INTERNET COMMERCE MANAGING FINANCIAL ON THE INTERNET

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ABSTRACT

Article explain how to business through internet which are web business clarification, strategy effect, how to make profit, and business electronic changes consist of criptografy, EDI, signature, digital notarisation, file, payment, and how to get succes in internet business.

Keywords: internet, commerce, financial

ABSTRAK

Artikel menjelaskan cara berbisnis melalui internet meliputi klarifkasi berbisinis di web, dampak strategi, cara mendapatkan uang, dan perubahan elektronik bisnis yang terdiri atas kriptografi, EDI, tanda tangan, notarisasi digital, arsip, pembayaran, serta cara mencapai keberhasilan berbisnis di internet.

Kata kunci: internet, perdagangan, keuangan

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INTRODUCTION

Commerce on The Web

The web is now ready for the next generation pf companies. Secure electronic payment system are the defining factors that will enable companies, large and small, to profit by selling online. Smart business people are keeping a close eye on their own digital storefronts. The internet is worldwide network consisting of connected regional network using a Common Protocol Suite, the internet Protocol Suite (IPS). System connected to the internet have access to huge range of service and information. Worldwide Wide Web (WWW) is a system for organizing information on the internet tools that allow people to navigate or browse the World wide Web simply by pointing and clicking.

The present and future facts that every kind of business you can imagine has entered the online world, supermarket stores, software companies, bookstore, bridal salons, toyshops, photography studios, music stores, publisher and many. And the truth is that most of them had no idea what they were getting into when they started : however, many companies, do have successful Web presence. Some properties of information that influence its potential commercial value include.

- 1. It is reusable. Unlike physical products, information can be sold without transferring ownership. As one information provide observed.
- 2. It can be used as an efficient and effective substitute for labor. These substitution effect are most visible in information intensive, complex and time dependent activities.
- 3. The time value of information also increase at the speed of business increases. In the 1990s, the traditional approach of measuring the money value of time.

In the same way, two powerful information management tools-the WWW and user friendly information "browser" – have transformed the internet from a tool for dedicated techniques to a power house of information and vast network of communication for everyone. Just the customer can sign up for automatic product update get customer support online, view demos and characteristics of product and service, download for free software and tap into additional resource. So, business are being very creative and using a variety of strategies to get noticed on the web.

With the web's flashy graphics, marketing and advertising are a natural fit. Companies with hot Web sites are capturing the business world's imagination. Most companies are advertising, but not selling, on the web – their emphasis is on telling not selling. As the elements of electronic commerce are folded into these marketing and advertising sites, selling will take precedence over telling. Inevitably, companies will want to see a return on their Web investment. Electronic commerce, therefore, will be the next big push.

Companies successful selling on the web today are marketing known commodities with consistent quality, such as CDs, magazines and brand – name computer equipment. Another thing are little big difficult, such as clothing, how will you can fit it? Is color on the screen the real color? But given the tremendous success of apparel catalog sales in recent years, one can only surmise that some of business will move to the web.

Companies are getting that web profits will eventually follow their web presence. Web advocates believe that online commerce is the next natural progression. Like a television makes its money through advertising. The Web is marketing channel too. Can the Web be far behind? When Internet commerce standards emerge as they did for the credit industry with Visa. MasterCard and American Express, presence will translate in to cash.

The effects for the Companies

We don't have to be rich and powerful to launch a business on the WWW. Because of that, the small companies can and are masquerading as big companies – the web enables a small company to project a professional, interesting, wide –reaching global image. The battle will go to those with the best overall strategy, not the biggest budgets.

Large companies have an advantage over smaller company because they can more easily generate publicity publicity for their sites thorough traditional media, such as by including their World Wide Web address in radio and television sports, sending out press releases, and adding an image of their web pages to printed ads and brochures. But they also have a disadvantage – expectation for them are high, especially if their traditional advertising has created a strong company image. Large companies need to invest substantially more many in setting up a highly sophisticated site to satisfy people's expectations.

The important for competition is powerful motivator. Because the Web is a new medium, creativity abounds and as new technology continue to emerge, Web pages will continue to involve. So, creative sites are drawling attention, the strategy is provide an interesting and excellent pages on the sites. Don't be a dried sites and people never see.

Web Site Business Strategies

Shopping on the web is still new. A customer's natural tendency is to resist anything new, especially when money is involved- it took more than the decade, for example, before people were comfortable with ATM machines. People will need to see an advantage when doing business with the company on the web.

Successful merchant understand this and offer discounts. Once a presence has been established, prices slowly rise. Even when offering discounts, many companies come out ahead. By cutting out the cost of distributing goods to retail, a factor that can account for 70 percent of the final cost of many goods, firms can offer lower prices while maintaining higher margins. These strategies are discussed later in the chapter and include the following : Just the Goods, Leveraged Information, Unique Service, Coupons, Email, Subscriptions, Contests, Special, Free Searches, Free Merchandise, Compilation of Strategies and Malls.

Making Money

Setting up a web site is not a guaranteed revenue generator by any stretch of the imagination. The web in many respects is still in its infancy: however, secure electronics payment system are believed to be the definitive to unleashing the business potential or this medium.

Some companies are making substantial profits from this technology and those companies are the usual suspects, software and hardware companies, computer publisher, Internet service providers and consultants. The people making the money today are the people with the expertise or equipment to establish a business on the web. For most business, the WWW is still a sideshow to their main business as they determine if long – term opportunity really exist on the Internet.

DISCUSSION

The Internet Commerce Revolution

The aims of this chapter is to introduced a new technology that are expanding the realm of electronic commerce to the Internet and small business. Each of the key components of commerce (contracts, signatures, notaries, payment system, and audit trails) are supported in new electronic commerce. Furthermore, these technologies are cheap and easy to use. Merchants should understand all of these technologies, but should pay particular attention to the payment system selected. Electronic payment system are envolving rapidly, so a set criteria was presented that any merchant can use to evaluated any payment system that may come along.

Different payment system currently available are discussed and a method of evaluating those competing system is presented. The other problem is known as the double – spending ; offline electronic cash stored on a PC is nothing more than a bunch of bits on your hard disk. Creating copies of electronic dollar bills is thus quite easy – no need to buy a high – priced color copier to copy cash here. By creating copies of electronics cash, anyone could start with a penny at eight on the morning and be a millionaire by noon. How are people prevented from copying electronic cash and spending it twice ? The answer to this question will play a key role in the success of offline electronics cash.

Public Key Cryptography

Cryptography is the science of scrambling message so that they cannot read. Ordinary Cryptography schemes rely on a high – tech secret – decoder ring., which, just like the matching secret – decoder rings buried in cereal boxes, is needed by both the sender and the reader in order to read message. The big breakthrough that mad advances in electronics commerce possible happened in the late seventies, when a group of research develop what is now known as public key cryptography.

Public key cryptography splits the decoder ring into two parts, called keys one key made public, the public key and other is carefully guarded the private key. The two keys always come in pairs. If the private key is ever compromised, the whole system breaks down.

Electronic Data Interchange

Electronic cash is just one application of advanced cryptography revolutionizing the field of electronic Data interchange (EDI). EDI specifies the format for a set of standard message. Business exchange EDI message with other businesses to order and pay for goods, check on parts availability, ship supplies, and more. EDI is essentially an electronic document – there are EDI purchase orders, EDI quotes, Edi authorizations, EDI verification of delivery And so on. A clearinghouse collets various EDI payment authorizations from customer and settles accounts once a day. Until recently, EDI message exchange between business were sent over leased lines not the internet.

EDI offers several advantages to business. Big business have been participating in these clearinghouse payment schemes for a number of years. While EDI does eliminate unnecessary paperwork for business, the real advantages of EDI are that it gives a business- increased capability to track orders and inventories electronically. Another important benefit of EDI is that companies control their money at all times, preventing banks from collecting interest on customer money as it "floats" in between accounts.

Digital Signatures

Digital Signature enable one partly to sign a document with a personal signature. The document receiver can look at digital signature of the sender and determine whether the document was altered since it was signed. Digital signature have several advantage over paper signatures, as flower, they can not be easily forget, they make document tampering obvious, they can be verified at a distance, they can be verified by someone who has never meet the signer and they are valid for copies, as well was for the original.

Digital Signature, combined with trusted timestamp services, enable nonrepudiable transaction (transaction that be denied after the fact). Digital signature prove the identity of a signer and trusted timestamp service guarantees the time of signing. Timestamp service are provide by digital notaries.

Digital Notarization

Digital notarization certifies internal document trails, making it possible for companies to use electronic forms for critical information. Providing a digital audit trail role of the digital notary. A digital notary system gives research a way to keep electronic histories of their projects by automatically notarizing their daily records. This process provide a solid document history of development projects. Also, digital notaries are useful for certifying financial records, contracts and research papers. The following companies and organizations will benefit by using digital notarization, law enforcement agencies, accounting firm, hospitals, banks, law firm and Wall Street.

Electronic Archiving

Electronic Archiving is the process of saving and maintaining historical records in electronic format. More is involved than just backing up tapes and storing them in safe. Any company interested in widespread use of digital notarization will also want to investigate electronic archiving in order to save notarization document.

Electronic Payment System

Electronic payment system (EPSs) comes in a variety of form. For our purpose, an EPS is any method of getting paid online. The perfect EPS fulfills the following requirements.

- 1. Cannot be lost, stolen, or forged;
- 2. has zero transaction cost;
- 3. is acceptable worldwide;
- 4. can be used for any size payment, from a penny to several billion dollars or more;
- 5. support credit and debit payment;
- 6. instantaneously transfers money between the customer and merchant.

Electronics Checks

Involved the sane level of security and general payment system set up as electronic credit cards. The difference is that instead of using an ID number, the bank issues you a whole set of numbers-similar to a checkbook without the checks also provides routine tracking of the checks that you have written. These electronic checks can bounce, just like an ordinary check.

Electronic Cash

It is a digital equivalent of dollars an cents. The technology necessary for cash transaction online is the same private keys so those customer can withdraw and deposit electronic cash. Electronic cash can be more convenient and flexible than traditional money, and in some forms offers the same level of anonymity as regular cash.

Privacy and Mechanics of Getting Paid

Electronic payment system vary in their answer to the following questions.

- 1. When does the merchant's account get credited ?
- 2. When does the customer's account get debited ?
- 3. Can the electronic cash be lost or stolen ?
- 4. Are purchased anonymous ?
- 5. Who is liable for forget or contested payment?

Merchants and customer must understand the difference between debit and credit systems, system work like a credit card \rightarrow put the money in and then spend it. Credit system work like a credit card \rightarrow spend first, pay letter. Credit systems use digital signatures and timestamps to replace the paper trail provided with credit card slips today.

Electronic payment systems can be devided into two categories : (1) identified EPSs : stamps each transaction with the identify of the customer, leaving a paper trail like an electronic credit card and (2) anonymous EPSs : work the same as currency consumer can use anonymous EPSs without identifying themselves. Each of the two EPS categories is further subdivided into offline an online.

Winning With Your Digital Storefront

People can sell products, services, advertising and information on the World Wide Web if they are smart about it and at the very last, they can promote our existing business. A repeat customer base is important to succeed in both the online and offline worlds. Repeat business depends on knowing our customer. Identifying customer and developing profiles is something that is just beginning to be explored on the web.

Ultimately, consumer attitudes toward the web will drive the success of digital storefronts. Anticipating the needs and wants of your likely clientele is the first in shaping customer attitudes. The following are strategies that we can use to locate our digital storefront in cyberspace:

1. Generate a Plan

Before starting a business, most people put together some sort of business plan approach taking your business to the web in the same thoughtful manner. If you are already have a business and are establishing your first web site or if you are already have and are establishing your first web site or if you are launching a new purely Web–based, you plan by asking yourself these important questions: why, what, who, how and when.

Use your answer to these questions to generate a list of priorities and establish a focus before your begin development of your digital storefront. Also, use you list of priorities to help you establish some sort-term and long-term goals and then keep them is perspective as you continue to develop your online business.

2. Use Content and More Content

The web is an information medium, if you don't have any worth while information to offer, you are totally exposed and no one will take you seriously. Make certain that only good; solid, accurate information gets the widespread exposure the web offers. Make your best information east to locate.

Every storefront should have the following information on the storefront :a header that clearly identifies who you are and what you sell, an e-mail address, copyright information as it applies to online content, contract information, mailing address ,a fax number and phone number.

3. Have Clear, Concise, and Direct Message

Although the important of providing content was just stressed, understand that quality does not mean quality. Textually dense sites are tiresome and they get in the way of doing business. Concentrate on capturing the essence of your business without overdoing the message. Avoid does information overload and get to the point. Within your clicks, you can select a product, read about it, make a purchase and be entertained in the process.

4. Put Your Best Face Forward

Organize your storefront so that all of your core options in view without the customer have to scroll to see more. If you have a number of links, present them in an organized manner,

grouping similar links together. This approach gives your page a clean rather than a cluttered look.

5. Make Storefront Interactive and E asy to Navigate

You want your digital store to be easy to use, fun to use and fast. Set up purposeful and meaningful links. Don't send customer an wild goose chases through your site unnecessarily. Utilize the interactive nature of the web to your advantage and remember that people browsing on the web are learners, not just passive receivers of information. Your storefront must have more to offer than just picture and text. Give your customers something to do. Make it as interactive as possible.

6. Entertain

People like to be entertained, they activity pursue a good time. If your online store is fun, customer will visit. Be carefully, however, that the entertaining qualities of your web site do not over shadow your message. Finding a balance between entertainment, content and a great product of service targeted at specific groups is the foundation of successful Web site.

7. Offer Giveaways as Incentives

Frequent content and giveaway draw crowds. Online coupons and store discounts can increase retail store traffic.

8. Offer Discounts

Selling at a discount will be a must for business venturing onto the web, at least in the early days. The point is *price* is always a great motivator.

9. Update Your Storefront Frequently

Change your display as much as money and time will allow; fortunately, may changes that can made on the web site do not necessary have to cost you anything extra.

10. Integrate Humor Into Your Storefront

Humor is an effective tool, but difficult to do well.

11. Project a Bigger than You are Professional Image

A few professional – looking graphics go a long way to boosting your image. Provide content that is well thought out and professionally presented. No one who meets you for the first time online needs to know how big your company actually is, so consider putting effort into looking than you really are. You can accomplish this by projecting an expert image.

12. Make Purchasing Easy

The easier you make the process of buying, the more likely it is that you will generate revenue. So make the process as quick and painless as possible.

13. Monitor Your Web activity

Programs are becoming available to track user activity at the web sites.

14. Known Your Competition

The Web makes the monitoring of your competition easier, so take advantage of it. Who has the good ideas ? Who is falling ? who is taking risk ? what's the next trend ? And so.

15. Make Certain your Storefront is Error

Prevent as many as you can having more than one-person review your web site. Test and retest before you go to market.

16. Draw a Crowd

Virtually nothing is known about how to effectively develop store fronts to maximize business.

17. Maximize Your Visibility

Many businesses are taking a multiple strategy approach to get people to their storefronts., because they know that visibility helps to build credibility. As the internet continues to grow ,it will become easier to get lost in the sea of information.

18. Adversity

Adversity are beginning to partner up with web provider or starting their own internal shops. They are also beginning to realize that advertising on the web requires smart target marketing that takes advantage of the web's unique ability to get immediate customer feedback.

Internet Service Providers

The web has brought back the old business of timesharing – renting space on someone else's computer. About 55 percent of the fortune 1000 companies are building their was sites internally, while the other 35 percent are turning to the internet service providers for the following reasons.

- 1. To became a hot site, you must take advantage of the latest technology, which is timeconsuming given the constant stream of update that must be tested and installed.
- 2. A full-time staff is often needed just to keep a site running. Because web technology is often used solely for external customers, the employee time investment in this specialized technology cannot be justified. Playing with the web technology is a distraction for most business, especially if it is not one of their core competencies.
- 3. Security is compelling concern for business . Specialist are required to truly isolated internal computer from the internet. Most companies simply do not want to take the risk that a hacker will penetrate their internal systems.
- 4. Real access security that ISPs can offer provide multistaged access control, monitoring of personal with access to equipment and 24 –hour per day guards.

- 5. Real physics security is taken care by ISPs floor rooms, power supplies, air conditioning, physical location, and network link.
- 6. Cost is a motivating force. Many internet service provider can provide a web site complete with graphics for less than the cost of the hardware and communication required to run your own site.
- 7. Many companies start with slow lines, such as 14.4 or 56 KB lines. ISPs often high-speed connectivity, multiple T1, and T3 connectivity to main internet hubs.
- 8. ISPs other headache free management control with their pre-exiting, proven policies for operation and security.
- 9. ISPs can provide automated backup and offsite storage.
- 10. System administrator if applicable do not need to learn obscure unix commands and TCP/IP setup parameter.
- 11. ISPs offer one-stop shopping no need to talk to Internic for a domain registration., Telco for lines, router vendor for firewalls and so on. The ISPs does it all your simply write the check.

Because everyone is rushing to the web, most providers have more business than they can handle. Many new providers are arriving on the scene the remarkable rate. Be selective. Make certain that the ISP you select can meet you individual business needs.

Agents

More and more sites are now being established on the web, covering nearly every conceivable topic. Manually searching through the maze is becoming a time consuming and expensive proposition. Agent are being develop to help speed these search. Agent based search tool will enable customer to search for the most competitive price or find general points of interest on the internet.

A software agent is a computer program that is a mobile autonomous enity traveling around cyberspace on your behalf. An intelligent agent can go off and do useful thing for you as your representative in the marketplace, such as buying and selling goods and service. Individuals, groups and institutions can own software agents and instruct them to access certain kinds of information and exchange information with other people and agents in cyberspace.

Agents take what customers what and automatically search the internet for matches. As a customers, you out a 50-200 question survey about yourself and buying habits. The results of the search will generate a home page on your browser. The agents search continually, even while you sleep. The agent doesn't run on your workstation, but rather than on an agent provider's machine. When you log on in the morning, the agent maybe posted 30 items retrieved from all over web. You can quickly look the result and determine which pertain to your life. The agent become highly personalized tool for you. Agent provider benefit also, because they know about you they can sell to adversity.

Future of Internet Commerce

The future for online is very bright indeed. Everyone is preparing. Retailer and bank across the country are rushing to establish system that will secure consumer trust. The government is trying to come up with standard for EPSs and is monitoring commercial traffoc over the internet. The current commercial online service continue to spend their shopping areas. Thousands

of copies of world wide web browsers are download daily. City – by-necessary to handle the sophisticated video, graphics, text, and sound commonly found on today's Web pages, but as is usually the case, the technology is a head of the infrastructure.

The most complex, high risk and potentially costly with internet experimentation is the security risk, and companies must consider this issue carefully from the outset. The last question are : is your company capitalizing on the potential benefits of electronic commerce ? Could action you should take prempt competitive actions by other?

CONCLUSION

The market moves on. Each of use, through our individual action, helps to shape the technology future. Consumerce will pick the winners and losers in the digital marketplace. The technology is still in its infancy. Changes that seem to be just around the corner may in fact be many years away. We believe that the adaption of the new technology will take considerable time. After all, many corporations are still running their business using twenty year – old technologies. Only the last few years has client server technology has been well well understood for many, many years. Still, once the majority of consumers have made up their minds on digital storefront, the rest of us will follow along.

Whether you call it evolution or revolution., change is coming. Communications technology will reach into all aspects of our society. The United Stated is leading the storefront will come. The only question is When ? Do you believe it will be happen because of the globally economic crisis? Then, the internet is an unsecured network. Connection a corporate network, no matter how secure hosts are the internet will place resource at risk. System with confidential data should not be connected. Maintaining security and integrity of information across inter organizational boundaries is always a challenge on the internet.

REFERENCES

- Applegate, L.M., F. W.McFarlan, and J.L McKenney. 1997. Corporate Information Systems Management: Text and Cases. 4th Edition. USA: Irwin/ McGraw-Hill.
- Dahl, Andrew and Leslie Lesnick.1996. Internet Commerce. Addition Wesley Publishing Company Inc.
- Milosevic, Z. and A. Bond. 1995. "Electronic Commerce in the Internet; What Is Still Missing?," URL: <u>http://info.isoc.org/HMP/PAPER/096?html?paper.html</u>.
- Wigand, Rolf T. and Robert 1Benjamin. 1997. "Electronic Commerce: Effects on Electronic Markets," URL: <u>http://www.use.edu/dept/annenberg/voll/issue3/wigand.html.</u>