes the Internet has its moments and then our classes have its moments. It varies. What I do have, which is great, is returning customers. Majority of my income is from returning customers.

*W: Really?*

A1: Once I get them, they will constantly go there [to the website].

#### **A.1.2.4 Host**

*W: Would you be interested in selling your goods over [a host] website?*

A1: Depends how it's set up. I need to know the logistics, and how you do it, and if it's going to cost me.

*S: Would be willing if it was on a commission base, or a percentage.*

A1: I'm not sure how it's going to be done yet. What do you mean by commission base? You mean they buy my products?

*S: No, they hold your products and sell it on their website, and you get a commission on every item that is sold.*

A1: No, it would be wholesale. I wouldn't be interested in that.

*W: What do you see as the advantages and disadvantages of selling your things through [a host]?*

A1: Probably a wider customer base, I would be able to reach, I think would be the advantage of it. The disadvantage is would I be able to keep up with the production. That's the main thing.

*W: Say your sales increased by a factor of 5, what kind of barriers would you have?*

A1: Just time.

*W: More time?*

A1: Yeah.

*W: Think that's about it, unless you have any questions?*

A1: Good questions. I think that was good.

*W: So you're pretty Internet savvy already.*

A1: More or less. But we were on the Internet from when it first started. My brother-in-law helped a lot. My brother-in-law was the one that did the police department website. He did there and he did the crime stoppers. Basically he's the computer guy there. And he was the one that came up with the idea that, "Hey, maybe you should put your [Product 1A] on the Internet." So he and I worked together. Then he got promoted. And then he said, "Oops, sorry, too busy now. Can't do this anymore." Then I got stuck with it. Then I found that Netscape, Netopia. And I strictly went with that and it worked out

well for me. But for the people who are not web-literate, that was the perfect site for them to go to. And I more than make up for the \$20 a month that I pay.

*J: How long have you been advertising your things on the Internet?*

A1: Five to six years.

*J: As a successful "dot-com" company, is there anything special that you have done to make yourself successful?*

A1: I'm a niche. I do [Product 1A]. There's a select group of us that does [Product 1A]. I don't make a product for everybody – it's just for a select group of people. And we're not a huge group, but large enough to make an income off of that. That's why my web site does well, because it's not for everybody – is just for a select group of people. The problem I have my web site is that the older women are not computer literate and so I miss out on a huge customer base. So it has pros and cons. I can go into a catalog. In fact I've done catalog stuff. But you have to print and mail it. You need to charge for the catalog, so it's guaranteed that you get your cost back; or you send it out and hope and pray that they purchase something. But I don't like to do that. I'm spoiled because of the Internet. Once you're on the Internet, it's like; I don't want to fax you anymore. I want email you.

*J: How you get people to visit your website?*

A1: All my books have my web site on it. It has my email address on it. It has my toll-free number on it. So you're supposed to be able to find the most of the time. But I also get threatening letter saying "update your web site - we want more pictures". There's a main [Product 1A] website... They are the ultimate [Product 1A] web site and most of us are connected to them, but it's just a referral. You can go there and see six websites on [Product 1A]. Because [selling Product 1A] is such a small niche, that's why I do well, because there's not many of us who do this.

## **A.2 Company B**

Interview Notes, February 22, 2001

Attendees:

- Company B: Person B1
- UH: Joy Agustin, William Albritton, Susan Linn

Interview was not recorded due to loud background noises

Notes taken by Joy, Susan, and William.

### **A.2.1 Interview Summary**

Person B1 sells products that are manufactured by someone else. Customers are able to order various amounts of his product from orders of 1 to bulk orders of 3,000 because he acts as a middleman, selling his products on the Internet. Since different companies manufacture his products, he is only limited by the amount the manufacturers have in stock. If there is insufficient stock of Product 1B, he might take several weeks to fulfill an order.

With regards to being found on the Internet, Person B1 used different approaches. Once he was featured on a local news segment about local business in Hawai'i. Another approach was to combine marketing resources with a couple of other small local businesses, and together they placed an ad in a New York publication.

The advantage to selling Product B1 on the Internet via a host web site may be a higher profile and having the brand name recognition. A disadvantage would be if the host was selling other products similar to Product B1.

Person B1 would take out a loan if it was needed, but he would rather not. He is interested in online banking and contact base assistance in the business community.

## **A.2.2 Interview**

### **A.2.2.1 Product**

*Q: What is your most popular product?*

A: They would be Product 1B. The ones that sell the most are the ones that are colorful and bright. As an experiment, more of the toned-down ones were placed on the website, but they didn't sell very many, so they were taken off. Right now the concentration is on the brighter, colorful ones. Those are the most popular.

*Q: Why do customers like it?*

A: The colorful, bright types of Product 1B fit their image of what they perceive Hawai'i to be.

*Q: What is its price?*

A: \$29. Bulk ordering is available. Some orders for 1,000 Product 1B, 3,000 Product 1B come in from businesses. There's not so many of those. Mostly the orders are from consumers.

*Q: How long does it take to create this product?*

A: Separate companies manufacture Product 1B. Usually everything is in stock. If they are out of stock, then it might take several weeks.

*Q: What's the average amount in stock?*

A: There's some stock that B1 keeps, but not usually. Mainly they are picked up from the manufacturer. B1 is mainly an intermediary, a middleman, the go-between for the manufacturer and the customer.

### **A.2.2.2 Business Organization**

*Q: Do you see yourself as an entrepreneur? What does that mean to you?*

A: Yes. An entrepreneur has his own plan, his own strategy of how to do things. He can respond quickly to changes.

*Q: What is the structure of your organization?*

A: It's an LLC, with limited liability. There were 2 partners, but both of them are now on the mainland doing their own thing. There are other partners now.

*Q: Who invested the money?*

A: This is all from private money, B1's own investment.

*Q: How many workers?*

A: Zero employees.

*Q: Are all workers contracted?*

A: It's a partnership relationship.

### **A.2.2.3 Internet ability**

*Q: Do you have a computer?*

A: Yes.

*Q: Do you have Internet access?*

A: Yes.

*Q: What do you think about buying products online?*

A: It's cool.

*Q: Have you ever bought anything online?*

A: Yes, mostly from Amazon and another online book company that gives out free t-shirts every time you order something. The t-shirts are good for sleeping in or working out.

*Q: What were your impressions? Any problems?*

A: No problems. The only thing to worry about is security, but the risk is pretty small and the security is pretty good. Your credit card could be ripped off over the phone.

#### **A.2.2.4 E-commerce**

*Q: Have you ever tried to sell your product on the Internet?*

A: Yes.

*Q: If so, for how long?*

A: 1 to 1-½ years.

*Q: You were profiled by the news station, weren't you?*

A: Yes, about 6 months ago. KHNL profiles small businesses on Tuesdays and Thursdays on the 6 o'clock news. Bank XX tries to help the small businesses by introducing them to people that may prove to be good contacts.

*Q: Was it successful? Any problems?*

A: One of the problems was the advertising cost. Along with a few other small businesses, they pooled together money and took out an ad in one of the New York papers. Alone, it would cost at least a few hundred dollars, up to a thousand dollars. To a small business, that's a lot of money. It's uncertain whether they'll make up the cost, but a person might get lucky.

*Q: How long did it take for the product to reach the customer?*

A: Normally it takes 3-4 days. The customer can also order by 3-day priority mail. If an order is received on Tuesday, the customer would receive it by Friday. An order placed on Wednesday would be received on Saturday.

*Q: What percentage of the business was done over the Internet?*

A: 100%

#### **A.2.2.5 Host**

*Q: Would you be interested in selling your goods on a host web site (choices are wholesale, commission, and/or drop-ship)?*

A: Ideally, it would be a wholesale relationship, where Product 1B would be sold to [the host] and they could market it as their own Product 1B, with their own label.

*Q: What would be the advantages/disadvantages?*

A: The advantages would be if the host had a high profile and a bricks and mortar store. Then they would have visibility that B1 couldn't get and they would have a brand. The disadvantages would be if we were selling the same product. Would there be competition between the two? It's easier to work with them than to be their competitor.

*Q: What are the current barriers to 5 times increase in sales?*

A: For a B2B customer, none. Another person might be needed, but for a business customer, there's no problem if sales increased 5 times, or even 10 times. For an individual consumer, there would be problems, with the packing and shipping. There are limitations as to how much you can pack in a 12-hour day. Some things would have to be left for the next day.

*Q: What kind of resources would you need if sales suddenly increased?*

A: Outsource fulfillment on the consumer side. There would be no problem on the B2B. There aren't as many of the business orders, but one of them can make up the profit more



than many consumers. The margin of profit is slim, but money is made on the volume of sales. It would take many consumers to equal that amount of profit. B1 wouldn't want to cut off the consumer side because it is not certain that business will place orders.

#### **A.2.2.6 Financial Services**

*Q: What kind of financial services would you need if sales suddenly increased?*

A: A loan. But B1 doesn't like loans because that means you owe money. An investor would be preferred.

*Q: What kind of banking services would you be interested in?*

A: Bank XX offers contacts, business assistance, and introduction to different people.

*Q: Would you be interested in loans, credit card transactions, and/or business bank account?*

A: Yes. Interested in online banking and contact base assistance in the business community and seeing if someone wants to make an investment.

*Q: What kinds of companies buy your product?*

A: There were orders from Sun Computers, IBM. The most interesting one was an order of 3,000 for monks in Japan.

## **A.3 Company C**

Interview Notes, March 1, 2001

Attendees:

- Company C: Person C1, Person C2
- UH: Joy Agustin, William Albritton, Susan Linn

Interview was not recorded.

Notes taken by Joy, Susan, and William

### **A.3.1 Interview Summary**

Company C also sells products that are manufactured by other companies. Depending on the manufacturer, they may or may not keep different products in stock.

Their original targeted customer base was hula-oriented customers. What they found was middle Americans who previously visited Hawai'i were placing most of the orders. However, there were orders from other countries, like Japan, Singapore, etc. They have learned that it's difficult to predict what will happen in 5 years. Instead, they try to be flexible and change with the times.

The main concern about using a host web site is the competitions that could arise. Since the host would have more money for advertising, how could they get people to their own web site? Also, while Company C sells some products exclusively, what about the products they have in common? It seems these issues would need to be resolved before they commit to a host,

To accommodate a sudden increase in sales, Company C would probably need to hire more workers. Currently there are just three of them running the company. Eventually, they would like to own a brick-and-mortar store where customers would be able to browse around and buy anything.

## **A.3.2 Interview**

### **A.3.2.1 Product**

*Q: What is your most popular product?*

A: Product 1C.

*Q: How about the Product 2C?*

A: A lot of those are sold, but Product 1C are the best sellers with Product 3C.

*Q: Why do customers like it?*

A: The people that buy them are mostly middle-aged people on the mainland. They buy them for luau parties, Mardi Gras, Halloween. We sell the Product 4C, Product 1C, and Product 3C.

*Q: What is its price?*

A: \$10 - \$20, depending on the size. Product 1C for little kids are around \$5 or \$6.

*Q: How long does it take to create this product?*

A: Product 1C are bought from a local manufacturer and held as stock. If they run out, they pick up more from the manufacturer. It takes a few days to make, depending on how many are ordered.

*Q: How does the company handle customer payments?*

A: Visa, MasterCard, American Express, and also checks and money orders.

### **A.3.2.2 Business Organization**

*Q: What is the structure of your organization?*

A: There are 3 people. C1 is full-time, C2 does the music and web site copy, and C3 is the silent partner and does the graphic work. But C3 is phasing out, so it will only be two people.

*Q: Who invested the money?*

A: C1 and C2.

*Q: Since your business was established, how has your business changed?*

A: Originally, they thought their market would be hula-focused, but it turned out that the customers are primarily middle Americans who have visited Hawai'i. They get some orders from Japan, Latvia, Singapore, and other places.

*Q: Where would you like your business to be in 5 years?*

A: They couldn't really tell because everything keeps changing. So you have to find ways to keep changing also. They thought that mainland halaus and Japan would be huge, but it turns out that the halaus are controlled by the hula teachers. Everyone has to buy his or their supplies from the hula teacher. Plus not many people have home computers in Japan. Sometimes 5 - 6 girls will put in one big order at a time.

*Q: Do you see yourself as an entrepreneur? What does that mean to you?*

A: C2 didn't like that word. They both left a regular brick & mortar retail because they didn't want anyone over them. An entrepreneur is perceived as someone who's a shark or parasitic. Instead of helping people, they find ways to make money.

### **A.3.2.3 Internet Ability**

*Q: Have you ever bought anything online?*

A: Yes.

*Q: What were your impressions? Any problems?*

A: They've all been positive, except for CD Now. The order took a few weeks to arrive.

*Q: How did you get noticed on the Internet?*

A: They are a Yahoo! store, so they built their web site through Yahoo! C1 is not a technical person, so it would have taken a long time to build the website. On Yahoo!, you decide how you want to register yourself: a few keywords or a whole page. In the beginning, they weren't ranked as high as they wanted to be on the search engine Yahoo!. It took around 9 months to be ranked higher. You can pay Yahoo! to be ranked higher, but they refused to pay. In retrospect, C2 claims they should have paid. Now on some search engines, they're number one or two on the search results.

#### **A.3.2.4 E-commerce**

*Q: How long have you sold your products on the Internet?*

A: One and a half years, since mid 1999.

*Q: What were your initial impressions?*

A: At first Yahoo! was not picking them up. The first month, they had no orders. Then slowly orders came in.

*Q: If you had to do it again, would you change anything?*

A: C2 would change lots of stuff, like having more products. There's always things you should have done yesterday.

*Q: How did you handle making your web page?*

A: Yahoo! has a fill-in-the-blanks form to make a web page. You have to learn a little html to make it nicer.

*Q: What percentage of the business was done over the Internet?*

A: Ninety-six percent. Except for C4, who faxes in orders because of no Internet access.

*Q: Is he a hula teacher?*

A: No, he sells [Product 3C] and fabrics in Japan. A friend gave him our business card and he's been faxing us ever since. He buys every month.

*Q: How do you get people to visit your site?*

A: They can check which search engine people used, whether it's Google or Yahoo!

#### **A.3.2.5 Host**

*Q: Would you be interested in selling your goods on [a host's] web site (choices are wholesale, commission, and/or drop-ship)?*

A: The concern is competition between their web site and the host's. There would be more money if customers went directly to their site, but the host would have tons of money for advertising, which they can't compete with.

*Q: What are the current barriers to 5 times increase in sales?*

A: Would need to hire someone.

*Q: What kind of resources would you need if sales suddenly increased?*

A: Hire more people, more space. Right now they have 400 square feet and it's full.

#### **A.3.2.6 Financial Services**

*Q: What kind of resources/financial services would you need if sales suddenly increased?*

A: Manpower and space. They would need more money to hire people. Also, they would want computers, but the computers are really needed.

*Q: What kind of banking services would you be interested in?*

A: Loans. Ideally, they would like an all-inclusive brick-and-mortar store, where people could come and buy anything. They previously worked with Bank XX1, but that bank is not interested in small businesses. Now they're with Bank XX2. Here they can get help

with getting focused on where they need to go to make the most money, and "hooking up" with other people.

*Q: Would you be interested in working with [a host]?*

A: C1 would want to know how to handle the competitive factor if they both sell the same products on their websites. On the other hand, they can pick out things that [a host] doesn't have. There are some things on their web site that they sell exclusively.

## **A.4 Company D**

Interview Notes, April 5, 2001

Attendees:

- Company D: Person D1
- UH: Joy Agustin, William Albritton, Susan Linn

Interview was not recorded.

Notes taken by Susan Linn

### **A.4.1 Interview Summary**

There is one main product sold by Company D that comes in many different sizes. The product is assembled with the pieces stored in warehouse freezers. Customers seem to like the product because it's an all in one package, containing almost everything needed. Right now Person D1 is selling a high-end product, but hopes to put together a lower-end version soon.

100% of Company D is on the Internet. In the beginning, Person D1 hired someone to put together his web site. When he noticed that producing his web site was taking longer than expected, he decided to buy some books and make it himself. He also found that hiring a computer-type person to make his web site was also difficult because they usually didn't understand the business side of things.

Company D is already associated with a host, but it also has its own web site. To get his web site noticed, person D1 appeared on a cable TV show. Every so often there were reruns of the show, so more people would know about him.

Currently Person D1 reinvests his profits into the company to avoid relying on bank loans. When he gets tired of this business, he plans to either sell it or shut it down.



## **A.4.2 Interview**

### **A.4.2.1 Product**

*Q: What is your most popular product?*

A: [Product 1D], for 2, 6, 12, and 24 people. The 2 and 6 are the most popular.

*Q: Why do customers like it?*

A: It's an all in one package. It includes get flowers, lei, music, food, etc.

*Q: What is its price?*

A: It starts at \$169.

*Q: How long does it take to create this product?*

A: The different parts of the product are always in stock in the warehouse. Vendors are contracted to do the cooking.

*Q: What's the average amount in stock?*

A: Product 1D are always in stock in the freezers in warehouses.

*Q: How does the company handle customer payments?*

A: Usually credit card over the Internet. If payment is by check, the check has to be cleared before the order is sent.

### **A.4.2.2 Business organization**

*Q: What is the structure of your organization?*

A: Vendors are subcontracted for the products.

*Q: Who invested the money?*

A: Own money.

*Q: How many workers?*

A: Two, my daughter works at the warehouse.

*Q: Are all workers contracted?*

A: No.

*Q: Since your business was established, how has your business changed?*

A: It's a growing business that started last September. Product 1D is more of a high-end product, not something people would buy every day. A cheaper version of Product 1D, Product 2D is currently being put together. Every item in Product 2D will be shrink-wrapped and microwaveable.

*Q: Where would you like your business to be in 5 years?*

A: I'd like to sell it.

#### **A.4.2.3 Internet ability**

*Q: Do you have a computer?*

A: Yes.

*Q: Do you have Internet access?*

A: Yes.

*Q: If so, who is your ISP? Are you happy with them?*

A: Trident Networks in Ohio. They are the only ones that don't have glitches. They have 100% fiber optics, with less than 200 domain names per server. They monitor their servers.

*Q: What you think about buying products online?*

A: Cheap. You can find products cheaper online.

*Q: Have you ever bought anything online?*

A: Yes, stuff on E-bay.

*Q: What were your impressions? Any problems?*

A: Cheap. No problems.

#### **A.4.2.4 E-commerce**

*Q: Have you ever tried to sell your product on the Internet?*

A: 100% of business is on the Internet.

*Q: If so, for how long? If not, why?*

A: Since last September.

*Q: What were your initial impressions?*

A: At first D1 went to a couple of programmers to put together a web page. But they were so busy, they took 6 months to register the domain name. So he went to the bookstore, bought a couple of books, and made his own web page.

*Q: Was it successful? Any problems?*

A: One problem was that the really good computer programmers didn't understand the business side.

*Q: Would you do it again?*

A: When D1 gets tired of a business, he sells it or shuts it down.

*Q: Who's your web developer?*

A: Himself.

*Q: How long did it take for the product to reach the customer?*

A: Products are shipped immediately.

*Q: What percentage of the business was done over the Internet?*

A: 100%. Around 1% of that is with a host.

*Q: How do you get people to visit your site?*

A: A cable television show wanted to do a show, so they called the Chamber of Commerce on the Big Island. Someone there mentioned his website. At the time, they weren't interested in the web, but took a look anyway. Eventually he set up something for it was filmed for their show. It's aired around 6 times so far. Then there was Channel 2, who did a profile for their show. Some people find him through search engines. D1 tried submitting to search engines and get his web site listed, but they wanted a fully functional web site before they would list him on the search engine.

#### **A.4.2.5 Host**

*Q: What would be the advantages/disadvantages?*

A: The advantage is the volume of traffic. The disadvantage is the pay process is slow.

*Q: What are the current barriers to 5 times increase in sales?*

A: None.

*Q: What kind of resources would you need if sales suddenly increased?*

A: Maybe hire a part-time worker and more space for a warehouse.

#### **A.4.2.6 Financial Services**

*Q: What kind of resources/financial services would you need if sales suddenly increased?*

A: D1 tries not to rely on banks and uses cash instead.

## **A.5 Company E**

Interview Notes, June 5, 2001

Attendees:

- Company E: Person E1 and Person E2
- UH: Joy Agustin(J), William Albritton (W)

Interview was recorded

Notes taken by William and Joy

### **A.5.1 Interview Summary**

Person E1 and Person E2 started Company E around August 2000. Their product is Product 1E. It is created with raw materials bought locally. However, they know that they could probably buy the materials in another country at a cheaper price.

With regards to getting noticed on the Internet, they first listed their company with numerous search engines. Then they tried listing their product on a host web site for a few months, but didn't have any sales at all. Now a local retailer carries their product, as well some stores in Florida and Japan, who found the product through their website. Advertising was minimal, consisting of paying for placement on search engines and then also through a related site. This seemed to be their main strategy around the holiday seasons, when people are looking for specialty gifts.

Eventually, they would like to sell their business. Since they both have full-time jobs, this company is more of a side business for them.

## A.5.2 Interview

### A.5.2.1 Product

*W: So your most popular product is [Product 1E]?*

E1: Well, that's our only product.

*W: And, what do customers like about it?*

E1: I think the most, I mean local and mainland, or international, is that it's Hawaiian based. See, because the way we differentiate ourselves from other [Product 1E] sellers is that it's Hawaiian style fabric. And there's that craze, local and nationally about Hawaiian products or Hawaiian printed products.

*W: That's what I heard.*

E1: So that's how ... my husband, got the idea of doing it too. Trying to find something different to do. There weren't any Hawaiian style [Product 1E] really being marketed.

E2: I just wanted to make a [Product 1E] for our dog, and ...

E1: And I didn't want to pay for one. So ...

E2: So they have all those catalogs with the different types of [Product 1E] in it. And I saw an actual [Product 1E] made out of fabric.

E1: You can see it on our web page. (Shows us a picture of their dog on a [Product 1E].)

E2: So I made a canvas one first, and it seemed to work okay. Then we washed it, and it shrank and couldn't put [it back together]. So, I was thinking about this Hawaiian print, and you know the seat cover craze. Everyone has, every car has a seat cover, a Hawaiian seat cover. So I thought about making one with that fabric. That seemed to work fine, so far.

E1: So, we decided to do it.

E2: Yeah, there's other selling points, like it's portable.

E1: Light weight.

E2: We have a matching bag that you can pack it in and take it with you. Yeah, it's lightweight. It comes apart. You can throw it into the washer. And, also, things like the

structural features. It's cool because the air can circulate under and through [Product 1E]. It prevents dogs from getting elbow calluses from lying on the cement all the time. Helps dogs with hip (problems), and other medical conditions that it helps.

*W: How long ago did you start?*

E1: About fall of last year

E2: Actually, it was about late summer.

E1: Well, when we started registering the names we started earlier.

E2: The idea was about last summer, probably middle of ...

E1: We registered the name in June. The first prototype we introduced in July. Then we started listing in September on search engines. So I can always more or less say fall.

*W: What's the average that you have in stock usually?*

E2: Well right now we probably have about a hundred, probably.

E1: One to two hundred. That was because we geared up to do an expo, the Pet Expo that was at Blaisdel.

*W: Yeah, we saw that on the web page.*

E1: We had to increase our supply because of that.

*W: Oh, okay.*

E2: But prior to that, we usually have about fifty maybe.

E1: Right now we're not expecting a high volume on sales because we're not marketing ourselves. That's because right now we both have full-time jobs.

*W: Oh, you both... ?*

E1: Yeah, right now this is just a side business. So we're pretty much not pursuing anything on a larger scale because this is what we can manage. Although you always want to have that big break, it's just how do you manage it when we both work full time?

*W: Are you interested in forming your own company then?*

E1: I think we've talked about focusing more on wholesale. It's the retail side of it that's more time consuming. When you have Internet sales, and you're doing the invoicing, and the packaging, and the shipping of it, that probably takes up more time than if you can prepare for a larger wholesale or a periodic supply to a particular wholesale person. Then that would be more...

E2: We would rather sell it to pet stores and have them sell it for us.

*W: Now you're doing more...*

E1: We're doing both. We have a local retailer that carries it. We wholesale also to stores in Florida and Japan. They found us through our website. We did minimal advertising, like paying for a placement on search engines. And then through a dog online center, we have a lot of hits from that.

*W: Where do you store it?*

E1: At home.

E2: In the closet, in the garage ...

E1: Unfortunately.

E2: In the bedroom.

*W: By the washing machine.*

E1: Yeah, all over.

*W: How do you handle customer payments? Is it more cash?*

E1: Charges.

E2: Visa or Master Card.

E1: Or check.

E2: And of course, at the local things, we accept cash.

E1: At the Expo.



E1: During Christmas time, we know somebody who has their own dog business, goes to craft fairs. So she took our stuff to the craft fairs. That was kind of like a wholesale arrangement.

#### **A.5.2.2 Business Organization**

*J: So, was this like a small thing that's only the two of you?*

E1: Pretty much, to manage the business. Sometimes we pull in family to help for some things.

E2: To help cut the pipes and everything. For the Pet Expo I had my dad come and help cut the pipes with the saw.

E1: My parents with folding the [fabric] and placing them in the bag. But we hire seamstresses and quilters to actually produce the products.

*J: Who invested the money to start the business?*

E1: We did.

*J: Did you take out a loan?*

E2: No, just used our own savings. It wasn't much. We started off really small. We would only buy small quantities, several yards of fabric, pre-quilted. We would buy pipes from Home Depot.

E1: There was minimal start up costs for us because we didn't have a store or overhead really. So we just used our own savings.

*J: So as you got more orders, you would just use the money from there.*

E1: Yeah.

*J: Oh, okay. So, when you guys need help, you mentioned calling your parents, and stuff. The seamstress, are they contracted?*

E1: Yeah, the seamstress and quilter have their own businesses and basically we purchase fabric through our quilter or through another company, and pay the quilter to quilt the material, and then another person, the seamstress, to do the actual sewing of the [fabric] and the bag.

*J: So, since you started last fall, how has your business changed? Like has it changed a lot from the very beginning?*

E2: Not really. We changed the way we were operating, like when we first started, we didn't feel it was worth it to accept credit cards, to have to go through the process of getting a merchant account, buying the credit card machine. But when we reached a certain point where we were getting enough orders through the website, then it was worth it to invest the money in the equipment and to get the merchant account. We actually started to accept credit cards from the start, but we were using a web site company, and that's all they do. They charge 9% of all your sales, but they'll give you the opportunity to accept credit cards. So once we reached that point where we could afford to get our own merchant account, and paying only 2% of the credit card [charges], we switched over.

*J: Just out of curiosity, you get the credit card number from people when they put in an order, and then you manually type in the number into your machine when it comes over the web?*

E2: Yeah, cause again, we didn't want to pay the \$20-\$30 more to have it automatically done. So what we're doing now is, they enter the credit card on a secure server. I get an email saying that an order was placed. Then I go to the secure server and log in and get the credit card information. Then at a terminal at home, I punch it in and that's how it's done.

*J: So now that you've been in business for over a year now, where would you like to be in five years?*

E2: I was telling her that I want to sell the business

E1: I would like to see if we could sell it and get royalties.

E2: Sell it to something like PetSmart.com or something like that. Maybe some other investor.

E1: Maybe [a host].

E1: I think one of the problems for small business is your limited access to resources or just trying to find the connections. For us, right now, we're buying everything locally. Ideally you could buy the supplies a lot cheaper in another country. You could have it made for less than half the price, but it loses its exclusivity of "Made in Hawai'i". But getting the materials at a cheaper cost would drastically reduce the amount that we invest in it. Plus being able to purchase that larger quantity would be good for the product too, right? So hooking up to a larger organization ... who has those resources and connections, would be advantageous for a small business. It's just that you lose control. But that's where you have to decide what you want. If you want to just have a small business, or for us, we have primary jobs, and just want to look at it as a moneymaking small side business.

I think the other national type of company to get into would be the Home Shopping Network. Hilo Hattie is good because it has its niche of Hawaiian products, and then they have their stores in the mainland. But that is somewhat limited. Things that have gone through like, the Home Shopping Network, aren't similar to that type of shopping...

E2: But that's like a one-shot deal.

E1: But they have all the online shopping now. So if they developed a new category of pet products, they don't have pet products right now.

E2: Or just Hawaiian products.

E1: I don't know if they would develop a Hawai'i section, because why Hawai'i over other areas? But, there's a lot of areas in the nation that have all this Hawai'i craze. You have all these transplant Hawaiians all over now that have Ho'olauleas and luaus all over the place. I think the workings of the Home Shopping Network is on a much larger scale. They would have huge sales versus Hilo Hattie.

*J: You mean like QVC, or something like that.*

E1: Yeah. I don't know if it was QVC or the Home Shopping Network that came here a couple of years ago and went to the Made In Hawai'i Festival. They selected 10 different companies to feature on a special segment, and they had huge sales. Some made pies, somebody made soap. I don't know what else there was.

*J: I can imagine that because housewives and people that stay home, they watch the Home Shopping Network. They see something they like, and they call in right away.*

E1: They get thousands and thousands of sales.

E2: There's a lot of them, QVC, The Home Shopping Network, Value Vision ...

E1: Yeah, there's a lot. But before, they would say, I think it was the Home Shopping Network, their revenue was more than the three major television stations combined. And that was when I was going to school... That was over five years ago.

*W: So they were around a while?*

E1: Yeah. But they have their online section now. That's an area I think would be good.

### **A.5.2.3 Internet Ability**

*W: So, obviously you have a computer and online access. Who do you use to build your web page? You do it yourself? Or you got another company?*

E2: Yeah, I did it myself. And I found this \$10 per month ISP to host our site. Do you want their name?

*W: Yeah.*

E2: Addr.com. It's only \$10 per month. You get hosting, email. For the connection we have Road Runner.

*W: Did you design it from scratch?*

E2: Yeah designed it from scratch. They didn't have any templates.

*W: How did you make the little dog on the [Product 1E]?*

E1: Oh, a graphic designer made it for us.

E2: A graphic designer I worked with designed that. The other little things, the whole look of the site, I just designed it myself, icons and everything.

*W: Have you bought products online yourself?*

E1 and E2: Yes.

*W: Ever have any problems with that?*

E2 and E1: Nope.

E2: In fact, I've been buying more and more stuff online. It's just cheaper. Digital camera, video camera, a lot of the AV equipment and things like that. It's just cheaper online. Of course we're not supporting the local market, but if we can save on not paying any tax, shipping is a lower too.

#### **A.5.2.4 E-commerce**

*J: E-commerce question. What were your initial impressions about selling your [Product 1E] online? Good idea, bad idea?*

E1: I think that was initially our primary distribution channel because we knew that the local market would be interested in it, but we were really hoping to capitalize on the Hawai'i craze outside of Hawai'i. We read about a lot, about in Texas it's really booming, anything that looks Hawaiian or says "Hawai'i" on it. So that was our primary goal, to be on the Internet. And that's what we started first. And then we started looking for retailers after.

E2: So, I guess you could say we worked backwards. I mean we started with the mainland with the website. Through the web site we were able to attract the local vendors and local interest.

*J: Did you guys have any problems with the Internet and trying to target the mainland first?*

E2: No. The hardest thing was getting, you had to be patient with getting registered on the search engines. That's we invested a little bit of money, not more than \$50 up front just to advertise on paper clicks. That got us some hits after.

*W: So they click on it, and they get money.*

E2: No, we pay per click. So let's say we have an account with goto.com. And goto.com had these accounts set up with AmericaOnLine. If you have an AmericaOnLine account and you search for "x y", AmericaOnLine uses goto.com search engine, and it will put [Company E] higher depending on what we bid per click. So let's say we're paying one cent every time someone clicks on the link, we have to pay goto.com one cent...

E1: Per click. But you can bid higher amounts to get higher on the list.

E2: So if you type in "x z", you may have hundreds of vendors that are paying premium rates, up to several dollars, every time you click on it. I mean "x z" isn't as popular as say, video projectors, or any other specific search item. So during Christmas time we were paying for 30 to 40 cents per click, and that was only getting us maybe the top 5, top 10. So every time someone clicked on it, they would deduct 30 to 40 cents out of our account.

*W: Did that add up to quite a bit of money?*

E2: No, not really, cause you can always go back and change your listing. If you wanted to change it to 5 cents a click, reduce it.

*W: For the search engines, how long did it take to get registered?*

E2: Well, Yahoo was probably about 2 weeks.

*W: That's it?*

E2: Yeah, it was actually pretty fast. But the thing about Yahoo is that they make their own description of what they think your web site is. So you can't tailor it. They only have a little blurb. At first they put something like "w x y" or something like that. So I

had to send them an email and try to get them to change it so they put "x z" in there so that if someone searches for "x z" chances are greater for us to be higher on the list. If they put "x y", and type in "x z", ours would never come up. It was that little tweaking that we had to do after to try to get them to change.

*W: I thought that in FrontPage there's the meta tag that has "y" "z".*

E2: But that's only one thing that search engines look at when they rank your site.

*W: That and others.*

E2: Yeah, that and others. They stated it real scientific, like how many times you put the word in, and where you put the word in. I don't know how it's calculated. There are companies out there that that you can pay will help you design your pages so that it's guaranteed to be in the top 2 pages or something like that. Kind of crazy. All the other search engines took about two months before we started getting listed. A lot of them get their lists from Yahoo or Google, or other search engines. So it takes a while for them to get the data into their search engine.

*J: So with everything you have done and invested, would you ever do this again?*

E1: You mean like start up a new business?

*J: Or, if you had a chance to go back in time?*

E1: Yeah, I think so. The whole idea was that we wanted it to be a side business and not take away time from our primary jobs. I think that's why it's manageable for us. We're not really being aggressive and trying to market it more because we wouldn't be able to handle it.

#### **A.5.2.5 Host**

E2: One thing I wanted to mention about starting an E-commerce thing is that we did for a while have our product listed in [WWW.com]. ... So that's like an E-commerce web site devoted to selling Hawaiian products, and they're affiliated with [a bank].

E1: [The bank] actually started this, and then they contracted it out ...

E2: And then they contracted it out to another company that's managing it. The deal with [WWW.com] is you provide them your product on consignment and you tell them what your wholesale price is. Then they mark it up to your suggested retail. If they sell it on their website, then they pay you when they sell the product.

It's all Hawai'i products on their site. If you have an account with [the bank], it's free. If you don't have an account, you have to pay for the number of products.

*W: Even if it's a different company, though?*

E2: Yup. It's still affiliated with [the bank]. [The bank] contract out a company to manage it for them.

E1: We pulled our product because they didn't sell anything.

E2: Yeah, we had it on their site for about 2 to 3 months during the fall, all the way through Christmas and Thanksgiving. They didn't get any sales at all.

*W: Zero sales?*

E2: Zero sales.

E1: They talked about marketing their site nationally and they wanted to use us in a press release, but we never saw anything from it, so we ended up pulling it. Locally, [the bank] promoted it in their newsletter, but we didn't get anything so we pulled it.

E2: Then again, they're only promoting it locally. In fact, their site was geared more towards mainland and Japanese buyers ...

E1: There were a lot of gift items.

E2: Because it was all Hawaiian products. But it didn't seem like their marketing...

E1: I didn't think they had funds...

E2: Yeah, probably didn't have enough money to have a marketing campaign and promote their site. So we just stopped listing our stuff with them. What you were talking about initially sounded like something similar to that, where you would like [a host] to sell the product exclusively through their website, or through their stores?



*W: That was our first plan. Now we're trying to figure out a way to make a process where small companies could get registered with [a host] really quickly. And then [the host] has all these stores and the website. ... Home Shopping Network sounds[like a good prospect].*

E1: Like you said, they're already well established nationally. They get tons and tons of sells on their products. I know my mom buys a lot. And some of them have the counter of their sells. When they're showing a product over a period of 10 minutes, they take in calls, and you can even listen to the callers on the product. Some of those have little counters that keeps moving every time there's a sale, and it's in the hundreds, in the thousands.

E2: Seems fake almost.

E1: But why? They're reporting revenues, so it's not fake. And if they're selling people's merchandise, they buy it in large quantities. So basically, they would want to know things like, what is your delivery time frame, and what is the supply that you have and could produce in a given time frame? If you go to their site, they have an area where you can find more information about getting listed on their web site or sell through their station.

*W: Another thing. Are you more interested in making your own website, or just filling out a form to put your product on and having someone else take care of the website. Which way would you prefer? Say if we had this larger company that you were selling your products on?*

E1: I think for us, selling it through the larger company because that's what we're talking about, removing ourselves from the individual or retail sales, and having someone else do it.

E2: At the same time you lose control if you do that, from a vendor's perspective. You lose control of the appearance, your market reach, almost like [WWW.com], we're turning it over to them, but we don't know what they're doing marketing wise, how many hits they're getting. They don't give us any reports or financial stuff.

E1: I think they were too small, didn't have enough foresight. They had a good idea, but they didn't know how to manage themselves. With the backing of [a bank], you would have thought it would have taken off.

*W: If you sold on with this larger company, would you be interested more in the wholesale, commission, or drop-ship?*

E1: Wholesale.

*W: If your sales increased five times, what are the barriers to that? How would you have to change your company to deal with that?*

E1: If we went to wholesale, I don't think it would be that bad.

E2: From the manufacturing side, we wouldn't be able to go to Home Depot to buy the supplies and take it home and cut it. We would probably have to hire someone to do that. Maybe precut from the mainland. Even the fabric, probably hire more seamstresses.

#### **A.5.2.6 Financial Services**

*W: What kind of financial services would you need?*

E1: It depends if it was retail or wholesale. For wholesale, there wouldn't be much difference. On the retail side it would be using more the automated services on the charge cards.

E2: It would be hard to punch all that in.

E1: Yeah.

*W: Would you be interested in loans, credit card transactions, business bank account, that sort of thing?*

E1: I don't think we would need a loan.

*W: What about the credit card transaction?*

E1: Well, we have our own credit card transaction set up. The business bank account, we already have one ...

*W: Do you see yourselves and entrepreneurs?*

E2: Yup. I have another side business.

E1: He's really the entrepreneur.

E2: I sell video projectors. ... The LCD ones. I sell those on the side as well.

E1: He's always been an entrepreneur.

## **A.6 Company F**

Interview Notes, June 20, 2001

Attendees:

- Company F: Person F1
- UH: Joy Agustin (J), William Albritton (W)

Interview was recorded

Notes taken by William and Joy

### **A.6.1 Interview Summary**

Person F1 started his company about 2 years ago. The company had some growing pains, as it grew quite fast. Currently, the company concentrates on production and marketing the product to wholesalers, who do the actual selling of the product. About 10-15% of his product is sold online on other company web sites. Most of the products are sold to tourists while on vacation here, particularly to Japanese tourists.

### **A.6.2 Interview**

#### **A.6.2.1 Product**

*Q: What is your most popular product?*

F1: [Product 1F]. But we also have a several different businesses that manufacture several other products.

*Q: Why do customers like it?*

F1: Easy to learn how to play, sounds nice.

*Q: What is its price?*

F1: As low as \$12 for a very low quality [Product 1F]. These we import. The ones that we make, we sell for \$280 to \$600. Plus the cost of the case, which is made in China. They are made of leather.

*Q: How long does it take to create this product?*

F1: From start to finish about a week and a half. Our [Product 1F] are made with lasers. We network with two big guitar manufactures. They do a lot of international business. In the order of about 60 million a year. ... In San Diego they'll sell our [Product 1F]. And also in British Columbia. And also online, we ride the coattails of the [Hotel F]. We ride the coattails of [another company]. In other words, we partner up with them. But I'm making it simpler than it actually is. The wood has to be logged from the Big Island. It goes to the factory. It has to be air dried for 30 days. Then it's in the kiln for a couple of weeks. Then it goes back to air dry, so the wood acclimates. Then we slice it up. Then we accumulate the wood again. Then we process it. So it's a lengthy thing.

*Q: What's the average amount in stock?*

F1: At the [Hotel F] we sell a couple 100 pieces a month. Overseas we're double that. We sell lower-line ones to [another company]. We're also in [another company].

*Q: Where is it stored?*

F1: In a warehouse at the factory.

*Q: How does the company handle customer payments?*

F1: Because we don't do it directly online – we're going through another company, we just invoice that company. And they'll receive their payment by credit card if it's online. We sell it at the [Hotel F] through a credit card.

### **A.6.2.2 Business Organization**

*Q: What is the structure of your organization?*

F1: It's a corporation – I am the sole owner. We have managers. Retail managers. Store managers. Factory guys.

*Q: Who invested the money?*

F1: Me. I took out loans and built a store. The laser-cutting machine cost a quarter of a million dollars.

*Q: How many workers?*

F1: Roughly 25.

*Q: Are all workers contracted?*

F1: They're all either salary or hourly.

*Q: Since your business was established, how has your business changed?*

F1: It has changed. There were some growing pains. It was established about 2 years ago. It's a lot of good people working. And that's what I believe in. We grew fast. In business, it's not only how much you know, but also how much you network.

*Q: Where would you like your business to be in 5 years?*

F1: I don't want to continue this too long. Probably sell it off to the staff and let them run it.

### **A.6.2.3 Internet Ability**

*Q: Do you have a computer/ Internet access?*

F1: Yes.

*Q: If so, who is your ISP? Are you happy with them?*

F1: Don't know (because don't directly handle the computer side of the business).

*Q: Have you ever bought anything online?*

F1: Yes.

*Q: What were your impressions? Any problems?*

F1: It depends on what you are buying. Like a musical instrument I believe online would not be a good deal, because like anything else you need to touch it. And test the sound. A couple of places online have that music side now. You can play. You can hear what the c-cord is now. We're further developing that right now.

#### **A.6.2.4 E-commerce**

*Q: Have you ever tried to sell your product on the Internet?*

F1: Yes, but other companies sell their product for them. However, the company is currently working on integrating photos and sounds to help in selling their product online.

*Q: If so, for how long? If not, why?*

F1: We got some started working on our page, but he got busy with other stuff. So that's put on hold.

*Q: Did you have your own website?*

F1: No. Our product is sold through other company websites. We have a retail store at the [Hotel F], which we sell a lot of [Product 1F]. If you check out the search engines, we are listed under the [Hotel F]'s website. We also do a lot of networking with Japan. Our product is on the web with [a company] and other Japanese instrument dealers. We also sell at [another company] for the local market. Although our main business is with the tourists. In particular the Japanese tourists. We're networked with 90% of the Japanese tour companies. Airlines, travel companies, etc. What my guys do is we have musicians, who go to each of these places and play for them. So the guests come in. Of

course when you start playing for them, they say “Oh – that’s cool. That’s easy to play.” So that’s how we make our sales. Not only at the [Hotel F], but Monday through Friday we’ll go to a different hotel and spend 2-3 hours there. And do demonstrations for their guests. You put a [Product 1F] in their hand and they’ll figure out how easy it is to play. And buy one. And that’s the backbone of our business.

*Q: If someone else, how is it handled?*

F1: A staff of 3 people does the marketing for us in house. So they communicate by fax, email, phone, and in person to make sure the product gets listed correctly on other web pages. There are a couple of companies from Japan that fly in their staff every other month just to meet with us. All our marketing guys are fluent with Japanese.

*Q: What are likes/dislikes about current setup?*

F1: (Seems pleased with the current setup.)

*Q: What percentage of the business was done over the Internet?*

F1: 10-15%.

*Q: How do you get people to visit your site?*

F1: I don’t know. The one in Japan. ... There’s a few 1000 hits a day.

#### **A.6.2.5 Host**

*Q: Would you be interested in selling your goods on a different website, which specializes in Hawaiian goods?*

F1: Yes. Sure. There are a couple of people who we’re doing that now with. A couple of “Made in Hawai’i” groups.

*Q: Would you be interested in using wholesale, commission, and/or drop-ship?*

F1: Wholesale.



*Q: What would be the advantages/disadvantages?*

F1: Less hassles. Don't have to maintain it. We're good at manufacturing [Product 1F]. We're good at marketing it through these wholesalers. Right now that's what we're strong at. Eventually we'll see how that goes and maybe we'll want to do it ourselves. But right now we don't have the staff to do it.

*Q: What are the current barriers to 5 times increase in sales?*

F1: Currently we're working through [a company] to sell more [Product 1F]. If that goes well, we'll have to gear up staff to produce more [Product 1F].

*Q: What kind of resources would you need if sales suddenly increased?*

F1: More staff and perhaps buy a new manufacturing machine.

#### **A.6.2.6 Financial Services**

*Q: What kind of financial services would you need if sales suddenly increased?*

F1: Probably would need something.

*Q: What kind of banking services would you be interested in?*

F1: Already have.

*Q: Would you be interested in loans, credit card transactions, and/or business bank account?*

F1: Already have merchant services ...

#### **Miscellaneous questions**

*Q: Do you see yourself as an entrepreneur? What does that mean to you?*

F1: Yes. Like to develop own stuff.

## **A.7 Company G**

Interview Notes, June 29, 2001

Attendees:

- Company G: Person G1, Person G2
- UH: Joy Agustin(J), William Albritton (W)

Interview was recorded

Notes taken by William and Joy

### **A.7.1 Interview Summary**

Person G1 has been in business for 12 years, and on the Internet for about 1 year. Her most popular product is prints (reproductions of her original paintings). The prices range from \$10 - \$40. She thinks that customers like to buy things from her web site because Company G pays for the shipping from within the U.S.

From the web page, a customer can place an order and pay by credit card. It takes about 2-3 weeks for an order to be fulfilled once an order is placed. About 1% of sales are through the Internet. G1 is not currently relying heavily on the Internet, but believes that it's a tool that will hopefully help in the future. G1's current web page serves more as an online catalog.

Person G2, G1's web developer, is also an artist. He feels that G1 should hire someone else to take care of the web page because that's not his area of expertise. Also, someone else would be able to do things that they would like to do but don't have the time for.

## A.7.2 Interview

### A.7.2.1 Product

*W: First on products, what's the most popular product that you guys sell?*

G1: Well, prints. In a general category, would be prints. Open edition prints. ... and these are basically three sizes. We couldn't say right now which image. ... But right now, are you talking about the Internet?

*W: Yes ma'am.*

G1: Prints. Open edition prints. But that's part of it. ... We haven't done [a lot] on the Internet, but we're beginning to get there. ...

G2: We also sell limited edition [prints]

G1: These are limited edition prints, but we sell very few. Right now it's anywhere from the \$10 to \$40 range.

*W: Is that what customers like about it?*

G1: I think [also because we also pay the freight from Hawai'i]. Which is reasonable.

G2: I think it's pretty good.

G1: Yeah, they like that.

G2: Not too many companies [do that].

G1: 'Cause many people think we're a foreign country as you know.

*J: Yeah, I know. I heard about that one a couple of times.*

G1: Of course when we first made the page, we said we would pay the freight, we never say in the U.S. And a guy from England ordered twice, remember? ... Good thing we were retailing.

G2: He was ... a friend of my cousin's.

*W: How long does it take to create this product?*

G1: ...Well, first you have to paint it. And then we have it scanned ... we have three different kinds of scans done: RGB, CMYK, ... and one for the Iris. We do prints on the Iris printer. ...

G2: The Iris printer prints out the [limited edition prints], which is the best printing process available.

G1: So then we have the digital scans. And we take them to [a shop], and they do all our printing from art scans. And then we have to have them taken out to [another shop], and they do all of our matting. So as far as creating an image, that is a whole different thing. ... It would start from the time it was scanned ... If you were really in a hurry, two weeks.

G2: That's pretty fast. 2 - 3...

G1: Although we have been known to do it in a day, haven't we [G2]. Not bad ... It costs a lot of money.

*W: What's the average that you have in stock?*

G1: Right now I would say we don't know right now, because we're going into Quick Books so we'll know. I would say we have [a lot] of stock in this place. ...

*W: And it's all stored here?*

G1: [Yes]. ...

*J: So when you get them printed, how many do you get printed at a time?*

G1: Well, it just depends on what kind of printing process we're using. If it's an offset print, with the old standard four color, maybe 5 thousand at a time. If we're doing a digital printing, maybe 12. Because we have a [lot of] images, so ... my bill at [one shop] was [huge]. ...

G2: The offset is more expensive to set up, so you want to do a lot of that.

G1: You have to make sure that you have an image that's going to sell. So my market mostly for offset prints is the hotel room art market. So it's worthwhile for me to do that. ... Yeah, the upfront cost is very expensive ... but we're paying [less for a print than what

we wholesale it for] ... So it's a nice business. ... So, and then if we're doing Iris's ... we only have to order two at a time.

G2: Because that's [more expensive per] sheet.

G1: It just depends on the printing type. We're going to be buying our own Epson printer soon. ...

*W: How do you handle customer payments?*

G1: Well, we have several kinds. We have Net 30. You mean customers paying us?

*W: Right.*

G1: ... Well for many of our fixed ... accounts, it's Net 30. So we deliver, and they get 30 days to pay. Now, many accounts are consignment. And we go and count every two weeks and then bill them for what they've sold. So it's either consignment or a Net 30. Some people are obviously cash, depends on their credit standing, meaning you pay when you take it home or pick it up. Now, people that come here always pay right away. We occasionally have people come here, but I try not to retail because it becomes too time consuming. It's just kind of a goodwill thing to do.

G2: It's mostly friends [stopping by].

G1: Well, we have people who email us from our web page, we have a few of those to go through, who want to come and see us. ... But we'll let them come by. It always creates goodwill. ... In fact, my studio is the whole upstairs.

G2: Then they end up hanging out. ... Which is good 'cause then they have a story to tell.

*W: Well y'all are so friendly that's it hard not to.*

G1: Well, we have a great business. And there's four people who aren't here right now. G3 had to leave early. And then there's three of them out setting up our new display ... right this minute as we're talking. So, our biggest business by far is not the net. I mean it's definitely all of our customers in Hawai'i.

*W: Right...*

G1: But we WANT it to be the Internet. It would be GREAT. Fortunately we don't have to rely on it. ...

*W: With the Internet, they pay by credit card?*

G1: Credit card. Through card services so we don't even have to swipe a card or anything. We don't even know what they're cards are. Card services handles it. It's all secure. ...

### **A.7.2.2 Business Organization**

*W: The structure of your organization. It's just four people that work here?*

G1: How many do we have? Six, part-time. Mostly everybody is major part-time. ... We're very flexible. It's a great place to work. ...

G2: Right.

G1: But you know what, we don't have to be in retail. Like right now, [for] our major project ... everyone is here when we really need to push something out the door. But we can cruise. ...

*W: So when you started your business, who invested the money?*

G1: Oh, we never had investors.

*W: Oh, okay.*

G1: Actually, my first ex-husband, [G4]. He and I are very close, and he helped me out a lot. I never had any investors because I'm a sole proprietor. I borrow money. So my dept is probably close to my inventory.

*W: And you said the workers are part-time?*

G1: Yeah, but I carry insurance on everybody. And some of them have their own licenses. But most of them it's part-time. ...

*W: Has your business changed much over the years since it was established?*

G2: It's gotten bigger.

G1: We got more modernized, bigger ...

G2: This [room] is all very new.

G1: Since February. These rooms I was renting out for years. To run your own business you have to ... rent out every room, buy old clothes, buy minimum groceries, drive an old car, ...

*W: That's just like us.*

G1: ... And even when this business is this big, I'm still ... driving an old car, ... And you know, you just don't spend your money.

*W: How about for the future, how would you like your business to grow?*

G1: I'd like to be doing at least \$50,000 a month. ... What I need to do is spend more time painting, and [it] is beginning to happen now. I'm beginning to loosen up a little. So I should be upstairs, and everyone else is so smart and perfectly capable of running everything.

G2: We should be doing half of the business on the web.

G1: Yeah, I'd like to be doing that, but I don't know. ... And eventually I would like to be doing \$100,000 a month. That's a big operation. ...

G2: At that point you get a fulfillment company.

G1: And from the bank, [they asked me] "Who's doing your fulfillment?" I said we are. [It's like] what are you talking about? Of course we're doing our fulfillment.

G2: That would be a major step. ...

### **A.7.2.3 Internet Ability**

*J: ... About your Internet situation right now. We saw the computer in the other room, and we saw the catalog thing. Who's your ISP, or Internet Service Provider?*

G2: Road Runner.

*J: Have you ever bought anything online?*

G1: I don't think I ever have.

G2: I don't like to. I would rather see my product, ... have it in my hand.

G1: I would buy music. I NEVER spend time on the web. I rarely surf the web.

G2: We buy services on the web.

G1: Yeah, and I'll go to MPR. That's all I ever listen to. I'll check out stuff, but I never spend time because it's like watching television. I have no time for that.

G2: I sign up for stuff on the web. ... then I get billed later. But I don't like to give credit [card information] ... I don't like to use credit cards anyway ... I don't like to give out money on the web.

*J: Have you had any problems when you've done a signing up with the credit card?*

G1: Nope, we're the wrong people to talk to there. We only want to sell, we don't want to buy.

G2: I've had problems signing up ... when there's a code or a pin code or something, and you don't have it. You have to wait for it to be emailed to you, and they don't email it for ... two days, and you've got to get this thing done now. It's like, don't you have an automatic [thing] that sends it, and I'm pressing refresh on my inbox. It's not coming up.

*W: It's not quite as convenient.*

G2: No, it's not as convenient as I would like. And it should be. ...

#### **A.7.2.4 E-commerce**

*J: And how long were you selling you stuff on the Internet again? One year?*

G1: Just a year. When did we really open?

G2: Since June.

G1: No, then the hurricane came. We used that as an excuse, remember? It was, like, August.

G2: It was, yeah.



G1: 'Cause we weren't ready, we weren't ready, we weren't ready. But now that we're open, it's just fun to tweak and tweak and tweak. And people love it. They enjoy it. They really enjoy our site. It's fun cause some people's one, [it's so boring], but [G2] has made it fun.

G2: ... Probably three quarters of the site is the whole shopping/galleries, and then a quarter of the site is content driven. And we want to increase that. We want to put more lessons up, ... we want to put photographs of our friends up ... one of the images that [G1]'s done that's not for sale ...

G1: But recent shows ...

*W: Make it more dynamic.*

G1: There's some people who really go to it a lot. ...

G2: We have [a program] that analyzes the logs on the server. It's an incredible server.

*W: How many hits do you get per day?*

G2: Do you mean unique visitors, or request for information?

*W: Unique visitors.*

G2: ... Per month it's about 150.

G1: ... It should be 1500. ... We just didn't have any expectations. That's a good thing. And they're probably good hits. We get a lot of mail. We get a lot of comments and guest book entries. ...

G2: ... People that come to the site ... A lot of people ... search for us mostly on MSN.

*W: Oh, you know where they come from?*

G1: Yeah, we know where they come from and everything.

G2: And some from Yahoo, Altavista, and Google. We have a lot of search people come from there.

G1: We're starting to link more with people.

G2: And I can even find out the terms they were searching for when they found us. And it's always "Hawai'i", "x", "art", "prints". maybe "y".

G1: It's all pretty amazing. Once in a while they'll ask for me, but ... we don't want them to know who I am. We want them to be looking, and we're right there.

G1: Do you all know about WWW.com?

*W: No, I don't.*

G2: ... We're going to signup with these guys. It's like \$1500 a year.

G1: Plus half a cent a hit.

G2: Half a cent click through. But they get a million hits a month?

G1: Yeah, it's a big [website].

G2: And they say they have a 3% click through. I want to find out whether we have a 3% click through, or whether their whole click through rate is [3%].

*W: So how much time do you spend making web pages?*

G2: Not much anymore. ... Initially, that's all I was doing. I was actually working at home, busting them out.

G1: 'Cause we just bought the IMac in January. ... PowerMac actually.

G2: Right. And I was learning telnet, C++. Just a little bit. Just some commands to configure the servers and stuff like that. We use DreamWeaver, so it's pretty easy. ... So I didn't really learn HTML. I know some few tags and stuff, you know. It's pretty easy with DreamWeaver. I had a lot of fun with it. Now I use Adobe ImageReady. ... That's a fantastic program. ... I'm an artist. I came to the programs with ... what I wanted to do and found out how to do it in the program.

G1: Almost everyone ... that works here is an artist.

*W: Oh, yeah, I kind of figured.*

G1: So, um, [G5], [G6], [G2], me. [G7] is not, and [G3] isn't. But [G3] is just a summer person. But ... it makes a big difference having artists working for an artist. I think it's great. Plus ... every one of us, we help everybody get their work out too. Eventually I would like to see them all as independent artists.

*W: So how long does it take for a product to reach the customer when they order it?*

G1: Within a week. ... We're so good, we'll get it out the door. ...

G2: We tell them if they don't get it within two weeks [let us know] ... they get the email confirmation. ... Also, on the email confirmation, I only just put this on. I just realized this would be a good tool to have. Once somebody orders something, they get the email confirmation saying this is your order, thanks for ordering, if you don't [get your] order within two weeks, contact us here: toll-free number and email address. AND, I put in four questions and ask them to email me back. ... You know, like how did you find the site, [do you have] any improvements for content, or anything you found, what you found good, what you found bad. I can't remember exactly what I put on it. So on the confirmation email I put that. So there's a lot of little tools like that that you can add here and there which will help you get the feedback. Like that [program], which analyzes the web server log, ... that's a brilliant tool.

*W: Yeah, pretty nice.*

G2: It tells you all kinds of stuff.

*W: ... What percentage of your sales are done over the Internet?*

G2: Not much.

G1: One percent. ... It's a future thing. ... Actually, I'm so glad we never really counted on it. ... It's exciting when you first do it, but I've been around enough to know that there's never, ever one big thing. It's a little here and a little there. ...

G2: The good thing about the web is it's got you some distributors. ... So [G1]'s ... had someone call her up. And they've been searching on the web ... for a new artist to add to their gallery. And they found [G1] on the web. ... And then if [G1] is looking for a commission on something, it's an online brochure that helps back up her work. ... 'Cause you don't have a physical catalog to show people.

G1: We will soon, but it's a work [in progress].

G2: ... You might have a couple of examples. You say "Go on the web and check it out" and they can go "Oh, she does all this kind of stuff." ...

G1: ... We really have unlimited things we can do, ... one of our biggest success stories is I do Christmas cards too. I have [someone else publish it]. I don't sell any of it. ... I'm not set up to distribute it ... I get a royalty. But someone took one of my cards to this gallery in Florida last year. And the gallery at that time was bidding for a big job with [a hotel]. So they called me and I said "Go on my web page." And they loved my stuff. ... We put together, physically, these portfolios ... So we shipped it to them, and we got the job.

Now, if that gallery actually didn't win it, then another gallery did, they picked us up. ... Not only did we get this job, I've got the whole [hotel at this one location] ... All the art work, 400 prints each, 8 images. ... plus this gallery is taking us into this huge show in Atlanta in September for the whole Eastern seaboard. ... Obviously this started out with a Christmas card, but it was because things go right on the net, and wow ... so this is not just for sales.

*W: Right.*

G1: This is like a living catalog out there that we can constantly change. So that is ... another tool I think for us.

*W: It helps make new contacts?*

G2: ... Yeah, definitely.

G1: And also the fact that you have a web page, especially in the art world, because most artists don't have the ability to do what I'm doing. They don't have the money. ... Well, we built it up from nothing, but, you know, I ran a business before I became an artist, which was only 12 years ago. ... I already had some business experience. ...

#### **A.7.2.5 Host**

*W: So, ... our theory is that it helps for these small businesses to get on a larger business's web page. One example is Hilo Hattie. They sell a lot of Hawaiian products, and so it helps these smaller companies to sell their products on [a host's web page].*

G1 and G2: Right.

G1: We would just be wholesale.

*W: Are you interested [in something like this]?*

G1: Of course. I would like to go with [a host]. We just haven't done it. ... There's ... nothing standing in our way except for time. ... we're at everywhere where we want to be except for [the host]. ... We refuse to go into ... awful stores ... because it is perceived value. You know, people want to be buying it as a gift, and not just as a souvenir. It is a souvenir, but ...

*W: Are you interested in wholesale, commission, or drop-ship?*

G1: ... We'd do it any way they'd want to set up. Sure, we're flexible. Why turn it down.

*W: What do you think are the advantages and disadvantages to that would be, though?*

G1: Of ... drop-shipping and all that?

*W: Of having a larger company sell your product?*

G1: Well there are no disadvantages. We do it all the time.

G2: Yeah.

G1: ... Most of our business is wholesale.

G2: ... We have a huge customer base.

G1: ... We're a wholesaler, basically. So we're already into that. As far as royalties. Sure, like on my Christmas cards ... all that's royalties. I've always thought of myself as a wholesaler. Somebody comes here and buys retail or buys on the web. It's really great. It's totally gravy for us. ... That's why our profit margin is huge when someone comes here or buys off the web. So ... we priced our products as if we were only wholesaler.

*W: Okay.*

G1: So we're set for that.

*W: ... If, say, your company were to increase in sales about 5 times, what would be some barriers to that? Or problems you might have?*

G1: ... Setting up the right systems. ... Capitalization. ... you could sell yourself into bankruptcy in two weeks you know. ... Keeping your credit up, which is always crummy for small business. ... bigger business, different set of problems. ... although we have fabulous people ... we could handle, with our little gang ... probably 750,000 a year, but then that would be it. ... That's talking about in prints.

Now, I can earn maybe ... that in doing paintings sure because the more well known I become, the more I can get. And then that's not taxing the group. So that's where I would like to see my increase. ... keep everyone working ... the way we want to work. ... So much of what we're doing here is quality of life. ... we just want to pay our debt and make some money. You know, be comfortable, have fun. ... If it's no fun anymore, I don't want to do it. ...

*W: What kind of resources would you need if the sales suddenly increased?*

G1: Money ... that's a biggie ... We would need more computers. We'd probably ... need storage areas. ... The problem with working with one supplier, or two suppliers, is that if something goes belly up with them, we need to spread out our suppliers. Work with more vendors.

#### **A.7.2.6 Financial Services**

*W: Any financial services you might need if sales suddenly increased?*

G1: Just loans.

*W: So right now the banking services, you have the credit card.*

G1: Yeah, we have everything. We have two different credit card. We have credit card with Card Services and then we have ... our manual swipe ... [so] we pay much lower percentages to Card Services. So that virtual terminal ... in the computer, you don't want

to use that unless really you have to cause it's a higher percentage that we pay Visa and MasterCard. ...

G2: There's a terminal on the web. ... you can just type in the credit card number.

G1: ... We don't want to use that unless we really have to. ... So when I'm, like, on the mainland, selling on the mainland credit card sales I can go to my computer ... and go on the virtual terminal and have those credit cards run through. It's pretty cool. ...

*W: So you see yourself as an entrepreneurs?*

G1: Oh yeah. I've been one for 25 years. And trying to make everyone here an entrepreneur too. ... There's a lot to learn, but the most important thing is cash flow management and a sense of humor. ... And also what to give up. ... We have what we call our high maintenance customers and our low maintenance, but we need them all. You can't just have the low maintenance ones. ... There really aren't many low maintenance customers. ... You can't be rigid. You ... set up an arbitrary budget for ... when you think it might be a good idea to let this person have [a] ... print, creating goodwill. Goodwill is really hard to define, but it's really important. ... Okay, goodwill, cash flow and sense of humor.

*W: How long have you been painting for?*

G1: Since '89. ... Sold my first painting in '90. ... It's a lovely life. ... It's never easy because two things: 1. If you're an artist... you're only as good as your last piece. ... You can't hide anywhere because you're the one creating this ... and you're always putting yourself out there for criticism because people are all critics. But then when you combine this with running your own business there's REALLY no where to hide. ... There's no one you're working for. Everything you do is you set it up. So it's exhilarating and exciting, but it's scary sometimes. ... You just have to be willing to take the risks all the time. There's no security, ever. ... until one day ... you can have that six months in the bank.

*J: Could I ask you more about that WWW.com thing?*

*W: ... Would we enter 'WWW.com' on the Internet?*

G2: Yeah. ... we're trying to find somebody to ... affiliate with on the web to really help market us. ... there's buy.com, ... somebody else, and WWW.com. ... Sounds like they're giving us a good price. ... So we're interested in that. We need somebody to help promote us. ... [G1] doesn't need to be paying me to be on the web, filling out forms, and spending more of her money trying to promote [her work] because I don't know that. We need to outsource that to somebody who can really promote us and knows how to do it.

*J: ... What kind of ... setup ... or deal ...?*

G2: It's a \$1400 initial setup. I can't remember what that includes. ...

*J: So is that ... where ... you provide information to them and they'll take care of your web pages and all that stuff?*

G2: They'll promote us and they won't do a site for us. We might get ... I think three pages. But it's not much. But we get links to our site.

*J: Is it important to have that link to your site? Like what if they provided you with more pages, or ... ?*

G2: ... And they actually help products on their site? They not into that. They don't want to have databases of ... products and do ordering ... They just want to promote. ...

*J: ... So there's ... an art section, and [G1]'s in there ... then a link to your site.*

G2: Exactly. And they'll promote us through that ... We may have one of [G1]'s images ... and we'll auction that or we'll have a special or [list] specials on the site. But that's probably the most it'll ever go to. ... They sound good. ... They get 3 million hits a month ... So I'm interested in that, although I actually checked up, and ... they're getting more like 700,000. They're embellishing, obviously. They recommend a 3% click-through rate. I'm not exactly sure how that works yet. And then there's a click-through cost per click ... So that's another \$1500. ... That's an extra 800 customers a month, compared to the 150 that we get. So we're very interested. And we're getting 1 or 2 orders a month. ... Okay, maybe 1%. So 1% of 600, 6 orders a month. ...



WWW.com sounds good. I'm interested mainly because the girl that contacted us was excited about our site. And she's excited about [G1]'s product.

*W: So they contacted you?*

G2: Yeah. ... they contacted us. ... She just contacted us out of the blue. ... But she's excited about the site. She's excited about your product. ...

G1: Yeah. She said they would really like to have something that they don't have ...

G2: Right, they would really like to have us. She has given us a deal ... and it sounds like we may be able to work with her ... and get a little extra exposure on their site. ... Sounds like they're doing a lot of traffic and it sounds like they know what they're doing. Been around for a little while... they're getting good ratings.

G1: Well, three years. ...

G2: I did a little research on them.

*J: Have you guys ever thought of ... you said you wanted to help people like [G2] to sell their work. Have you ever thought about ... combining all of your stuff and going out and trying to [find someone]?*

G1: We do already. Well, ... I have several other artists with me at [different places]. ... We don't make any money, but the tradeoff is that we all help each other and go out on inventory and all that ... So ... I don't want to retail like that. Not right now. ...

*J: So you wouldn't be interested in selling it as retail. What about if you combined information about your products and you went to someplace like a [host] ..., so that they would look at your package ...*

G1: ... That's how I got my friends into [these places] ... but it doesn't work unless it was my business, unless I was a rep for these people. I'm just not interested in doing it. ... We all do it by helping each other out. ... so when I get paid by [these places], ... I can tell right away from the invoice what was their share. And then they'll help me, maybe, pay for displays and whatever. It's more of just a friendship thing and working with artists. We were all doing a big show in August, the Made In Hawai'i Festival, which is a big show.

G2: That's how they found us.

G1: Oh yeah, right. ... there'll be, maybe four of us sharing three booths, a big set up. But everybody does his own art. ... It's another whole business.

G2: To market someone else.

G1: Yeah, cause you're a rep in some essence, a distributor for them. I'm just not interested in doing that. I don't want to deal with someone else's problems in that sense, like getting them to get their stuff done to deliver it, and all that stuff. It's not worth a 15% or whatever.

G2: But what you'd like to do is get [G8] on the web.

G1: ... Now, I would put ... [one of the fellow artists] that I help out [on the web], and eventually weaned away from me. But it's a way to help her and [a couple of other artists]. No, only in a friendship mode.

*W: Do you know any other artists, or businesses that might be interested in doing this study as well?*

G1: Sure. ... [Person H1]. ... She would be a good subject. ... [Person I1] ... He's got a website, and he links to us too. ... You can tell [I1] and [H1] that we recommended [them].

## **A.8 Company H**

Interview Notes, July 10, 2001

Attendees:

- Company H: Person H1
- UH: Joy Agustin(J), William Albritton (W)

Interview was recorded

Notes taken by William and Joy

### **A.8.1 Interview Summary**

Person H1 has been in business for about 8 years and on the Internet for about 1.5 years. Her most popular product is 8x10 prints. The prices range from \$15-\$18.75. She thinks that customers like her product because of its small size. Most of her customers are tourists.

H1 has her own web page and is featured on another web page with other artists. Her personal web page is used mainly to form a connection between her and her customers. She does not use it for commercial purposes. The web page that she is featured on has not been very successful. At most 5% of sales are through the Internet. She thinks that it's because the web page is concerned with selling original artwork, but most people are not willing to spend a fair amount of money on something they have not seen in person.

It takes H1 about 5 minutes to put together a print to sell if she has all the materials on hand. This includes placing the print, matte, and an insert into a plastic bag. If her business were to increase 5 times, she would probably need to hire part-time employees. She does not like loans. Instead, she would rather grow slowly and keep reinvesting her own money.

## A.8.2. Interview

### A.8.2.1 Product

*W: What's your most popular product?*

H1: 8 x 10 prints. ... I'm after a tourist market ... the volume is in that size because it's so affordable. Portable. It's easy to frame. ... Great for gifts. People can buy 6 of them at a time.

*W: ... How much do they sell for?*

H1: \$15 retail. That would be the low-end retail, and the high-end retail would be about \$18.75.

*W ... How long does it take to create this product? ...*

H1: ... It depends how you think of it.

*W: Right.*

H1: Because you have to first create the original art.

*W: Right.*

H1: And then there's the staging that goes to get it published. ... If you're just talking about the assembling and packaging ... Once you have all the parts, maybe 5 minutes ... to put it in a package and get it ready to sell. It's hard to describe otherwise because you're talking about an original that maybe took a week to make. And then there's the publishing process ...

*W: How long does the publishing process take?*

H1: ... Maybe two weeks ... but that's assuming you're going to print 500 or a thousand or 2 thousand or whatever it is because you're [printing at one time]. You're cost goes down ... the assembly part is pretty quick.

*W: You keep a large amount in stock?*

H1: ... probably 1,000 [prints] cause I have a lot of different images ... I have to have enough for each image. So when I get an order I can just [assemble] and ship. But I keep in stock thousands and thousands of prints because it's more cost effective to print a lot ... so I just stockpile those and reorder as needed. ... I don't keep as much of the other stuff. Maybe 5,000 pieces of cardboard for the backing ... I'm in constant flow on my inventory, but I think it's reasonable ... to say 1,000 pieces at any one time ready to sell or to wholesale.

*W: Where do y'all store it?*

H1: In my house ... and my studio. ... I'm a really small business. I can't afford to have a location on the side because my cost would be so much higher. And it would be less efficient. This way I'm right there. ... The bad part is that I'm not segregating my life from work. ...

*W: How does the company handle the customer payments?*

H1: I'm dealing with three types of situations. One of them is I'm a retailer. So I'm selling directly to tourists several times a week at [a hotel]. So I'm right there. I'm doing a demo. They buy my stuff. I'll sign it for them. I'm doing all the TLC to make them feel really good and hopefully they'll come back and buy more. I'm also doing wholesale sales to other companies. ... fairly good sized local companies. ... And the third type of sales are consignment sales, and those are to small companies that really can't afford the upfront inventory cost or they can't afford to pay me for originals. ... galleries just don't buy art outright no matter how good they are and how well known they are. They can't afford it because their inventory on the floor would be in the millions, and the insurance ... so they never do that. And I sell a lot of that type to, but that's not something that has anything to do with an Internet availability. Folks typically don't buy high-end art on the Internet.

*W: Right.*

H1: They want to see it first. ... So it's a good way to introduce ... yourself and your art to a potential customer. But it would never be real effective in the way of selling something on the high-end. Unless someone already knew and had seen the original, then they would know ... what they could expect. ... It's not 100% accurate when you're trying to portray art digitally. You don't have a sense of scale. You don't know what the framing is. There's all kinds of other variables that are addressed [in person]. ... And especially in some people's work, like mine, one of my drawing styles is incredibly detailed. And even when you take a thumbnail and expand it, it's still not a real good rendition of it. It gives a flavor. That's fine, but it's not real accurate in portraying the amount of detail.

### **A.8.2.2 Business Organization**

*J: Questions about your business in general. What's the structure of your organizations?*

H1: I'm a sole proprietor.

*J: So no partners ...?*

H1: No partners, no employees, no part-time employees. Once in a while a friend will give me a hand. ... I do everything myself. ... But I do subcontract for parts and pieces, like I don't cut my own mattes anymore. And someone else ... does the printing. Someone else does the printing of [the information that's included with a print]. But otherwise the shipping and the billing and all that I do that all myself. ... I'm real efficient, so I don't waste a lot of time.

*J: Who invested the money to start your business?*

H1: I did.

*J: Any loans or ...?*

H1: No. ... I started with a set amount of money and I just kept reinvesting ...

*J: Some of the people we've talked to say they don't like loans and they'd rather [use their own money].*

H1: ... Yeah, I don't want to have anything over my head. I pay my bills on time. ... I don't want anybody to have any reason to be disappointed or upset with me as a business person. ... I don't need the loan either, so why should I have one?

*J: That's good. Since your business was established, how has it changed?*

H1: Well, I'm growing 40% a year. So it's exponential almost. ... It started very modest and very small because I knew nothing about doing this. I came into the art business after having been an art teacher. I [knew nothing] about running a company or selling things to people. I had no clue. So I started very small and just kept learning as I went, by the seat of my pants kind of stuff because there's not a lot of people around ... at that time that were willing to share their story, their methods ... it just wasn't happening. There are only a few people now that I know kind of at my level. [Person G1]'s one of them. [Person I1]'s another one. And there are several other people on Maui who do the kind of retailing and wholesaling that we do. But there aren't a lot of people in the art business that go for the volume in products from ... \$2 to \$5,000.

Most people don't want to be bothered with this stuff. They want to be pure in their art. They don't want to be merchandising. ... The business has changed from being very small to growing it to its current rate of 40% a year. ... I think it's also a function of time that the more work you have out there, the better known you are. And if people start looking to you for other things, licensing agreements for your designs for their products, stuff like that. And I think once you get to a certain energy level ... then the momentum is just going to pull you forward. You don't have to work so hard to [meet your goals].

*J: Where would you like to see your business go in 5 years?*

H1: ... I don't know. ... I couldn't even predict where it was going to be when I started doing this in '93. [That's] 8 years now. I had no clue that it was going to be this big by this time.

*J: So you're just taking it one day at a time.*

H1: Yeah ... I have no idea where it might go in 5 years, except I imagine that I will ... need part-time employees because I wouldn't have time to do this assembly work. Maybe partnerships with other companies to do shipping services and things like that. ...

*J: Would you like more time to ... do your art work.*

H1: No, actually, I have plenty of time to do it. ... I'm not one of those people that needs perfect conditions in which to create art. When I'm at the hotels, if I'm not talking to somebody and trying to help them decide on a sale or whatever I'm working. And when I'm here at the gallery and it's slow, I'm working on my art. I'm not reading a book, I'm not surfing the web. I'm using that available time when I'm confined to a certain place to do something creative. ... I just don't have that mental block that people have. ... I'm just able to focus, so lucky me.

### **A.8.2.3 E-commerce**

*W: Do you have a computer or Internet access now?*

H1: Yes, I do. I've had a computer for a long time and I've had Internet access for [about] 3 years. I have a homepage with my art on it, but it's not a commercial site. It's just basically advertising so people can see images and then email back and forth if they're interested in something.

*W Right.*

H1: Maybe pricing, or more information. Things like that.

*W And that's been up for how long?*

H1: ... That's been up for about a year and a half.

*W: ... When you first put it up, did you get a lot of notice off of that?*

H1: It's a homepage, so it's not the same as if I were doing a commercial site. I self-advertise. ... Every time somebody buys something, they get my email address and my



homepage. ... I do get hits that way, but I'm not tracking them. It's basically just a convenience for the customer. ... We have a web site through the gallery that most of us are on. It was put together by a third party, I don't think it was the gallery members that did it. And to be honest, that's been a flaming failure because ... the reason I said earlier, people don't buy ... fine art on the web. So it's mostly just advertising. I'm sure the guy hasn't even recouped his development costs let alone his hosting.

*W: Really?*

H1: Yeah, it's real bad. It's been up for [about a year], and ... I think they sold a couple thousand dollars worth of things ... most of which were one sale to somebody's friend.

*W: Do you know who built that?*

H1: H2. It's a nice looking website. It's beautifully put together and they have a shipping theory that you might want to look at ... cause it's similar to what you're talking about. I'm assuming it is, except that it hasn't been real effective. We advertise for them by giving out the card [listing the IP address] with purchases, but I don't think [the page has done much].

*W: You think that pulls many customers into the store [who's] seen [the web page]?*

H1: I doubt it.

*W: Or they see it later and buy from it?*

H1: I don't think so. ... [I think] people look at it out of curiosity, but they don't buy from it. ... Honestly, I don't know if that could possibly bring them back because we have no way of tracking ... if they go there first and then come here.

*J: How long was the page up for again?*

H1: For almost a year now.

*W: From your own web page, do you think customers look at that and then come to the store?*

H1: No, ... my homepage would only lead them to my email address. It doesn't lead to the store. ... That's separate. ... First of all, I don't know if I'm going to be here forever. ... So I want them to connect with me as a person and not as a member of a group.

*W: Do you think you'd be interested in another web page?*

H1: Yeah, depends on the price structure. ... I'd be especially interested if it's similar to the kind of ... wholesale cost that I have now when I'm selling something like this.

*W: Do you know how it's handled, this other web page?*

H1: Yeah they were charging us a set fee per month plus 20% of the selling price.

*W: Of anything that was sold?*

H1: Right. Now they were not selling prints. They were only trying to sell original art ... and that's, I think, partly why it wasn't as effective as it could have been. If they'd been a little bit less ... high-brow and a little more practical they might have sold prints and at least kept it going ... [and] starting to cover their costs. But they weren't willing to do that. ... I guess they didn't want to be bothered with many sales. ...

*J: But those are the ones, right? When you sell a lot of them, they still add up to a lot of money. You'd think they'd give it a try ...*

H1: ... I don't know. I can't speak for their rational in doing business the way they chose to do it. Of course, we [also] had the choice to participate or not. But since they were doing all the digital photography, and they were paying all the costs to getting the site up and running. ...

*W: Anything you particularly like about the current set up?*

H1: It's beautiful. It's very easy to navigate ... I think it does a good job of showcasing individual artists. ... I feel it's a little slow to load. ... There's a lot of digital stuff there and those files can, depending on your system, can be a little slow. Other than that, I find no fault with it. I think it's a great website. It'd be a good model for somebody to use, I think.

*W: ... Do you know how long does it take a customer to get a product if they order it online?*

H1: I think they guarantee it will be within 2 weeks. But to me that's kind of slow, especially if they're ordering prints. Now if it's an original that's not unreasonable because you have to pack it a certain way. That's not necessarily something that you can just run to the post office and put it in a box and ship it. But if it were prints, there's no reason those couldn't go out within a week.

*W: So they have their own ... warehouse ...?*

H1: No. ... If they sell something, they let us know and give us the shipping address it's going to and then we pack and ship. And drop shipping for somebody that's operating a web site is really the way to go. That way they don't have [an] inventory. You just have to know that it went out to the proper customer, and that the person who's on the other end, the provider, is doing that what they're supposed to do. So there'd have to be ... checks and balances that it's being done correctly. But that's one of the beauties of doing it by website. You don't have inventory to maintain. ...

*W: You know what percentage of your business is done over the Internet?*

H1: Very little. ... I would say, maybe, 5%. ... That would be generous to say 5%.

*W: You wouldn't happen to know how many people visit the website?*

H1: No I don't. I don't have any way of knowing that.

*W: How do you ... communicate with each other then?*

H1: Email. ... Yeah, ...Somebody had bought a piece of art, looked at the back, tried to get to my website, couldn't get it on their server, and emailed me. ...

It's a good way to communicate. And especially where we're in, Hawai'i, and then we get a 6 hour time difference between [here and] the East Coast. I wouldn't want people calling me on the phone, and I wouldn't want to call them back either ... It's more expensive, and it's more difficult to get the timing right... They're working, I'm working.

#### A.8.2.4 Host

*J: ... Would you be interested in selling your goods on a different web site that sells something else other than art stuff*

H1: Yeah, ... I think the only kind of web site that's going to succeed is some big name company that people recognize instantly, like Hilo Hattie. The other ones are just too hard to find if you're just aimlessly wandering. There's too much on the web, and the only things that are going to survive are the ones that have brand recognition.

*W: That's kind of what our idea is too.*

H1: ... Yeah, it's got to come under the umbrella of a big guy and be real easy to find, otherwise you're just dead in the water. It's not that it's not effective in some way, but it's not going to be as effective as a retail venue for anything.

*J: ... Do you think ... these other websites ... might need a brick-and-mortar ... or just the name needs to be recognized*

H1: As far as I can tell ... a lot of them have gone bust if they didn't have some kind of cognate to the real world. Think of all the eToys ... maybe the only ones that will be okay are the banking companies like eTrader, eBay, or some of those, where it's not really necessary. ... Anything where there's a product involved, some physical thing, it would probably be a lot better if they did have a physical store. So I can see real easily [Company XX1] doing a website.

*J: ... They have a lot of stuff.*

*W: They don't have one?*

H1: I don't know. ... But a big company like that that's got international branding, they sure ought to have one. ... In my opinion, the web is better suited to nuts and bolts [kind of things].

*J: Going back to selling your paintings ... on a different website, would you be interested in wholesale, commission, or drop-ship?*

H1: I think drop-ship is the easiest. Wholesale is actually better for me because then I'm making the sale right away. I don't have to worry about anything else. ... I think it's ... more fair for both parties [if it's the] drop-ship method because then the person that is doing the web site and taking care of that part of it isn't also then maintaining inventory for ... hopefully thousands of products they'll have on there. It's too expensive. That's what messes up [Company XX2]. They have too many things in their warehouse rather than keeping a smaller stock ... cause who knows who's going to order what book. ... It depends too who you're dealing with on the drop-ship end. Some people may be very reliable and quick to respond and other people are not so good. ... I guess it's hard to say, but from my point of view, I would rather drop-ship. ... Then, too, I know what's selling.

*J: Do you see any advantages or disadvantages with selling your product on a bigger website?*

H1: I don't see any disadvantages. It's just another way to have a retail connection.

*J: Well, some people have said that there's a disadvantage because you lose control of how their products are marketed. Do you think that maybe [a disadvantage]?*

H1: No, I think any time your product goes into someone else's hands in a store situation you've already lost control because they're going to display it where they think it does best in the store. They make all kinds of decisions related to your product that you have no say in. So what? Go ahead, put it on your website. Just don't put me at the end.

*J: Do you see any barriers, current barriers if your sales increased about 5 times?*

H1: No barriers. I would just have to get more help. I couldn't keep doing it myself. I'd burn out.

*J: Maybe more places to store your inventory?*

H1: Well, I think I'd probably just try to be more efficient first so I'm not incurring extra cost.

### **A.8.2.5 Financial**

*J: And still no loans.*

H1: No. I'll never have a loan. I'll never do that. I don't need to do that. [I have enough] cash flow so I don't have to worry about it.

*W: So, no loans. Any other banking services you might be interested in?*

H1: Nope. I already have a merchant account so I accept charge cards when I'm doing business for myself. I'm able to do that for customers. Although they can't do it on my homepage, we can do it by email, which I don't like to do, or we can do by phone. So they can give me their charge card number over the phone and I can run it through my system and mail them back their receipt with whatever they ordered.

*J: So you have one of those terminals at home and you type in numbers.*

H1: Right.

*J: Do you see any problems if your sales increased and you're still punching in numbers in the terminal? Like maybe a thing that will do it over the Internet?*

H1: ... Maybe, I don't do that much of a volume of retail sales through charge cards. Most of my business is wholesaling. ... Say 80% of my business, maybe a little more than that, is wholesale. So I'm not the one that's bothered by doing that. At present it's not a concern. But if someone else is doing the Internet sales, then I don't have to worry about it anyway. ... All I'm doing is taking the order, keeping track of what's owed me from whatever system we're using, and doing the shipping.

### **A.8.2.6 Miscellaneous**

*W: Do you see yourself as an entrepreneur?*

H1: Yeah, I guess so, huh? Started from zero.

## **A.9 Company I**

Interview Notes, August 16, 2001

Attendees:

- Company I: Person I1
- UH: Joy Agustin (J), William Albritton (W)

Interview was recorded

Notes taken by William and Joy

### **A.9.1 Interview Summary**

Person I1 has been running his business for about 4 years. He is more interested in running a quality business than making money from it. He believes that location, customer service, and a quality product are the keys to his success. Although he does not have an online web page for his company, he is interested in creating one someday. Overall he does not seem to like the Internet, as it makes business interaction impersonal and seems to be bad for small businesses.

### **A.9.2 Interview**

#### **A.9.2.1 Product**

*Q: What is your most popular product?*

I1: Smoothies.

*Q: Why do customers like it?*

I1: Fresh fruit, no supplements, not too cold, doesn't taste like ice cream

*Q: What is its price?*

I1: About \$4.00.

*Q: How long does it take to create this product?*

I1: About 20 seconds.

*Q: How does the company handle customer payments?*

I1: Cash.

### **A.9.2.2 Business organization**

*Q: What is the structure of your organization?*

I1: Sole owner, no managers, everyone is at the same level, split up responsibilities, have meetings twice a week, and dinner once a month.

*Q: Who invested the money?*

I1: Myself.

*Q: How many workers?*

I1: 15.

*Q: Since your business was established, how has your business changed?*

I1: 4 years ago bought shop; since moved to corner shop – sales doubled.

*Q: Where would you like your business to be in 5 years?*

I1: Just want to survive – to prove that local businesses can survive!

### **A.9.2.3 Internet ability**

*Q: Do you have a computer/ Internet access?*

I1: Yes.

*Q: If so, who is your ISP? Are you happy with them?*

I1: CompuServe/American Online.



*Q: What you think about buying products online?*

I1: Feel positive.

*Q: Have you ever bought anything online?*

I1: I don't like to buy things online.

*Q: What were your impressions? Any problems?*

I1: The Internet is bad for small businesses - very impersonal.

#### **A.9.2.4 E-commerce**

*Q: Have you ever tried to sell your product on the Internet?*

I1: No.

*Q: Did you have your own website?*

I1: No.

#### **A.9.2.5 Host**

*Q: Would you be interested in selling your goods on a different website, which specializes in Hawaiian goods?*

I1: Yes – pineapples and papaya.

*Q: Would you be interested in using wholesale, commission, and/or drop-ship?*

I1: Commission.

*Q: What would be the advantages/disadvantages?*

I1: Fruit could rot, have parasites in it.

*Q: What are the current barriers to 5 times increase in sales?*

I1: Would need more employees.

*Q: What kind of resources would you need if sales suddenly increased?*

I1: More employees. Keep service and quality products.

#### **A.9.2.6 Financial Services**

*Q: What kind of financial services would you need if sales suddenly increased?*

I1: Not interested.

*Q: What kind of banking services would you be interested in?*

I1: Not interested.

*Q: Would you be interested in loans, credit card transactions, and/or business bank account?*

I1: Not interested.

#### **A.9.2.7 Miscellaneous questions**

*Q: Do you see yourself as an entrepreneur? What does that mean to you?*

I1: Don't fight for money – want to create a quality business.

## **A.10 Company J**

Interview Notes, August 16, 2001

Attendees:

- Company J: Person J1
- UH: Joy Agustin (J), William Albritton (W)

Interview was not recorded

Notes taken by William and Joy

### **A.10.1 Interview Summary**

Person J1 is a watercolor artist, who designed his own web page about two years ago. In addition, he also sells his works on three other “art gallery” web pages. Currently, about 5 percent of his sales are generated from the Internet.

### **A.10.2 Interview**

#### **A.10.2.1 Product**

*Q: What is your most popular product?*

A: Matted prints and originals.

*Q: Why do customers like it?*

A: Hawaiian themes, flowers.

*Q: What is its price?*

A: \$25 – matted prints, \$400 - \$4,000 – originals.

*Q: How long does it take to create this product?*

A: 30 hrs average.

*Q: What's the average amount in stock?*

A: 25 - 50 each.

*Q: Where is it stored?*

A: At the owner's studio.

*Q: How does the company handle customer payments?*

A: Cash, Visa.

#### **A.10.2.2 Business organization**

*Q: What is the structure of your organization?*

A: Sole proprietor.

*Q: Who invested the money?*

A: Himself – no loans, just bought paints and paper.

*Q: How many workers?*

A: Only wife and himself.

*Q: Are all workers contracted?*

A: Not applicable.

*Q: Since your business was established, how has your business changed?*

A: The trend is from matted to originals.

*Q: Where would you like your business to be in 5 years?*

A: Have a separate team to manage the Internet site.

### **A.10.2.3 Internet ability**

*Q: Do you have a computer/ Internet access?*

A: Yes.

*Q: If so, who is your ISP? Are you happy with them?*

A: Road Runner – very good.

*Q: What you think about buying products online?*

A: Great.

*Q: Have you ever bought anything online?*

A: Yes, things like air tickets and art supplies. Generally buys from the same company every time. Usually buys from big companies.

*Q: What were your impressions? Any problems?*

A: No problems.

### **A.10.2.4 E-commerce**

*Q: Have you ever tried to sell your product on the Internet?*

A: Yes.

*Q: If so, for how long? If not, why?*

A: For 2 years.

*Q: What were your initial impressions?*

A: Good.

*Q: Was it successful? Any problems?*

A: Small increase in product sales.

*Q: Would you do it again?*

A: Yes, would continue.

*Q: Did you have your own website?*

A: Yes.

*Q: Who's your web developer?*

A: Himself.

*Q: If vendor, how much time is spent making pages?*

A: 75 – 100 hours to set it up, but now only 2 hours a month for maintenance.

*Q: What are likes/dislikes about current setup?*

A: Takes 2 – 3 weeks to put images on the site. (Must take 35mm slide, put on CD-rom, and then put on computer.)

*Q: How long did it take for the product to reach the customer?*

A: 4 – 5 days.

*Q: What percentage of the business was done over the Internet?*

A: Around 5%.

*Q: How do you get people to visit your site?*

A: Search engines, business cards, brochures.

#### **A.10.2.5 Host**

*Q: Would you be interested in selling your goods on a different website, which specializes in Hawaiian goods?*

A: Yes – currently sell on 3 other sites, Internet gallery websites, artbroker.com.

*Q: Would you be interested in using wholesale, commission, and/or drop-ship?*

A: Wholesale and drop-ship.

*Q: What would be the advantages/disadvantages?*

A: If the web site only generates many small orders, then this will take more time while generating only a small increase in sales.

*Q: What are the current barriers to 5 times increase in sales?*

A: Need more workers.

*Q: What kind of resources would you need if sales suddenly increased?*

A: Would need more workers.

#### **A.10.2.6 Financial Services**

*Q: What kind of financial services would you need if sales suddenly increased?*

A: None.

*Q: What kind of banking services would you be interested in?*

A: Not interested.

*Q: Would you be interested in loans, credit card transactions, and/or business bank account?*

A: Already have credit card transactions.

#### **A.10.2.7 Miscellaneous questions**

*Q: Do you see yourself as an entrepreneur? What does that mean to you?*

A: 1<sup>st</sup> as an artist. 2<sup>nd</sup> as a small business owner.





## Glossary

**content management system (CMS)** – a database which organizes and provides access to all types of digital content – which includes files containing images, graphics, animation, sound, video, or text, otherwise known as digital assets. Its usually used to manage digital assets during the development of a digital resource, such as a web site or multi-media production [34].

**D-U-N-S Number** - a unique nine-digit identification sequence, which provides unique identifiers of single business entities, while linking corporate family structures together [28].

**metamarket** - a virtual trading space that connects customers with the providers of goods and services they need to fill their needs [33].

**metamediary** – a business that brings buyers and online merchants together and provides transactions services such as fianacial settlement and quality assurance [15].

**Vendor Relationship Management (VRM)** – a structured relationship between a group of small vendors with a common bond (such as Hawaiian products) and a larger company that markets and sells their products.

**virtual merchant** – a business that operates only over the web and offers either traditional or web-specific goods or services [15].

**virtual mall** – a site that hosts many online merchants [15].



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