INPUT
IT Intelligence Services

400 Frank W. Burr Blvd.
Teaneck, NJ 07666
Tel. (201) 801-0050
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October 24, 1996

Ms. Satoko Usui
Fujitsu Research Institute

Mr. Harou Horii
Fujitsu Research Institute
fax 011-81-3-5401-8439

Via E-Mail: satoko@fri.fujitsu.co.jp
NIFTY Serve KYL06007

Dear Mr. Horii and Ms. Usui:

Mr. Takeda from INPUT's office in Japan forwarded your questions about the ONSALE study. The questions are contained in your paper titled "The Survey About the Business Actual Status".

1. INPUT's study will cover all of the questions, with the following exception:

In point (2) of your questions, the first two bullets ask for:

- Contract items and items of agreement
- Various kinds of commission items, payment amounts and commission rates about product exhibition, sales, etc.

As previously stated in our proposal we expect to obtain information on the general levels of commission. We will attempt to find out as much as possible for the arrangements for two or more accounts, i.e., sellers with whom ONSALE has a contractual relationship. This would include fees (if any) for posting or exhibiting merchandise as well as general commissions on sales.

We should also be able to describe whether fee arrangements are simple or complex. Complex commission arrangements, which may or may not exist, could include some or all of the following:

- General volume incentives
- Volume incentives for particular time periods (e.g., holidays)
- Differential commissions on classes of merchandise
- Differential commissions on particular merchandise
- One-time or temporary incentives
- Different terms for different customers (e.g., large accounts or accounts with particularly attractive merchandise may receive better terms)
- Differential payment terms and conditions, depending on time and means of payment

If commission arrangements are complex, we will try to get as much information as possible on which categories exist. We would be quite surprised if we were also able to obtain accurate and precise commission arrangements for each category, however. This sort of information represents important "know-how" and is probably as important as patents or other types of technical trade secrets to ONSALE.

2. Concerning Patent (and Copyright) Protections

Both patent and copyright information is publicly filed and publicly accessible. For that reason, if ONSALE has tried to obtain patient or copyright protection, this information will be available. INPUT can obtain the information (from ONSALE or from public records) and freely pass it on to FRI (and FRI's client).

However, INPUT believes it is also likely that ONSALE will protect technical advantages by declaring them trade secrets and/or by means of non-disclosure agreements with its business partners. In these cases, ONSALE will be extremely unlikely to disclose to INPUT (or anyone else) -- without proper legal protection -- information which has been declared a trade secret. One reason is that, by law, if a company makes trade secret information selectively available publicly, the information is no longer legally protected.

3. Possible Additional Research

After INPUT has interviewed ONSALE, it may appear that ONSALE does have multiple, complex contractual relationships. If this is the case, then INPUT could interview several of ONSALE's major accounts. Commission information will be less important to these other firms and more details may be available.

INPUT does not believe that these other interviews should be part of the current proposal -- there are too many variables involved. The most important variable is that INPUT hopes to collect all the information that FRI needs from ONSALE in the research covered in our current proposal!

If I can be of further assistance, please contact myself or Mr. Takeda.

Sincerely,

Thomas O'Flaherty
Vice President

cc. Kosei Takeda, INPUT KK (E-Mail and fax)

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IT Intelligence Services

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Teaneck, NJ 07666
Tel. (201) 801-0050
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FAX TRANSMITTAL FORM

Date: Oct 24

Confidential: Y / N
Urgent: [✓ Y] / N

To: Name: Wilson

Tel./Location:

Co.:

Page: 1 of 9

Fax No:

File: Chron
Contact
Other:

From: Name: Tom

Subject: ONSALE Proposal

- Takeda tells me we have an 80% chance. I have built up this one & an associated one to ≈ $32K (But there is 1 competitor left)

- Proposal attached - which reflects our conversation

- They sent along ~~a~~ 2 pages of questions. I only see a problem with the * items

- Attached is my draft response - Hopefully, it makes it clear why no one could get the info

I wanted to get your comments because you'd be the man on the spot (so to speak)

(If I'm being too cautious, I'll be happy to promise more)

AN ANALYSIS OF *ONSALE* AND THE DISTRIBUTION OF USED/REFURBISHED PCs IN THE U.S.

I. CONTENT OF THIS PROPOSAL

This proposal is in response to "Category A" in Fujitsu Research Institute's (FRI's) Request for Quotation dated 15 October 1996. FRI's Request for Quotation requested a separate quote for points 8 and 9 in the Request.

INPUT believes that point 6 (on the used/refurbished PC market) should also be quoted separately for the reasons given in the next section.

II. SCOPE

In general INPUT accepts the scope of the study as described in the Request for Quotation. INPUT's recommended modifications are contained in the description of each option below.

Option 1: Operation of ONSALE (Points 1-5, 7 of Request)

INPUT sees point 1 as a subset of point 7. INPUT will describe the barriers to entry faced by ONSALE's competitors. Barriers may include some or all of the following (as well as other barriers not specified here).

- Patents and copyrights
- Trade secrets
- Proprietary knowledge -- covering software and/or market factors -- that is not technically a trade secret
- Long term agreements with suppliers of goods
- Market position
- Other licensing agreements

INPUT believes there are two additional factors which FRI and FRI's customers should take into account when examining this market:

- In what, if any, ways does ONSALE deal differently with U.S. and non-U.S. suppliers or customers?

- Does ONSALE now have licensees in non-U.S. markets? What is ONSALE's general position concerning such licenses?

Note: Covering these two above issues will have no effect on delivery time and a very small impact on cost.

INPUT will be able to obtain information on the general levels of commissions. However, commissions are a complex and sensitive subject. ONSALE may have special arrangements with particular suppliers that INPUT will be unable to obtain information about.

INPUT will also supply FRI with brochures and other information not available on the Internet.

Option 2: Operation of ONSALE and marketing and promotion of ONSALE (Points 1 - 5, 7-9 of the Request)

All of the comments made concerning Option 1 apply to this option as well.

INPUT will describe both the initial as well as ongoing marketing efforts by ONSALE -- those aimed at suppliers and those aimed at customers. If ONSALE identifies specific marketing efforts as being very successful, INPUT will report this information.

Note - Someone else would do this

Option 3: Distribution of used/refurbished PCs in the U.S. (Point 6 of the Request)

The distribution question is a much broader issue than an analysis of ONSALE. The analysis of distribution can be used to understand ONSALE's activities within the larger market context.

INPUT's report will cover the following:

- The overall size and growth of the used/refurbished PC market in the U.S.
- Principal channels of distribution
- The attractions and limitation of used/refurbished computers to customers
- The advantages and disadvantages of each distribution channel

Options 1/2 look at a single company. Option 3 covers many more companies and channels. INPUT's preliminary analysis of the issues involved in distribution of used/refurbished PCs has identified the following channels that will need to be included in the analysis:

- Manufacturers' websites (e.g., IBM, NEC, Gateway)
- Other on-line sources (e.g., PC Hardware Forum, Computer Database Plus)
- Manufacturers' 800-numbers (e.g., Compaq, Gateway, Micron)

- Computer retail stores
    - National chains
    - Independent stores
- Computer rental services
- Computer repair businesses
    - National chains
    - Independent stores
- Sales by individuals

In order to obtain a good understanding of the sales dynamics in the used/refurbished PC market INPUT will interview a representative sample of those in different parts of this channel.

III. Methodology

Options 1/2

INPUT will conduct one or more face-to-face interviews with principals of ONSALE. With the exception of commission information (already noted in the "Scope" section) INPUT believes that the information requested will be made available to INPUT. A new business like ONSALE views INPUT as an important means of becoming better known and respected among both suppliers and customers. INPUT may check ONSALE's information with other sources if ONSALE's statements or claims appear to be too optimistic. These interviews will be greatly facilitated by the fact that ONSALE's office is in the same office complex as INPUT's California headquarters.

Option 3

INPUT will rely primarily on interviews with representatives of major players involved in the sale of used/refurbished PCs as well as INPT's own knowledge of distribution channels. (Please see the categories identified in the "Scope" section for Option 3.) In preparing this proposal, INPUT reviewed secondary data on this topic and found that it did not address many of the issues that will be important to FRI and FRI's customer. The need for multiple interviews with many companies is the reason for the time and price quoted.

IV. SCHEDULE AND FEES

The chart below describes the delivery schedule and the fee for each option.

OPTION	DELIVERY DATE	FEE (a)
1	21 days after authorization	$6,500
2	21 days after authorization	$7,500
3	21 days after authorization	$10,000

(a) Fees include expenses.

This proposal will remain valid for thirty days, unless extended in writing.

V. AUTHORIZATION

To authorize the project as specified, please sign and return one copy of this proposal, along with the initial fee. Upon acceptance by INPUT, a countersigned copy of the proposal will be returned to FUJITSU RESEARCH INSTITUTE (FRI).

AUTHORIZED BY FRI:	ACCEPTED BY: INPUT
______________________ Name	______________________ Name
______________________ Title	______________________ Title
______________________ Date	______________________ Date

The Survey about the Business Actual Status

(1)Patents or industrial properties of O company or under application for patent about the surveying business

- ✓ Number of copies and the contents(if possible)
- O company's way of thinking about patents and industrial properties if none

(2)Contract contents, or terms and conditions of business with O company and other distributors (Under this item the survey is required about two cases; sales committment to O company and direct contract with the distributors.)

不
- Contract items and items of agreement
- Various kinds of commision items, payment amount and commision rates about product exhibition, sales, etc.
- Way of deciding selling prices at the beginning of the sales(the lowest prices)
- Way of deciding the range of price raises at auction, and the actual implementation

(3)Way of settlement with O company and the distributors

- ✓ Settlement flowchart at the completion time of sales contract
- ✓ Timing of billing
- ✓ Settlement flowchart about the settlement of commissions and others at the failure in sales contract, if any
- ✓ Solution routine in case of the occurrence of such problems as unattended buyers and no payment

(4)Way of settlement with the distributors and the buyers

- ✓ Means of settlement and its flowchart
- ✓ Reasons, if any specific credit company

(5)Way of product delivery to the buyers after sales contract

- ✓ Flowchart of product distribution
- ✓ Reasons, if any specific transportation company specified by O company
- ✓ Way of special contact among the transportation companies, O company and the distibutors, if any, and its rough explanation

prob ✓ (6)Coping with the obstruction against this business of O company

- Such ways as legal procedures and pre-notices
- ✓ Technological security systems, if any, and its purposes (Against what is the security and what is the most alerting condition?)

(7)O company's differentiation strategy

- Differentiation against new entrants
- Support fromand partnership with computer makers

(8)Way of pioneering new distributors or exhibitors

- Selection criteria and pushing strategy from O company
- Judgment criteria about the distributors(region, conditions of their exhibits, companies' characteristics, etc.)
- Prtnership and tie-up with computer makers and vendors

(8)Sales support strategy

- Way of advertisement and propaganda at the set-up time of the auction business
- Actual results of effective sales support policies(the secrets of the surprising attractiveness of O company' Web site)

U

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FUJITSU

シニアコンサルタント
堀 井 晴 雄
HORII Haruo

株式会社富士通システム総研

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Recycled Paper

HARUO HORII

SENIOR CONSULTANT

FUJITSU RESEARCH INSTITUTE FOR ADVANCED INFORMATION SYSTEMS & ECONOMICS

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16-1, KAIGAN 1-CHOME, MINATO-KU, TOKYO 105, JAPAN
TEL. 81(3)5401-8396 FAX: 81(3)5401-8439

① Does ONSALE have some patents relating to its Internet auction? If so, what patents does it have?

offer prop
offer here

② Regarding the contract between ONSALE and the merchant:
- What are the contract matters between ONSALE and the merchant?
- What kind of commission is paid to ONSALE? How much is paid? → complex, may not get all detail
- Who decides the minimum bid and bid increment, ONSALE or the merchant? How are they decided?

③ How does the settlement process flow ? When is the settlement done between ONSALE and the merchant? When is the settlement done between the bidder and merchant?

2

④ Why does ONSALE restrict the choice of carriers to Fedex or UPS exclusively? Is there some reason relating to the settlement?
⑤ How does ONSALE protect their auction from ill-will bidders? Are there some legal protections?
⑥ How are used or refurbished PCs are distributed in the U.S.A? → genl
⑦ How does ONSALE set up barriers to new coming auctioneer?
1/2
⑧ How does ONSALE seek new merchants?
⑨ What kind of promotion did ONSALE do when they began operating the auction? Why so many people are attracted to the ONSALE Web site?

Category B : About the Internet exposition market:

10K

①Internet exposition market size
- Current market size and expected market size for the next 3 years.
- How does Internet expositioner take benefit ?

3 wks

② How does Internet expositioner relate real world exposition?
③ Which services does it provide? Is there any service menu ?
④ Which company is leading this market? How much revenue does its get? How much share do they have ?

Please provide us with a separate quotation with the cost of this research and term for following items by 10/22.
① Category A: ①to⑦
② Category A: ①to⑨
③ Category B

5 x 1.6 = 8.0
x 1.2
10k

Yours sincerely,

Haruo Horii

―――――――――レター終了―――――――――――
―
碓井 聡子 (Usui Satoko)
(株)富士通システム総研 コンサルティング事業部
Tel : 03-5401-8396 (ex. 7076-4943) 竹芝サウスタワー
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―

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FAX TRANSMITTAL FORM

Date: 10/24/96

Confidential: Y / N

To: Name: Tom

Very Urgent: [✓ Y] / N

Tel./Location:

Co.:

Page: 1 of 6

Fax No:

File: Chron

Contact

Other:

From: Name: Kosei Takeda

Subject: ① FRI ② FRI proposal 4 pages

not so urgent, but

urgent

I've got this

ADM 341/10 8/93

To: tom_oflaherty@input.com
From: Kosei Takeda <kk-kosei@po.iijnet.or.jp>
Subject: FRI custom proposal(ONSAL)
Cc:
Bcc:
X-Attachments:

Tom

After the discussin in their division, two companies were survived among 4 or 5 research companies. INPUT and one strong company (they do not tell me now). Mr. Horii and Ms Usui seem to like INPUT and recommend us in their division. I think it is 80 % probability now. But a few staffs of them are not satisfied with our proposal, and recommend competitor. So they want to confirm us being able to do research and get information as attached.

They will make decision on Friday or next Monday .
Please send E-mail to Mr. Horii and Ms. Usui that we can cover completely. If there are some difficult parts, it better to say honest. They may accept it. I need your reply on 25th (Japan)

They belong to differen division from Asai and Sato, but Asai recommended us to use for research.

Kosei

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コンサルティング事業部

FUJITSU

シニアコンサルタント

堀　井　晴　雄

HORII　Haruo

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FRI 10-21 (only)

INPUT
IT Intelligence Services

10/22/96

Done
g.e.

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Fax (201) 801-0441

October 22, 1996

Ms. Satoko Usui
Fujitsu Research Institute

Via E-Mail: satoko@fri.fujitsu.co.jp + INPUT KK

Dear Ms. Usui:

Mr. Takeda of INPUT's Japanese office sent me your questions on our proposal, "An Analysis of ONSALE and the Distribution of Used/Refurbished PCs in the U.S." I am addressing the questions in this letter and am also updating the proposal. A copy of the updated proposal is being transmitted with this letter.

I will discuss the coverage of Option 3 first and then describe the Methodology for all the options.

Option 3 Coverage

As mentioned in the proposal, Option 3 is actually a much broader topic than Options 1/2. Options 1/2 look at a single company. Option 3 covers many more companies and channels. INPUT's preliminary analysis of the issues involved in distribution of used/refurbished PCs has identified the following areas that will need to be analyzed:

- Manufacturers' websites (e.g., IBM, NEC, Gateway)
- Other on-line sources (e.g., PC Hardware Forum, Computer Database Plus)
- Manufacturers' 800-numbers (e.g., Compaq, Gateway, Micron)
- Computer retail stores
    - National chains
    - Independent stores
- Computer rental services

- Computer repair businesses
    - National chains
    - Independent stores
- Sales by individuals

In order to obtain a good understanding of the sales dynamics in the used/refurbished PC market INPUT will interview a representative sample of those in this channel.

Methodology

Options 1/2

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If you have further questions about either of INPUT's proposals, please do not hesitate to contact me.

Sincerely,

Thomas O'Flaherty
Vice President

cc. Kosei Takeda, INPUT KK

PROPOSAL

AN ANALYSIS OF *ONSALE* AND THE DISTRIBUTION OF USED/REFURBISHED PCs IN THE U.S.

Submitted to

Fujitsu Research Institute

October 22, 1996

Prepared by

INPUT

Atrium at Glenpointe
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201-801-0050
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October 22, 1996

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Fujitsu Research Institute

Via E-Mail: satoko@fri.fujitsu.co.jp

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If you have further questions about either of INPUT's proposals, please do not hesitate to contact me.

Sincerely,

Thomas O'Flaherty
Vice President

cc. Kosei Takeda, INPUT KK

PROPOSAL

AN ANALYSIS OF THE INTERNET EXPOSITION MARKET

Submitted to

Fujitsu Research Institute

October 21, 1996

Prepared by

INPUT

Atrium at Glenpointe
400 Frank W. Burr Boulevard
Teaneck, NJ 07666

201-801-0050
Fax: 201-801-0441

AN ANALYSIS OF THE INTERNET EXPOSITION MARKET

I. CONTENT OF THIS PROPOSAL

This proposal is in response to "Category B" in Fujitsu Research Institute's (FRI's) Request for Quotation dated 15 October 1996.

II. SCOPE

The bulleted items below describe the the scope of the study. The sections that are not underlined are the points contained in FRI's Request for Quotation. There are several areas not mentioned in FRI's Request which INPUT believes should also be addressed. These are underlined below.

- What is the size of the Internet exposition market worldwide for 1996, 1997, 1998 and 1999?
    - In the U.S.?
    - In the rest of the world?
- Will *intranets* continue to be covered within Internet expositions? If no, what will be the expected size of each separate market, that is, Internet and intranet expositions, over the next three years?
- What services are offered by exposition organizers/managers? How are services charged for?
- What benefits do exhibitors obtain from being part of an Internet exposition? Are there expected to be different kinds of benefits in the future?
- Which is the leading Internet exposition organizer/manager? What is its revenue or market share? Which are the three leading Internet exposition organizers/managers? What is their revenue or market share? Do the leading Internet exposition organizers/managers take essentially the same, or different, approaches to this market? If different, does one approach seem better than another?

INPUT will offer FRI two options:

- Option 1: The scope as specified in the Request
- Option 2: The scope as specified in the Request, plus INPUT's recommended additions

III. SCHEDULE AND FEES

The chart below describes the delivery schedule and the fee for each option.

OPTION	DELIVERY DATE	FEE (a)
1	14 days after authorization	$10,000
2	21 days after authorization	$14,000

(a) Fees include expenses.

This proposal will remain valid for thirty days, unless extended in writing.

IV. AUTHORIZATION

To authorize the project as specified, please sign and return one copy of this proposal, along with the initial fee. Upon acceptance by INPUT, a countersigned copy of the proposal will be returned to FUJITSU RESEARCH INSTITUTE (FRI).

AUTHORIZED BY FRI:	ACCEPTED BY: INPUT
______________________ Name	______________________ Name
______________________ Title	______________________ Title
______________________ Date	______________________ Date

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FAX TRANSMITTAL FORM

Date: Oct 21

Confidential: Y / N
Urgent: [✓ Y] / N

To: Name: INPUT KK
Tel./Location:
Co.:
Fax No:

Page: 1 of 8

File: Chron
Contact
Other:

From: Name: Tom OFlaherty
Subject: 2 Proposals for FRI

- These are in reply to FRI request of Oct 15
- Price includes KK commission
- Proposals have also been E-Mailed to you (FRI has not been sent a copy)
- I used 2 proposals to reduce confusion over so many options

ADM 341/05 8/93

FAX

①

To: Tom
Fr.: Kosei
Re: FRI

Thank you for FRI's proposal. I had the meeting with them today. They wanted to know as follows:

① Methodology (in case of Onsale)
"Onsale" is very small company has only 6 or 7 employees. and set up last year, so if we get information about "Onsale", we should do indepth interview with "Onsale". To get information mainly from the face to face interview not from secondary data are necessary, ⊕ other methodology please write in the proposal

- Regarding Option 3

They want to know the reason why "point 6" needs much more time and cost ~~more~~ than other points.

(point 1-5, 7-9) < (point 6)

They ~~think~~ seem [ ] are more difficult to get information than "point 6".

How do you think?

please explain to them

I want you to send E-mail to Ms. Usui and me.

③

methodology

satoko usui, 17:38 96/10/15 +09, Request for Quotation

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PCWEEK

PC Week July 15, 1996 v13 n28 pA1(2)

A different kind of PC company.

(General Motors Saturn Corporation could be a model for computer industry) (includes related article on ideal management team)(PC Week Inside) (Industry Trend or Event)

Author

Silverthorne, Sean

Abstract

The PC industry has become stagnant despite rapid advances in technology; first-time purchases have slowed to a trickle, and most sales are generated by users replacing existing systems. Many experts believe that computer firms will have to start from scratch to reach new markets; the best model is GM's Saturn Corp, a subsidiary formed by the automaker to build an entirely new business model. Such a 'New Computer Co' would offer aggressive leasing options, financing, and used computers. Only 40 percent of US households can afford a new computer; leasing would make PCs affordable and would allow 'trade ups' to new technology. Advertising should be re-invented to convince people of a computer's usefulness. 'Relationship selling,' which empahsizies no-pressure sales and a purchase and ownership 'experience,' is a strategy successfully practiced by Saturn which could be useful in the computer business. Some argue that PC companies should stand behind the entire product as car companies do.

Full Text

Face it: 70 percent of U.S. households don't own a PC and won't buy one. To reach them is going to take some new thinking--just like GM's offshoot taught the car industry a thing or two

Over the past 12 months, the computer industry has come to a startling realization: The consumer PC business is a replacement market. First-time purchases have slowed to a trickle. So how does the industry reach the 70 percent of households that are still computer-free? Start from scratch. "If we are going to go forward through this ceiling, we need a rethinking of the business," says Rajendra Sisodia, associate professor of marketing at George Mason University, in Fairfax, Va.

And he gets a rousing "Right on!" from about 30 others we interviewed from inside the industry and out--including hardware companies, game companies, business professors, consultants and analysts. The question is simple: What can the industry do to reach new customers? The answers, when you stitch them together, show that the best solution is to break with the past, not build upon it. What the industry really has to do is build not just a new computer, but a new kind of computer company.

The best model for New Computer Co. is not another technology company. That's too much same-old, same-old. Nope, the model here is a car maker, Saturn Corp.--the subsidiary General Motors formed a decade ago to break out of its Old-Think funk. Why Saturn? Because our new company must break with tradition just as Saturn stood traditional car-selling techniques on their bumpers.

New Computer Co. (based in New Paradigm, Ark., about 10 miles south of Hope) offers such outrageous come-ons as trade-ins, rebates and attractive financing. There are aggressive leasing options, too. Used computers are sold for profit, not scrap. The company slices the market business-card-thin by designing machines for women, seniors, teen-agers and university students. It sells them like Orrick sells vacuums or Amway sells home-care products--door-by-door, on infomercials. In short, any way the consumer wants to

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buy. Like Saturn, the New Computer Co. establishes itself as a class operation, so only highly trained, motivated salespeople work there. Like Saturn, this new company is selling an experience, not just a product.

Already, bits and pieces of the New Computer Co. are being tried out. Acer America and Logitech run "factory outlet" stores, where used, refurbished and discontinued equipment is sold at discounts starting at 20 percent. Compaq is segmenting the consumer market with kids' offerings, in tandem with toy maker Hasbro. And Sony Corp.'s first consumer PCs are distinctly styled, backed with state-of-the-art support and come in a case designed with stereo or video equipment in mind. The key will be stitching it all together.

Because we're talking about a consumer business, the most important building blocks for our dream PC company are in selling and marketing. One of the great inhibitors to PCs becoming mass-market items is the $1,500 to $3,000 price. At that price, only 40 percent of U.S. households can afford one, according to Forrester Research. So the New Computer Co. helps customers buy its products. It offers low-rate financing. It creates its own financing arm, like GMAC, which is a profit center for General Motors. Another idea: leasing. In Europe, many people lease major appliances. With a lease, you can trade up your computer every few years.

Sisodia, the George Mason professor, has another idea for combating fear of obsolescence. "PC makers have to take the risk out of buying," he says. His idea? Just as software makers provide cheap upgrade prices, so, too, should PC makers upgrade entire systems for a good price break.

To generate widespread acceptance and familiarity with PCs, the New Computer Co. is at the forefront of creating community walk-in computing and training centers. It lobbies employers and school districts to create subsidies for employees and students to purchase computers. Getting more PCs into schools will increase their penetration into the general population, says Gordon Eubanks, CEO of Symantec Corp., in Cupertino, Calif. "The Industry has to be sure that there Is a PC in every classroom."

Tech advertising needs a new twist. For all the industry's talk about moving away from speeds-and-feeds advertising, that's still the prevalent theme, even in ads run in nontechie venues. In a recent Dataquest survey, respondents said the No. 1 reason they haven't bought a PC is because they don't need one. So New Computer Co.'s marketers emphasize not how fast the computer is, but what it can do for you.

How computers are sold at the retail level needs an overhaul, too--at least if you want to reach new consumers. A few companies, including Apple, IBM and CompuAdd, experimented with selling through their own branded stores. Most flopped--too much channel conflict. But the idea is worth exploring again. Saturn considers its retail stores the sacred place where loyalty is bred between customer and company, says spokesman Greg Martin. When a customer takes possession of a car, employees gather round and applaud. Buyers are even invited to barbecues. "We create enthusiasm from the moment the customer steps on the lot, and that creates intense loyalty for the product and the company," says Martin.

Saturn has become a master at "relationship selling"--that is, creating a psychological bond between the salesperson and buyer. It starts with the no-pressure approach. The customer initiates the first contact with a salesperson and doesn't get hounded into closing the deal. Buying a computer should be an equally pain-free experience. Such relationship selling is preferred, in particular, by women and seniors, says Sisodla. "They want somebody there who personifies the relationship and holds their hand."

Don't want to open a store? Then go door-to-door, suggests high-tech marketing guru Geoff Moore of The Chasm Group, in Palo Alto, Calif. "The idea here," he says, "is some form of at-home sales experience, delivered by someone who is not a geek--indeed, someone, ideally, who is considered a trusted

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acquaintance." The advantage of home selling? Late technology adopters feel more comfortable on their home turf. Toyota and other Japanese car manufacturers have experimented with varying degrees of success with home selling in Japan.

Home selling could create another benefit by extending the selling season. Today, most companies sell most of their consumer PCs at Christmas time, notes analyst Barry Bosak of Smith Barney & Co., in New York. That leads to massive inventory and forecasting problems. The New Computer Co. attempts to spread the business throughout the year.

Another vital move: Hammer prices down. And selling used PCs may be the place to start. Last year, consumers purchased 2.4 million of them, up 50 percent from the previous year, according to Computer Intelligence. Best Buy is already selling "remanufactured" Packard Bell machines.

Acer America's Factory Outlet, in San Jose, Calif., offers used and refurbished Acer equipment at a deep discount. Here, buyers can snap up a 75MHz Pentium system for about $600, says Rob Olstad, director of product marketing for consumer systems. But don't think of a factory outlet as just another way to shake off some unwanted inventory. Sure, Logitech's outlet store does up to six-figure revenue a month, and a once-a-month sidewalk sale can bring in $40,000. But just as important at these outlets is the sale of accoutrements such as company-labeled sweaters, hats and coffee mugs. Those now account for almost half of outlet sales at Logitech, and they create tremendous brand reinforcement, says Bill Wrightson, sales director of major retail accounts.

The product itself needs a revolution, too, and there is no shortage of ideas about how to do so, starting with Oracle's Network Computer. Moore thinks there is much more room for segmenting: Build cheap devices with "application-specific, bullet-proof" technology, such as a "Rainy Day Project" computer for kids, "The Homework Center" for older kids, and a "Home Management" tool for Mom and Dad. In other words, customize as much by hardware as software.

In fact, the best way to sell computer gear may be to get away from the PC-centric model altogether, says Jon Richmond, president of Fox Interactive, in Los Angeles. "You shouldn't buy a PC. You should buy a computer network for the home," he says. Instead of selling a PC for $3,000, sell a network for the home for $2,000. The system would have monitors throughout the house and control everything from air conditioning to security to lawn watering--plus the more traditional computer stuff like money management, games and education. "And don't make it so ugly," Richmond says.

Ugly is one area where traditional computer companies are making advances. Acer's stylish and colorful Aspire line showed last year that good looks are appreciated by consumers. Sony's new computers are equally eye-catching, but those models still look like PCs. This fall, a new IBM Aptiva code-named Stealth, will be dark and sleek, designed more like a stereo than a PC.

Unfortunately, tech support for computer products is still pretty ugly. It's expensive and hard to find. "Can you imagine if you just bought a new car, then had to stand in line for an hour to get help, like you do on a computer support line? You'd take it back tomorrow," says New York-based Internet consultant Arlen Anderson. Saturn sparked a Motor City revolution with its 30-day, full-refund guarantee.

Sony is trying to improve the support situation. It promises customers will be on hold no longer than a few minutes. And built-in diagnostics software, coupled with a modem, will allow Sony technicians to repair many problems quickly over the phone.

Neil Goldsmith, an analyst at Tribeca Research, in New York, thinks another service-related problem is that

there are so many components in a machine that it's difficult for a consumer to know who to blame--or who to call--when something goes wrong. "GM stands behind all of the car, even the spark plugs," says Goldsmith. Like GM, New Computer Co. is willing to adopt a holistic approach to computer repair.

But not everyone believes that the existing model is broken. Michael Dell, CEO of Dell Computer Corp., agrees that ease-of-use issues need to be addressed but believes manufacturers don't need to reinvent the wheel to reach consumers. He sees great opportunity for significant growth in the home markets of Japan and Europe, for example. And Dataquest analyst Kim Brown believes the industry as currently set up can deliver a low-cost, consumer-friendly box if it doesn't get sidetracked by the NC hubbub, which he argues will not be a big seller.

They're probably right that the top PC makers can remain successful by making incremental improvements. But if there's one thing that Saturn shows, it's that fresh thinking can bring significant rewards. The company has an installed base of 1.8 million users and has among the highest loyalty in its business. It has a 10 percent market share in its category.

The first PC company that taps into the technology-resistant masses will reap even more rewards. If it converts tens of millions of first-time buyers, the New Computer Co. stands to drive volumes--and potentially profits--like the industry has never seen before. Time to fire up the barbecue.

Sean Silverthorne is a producer for ZDTV. He can be reached at sean--silverthorne@zd.com.

The Right Mix Of Management For The New Computer Co.

The New Computer Co. needs a new mix of managers--some from outside the business. Here's who we would put in charge.

CHAIRMAN: Nobuyuki Idei, CEO, Sony Corp. After dominating in consumer electronics, Sony has turned its full attention to the computer business. Idei proclaims his biggest rivals soon will be Apple and Compaq. The company is quickly making its mark with the strong debut of the Playstation game deck, an alliance with Microsoft and, now, its first consumer PCs.

CEO: Phil Jackson, head coach, Chicago Bulls. Don't scoff. The boss of Da Bulls is the perfect taskmaster for a technology company. He knows how to blend the talents of superstars (Michael Jordan) with bad boys (Dennis Rodman) and role players (Steve Kerr). And since results count, don't forget Jackson's won four world championships. His philosophy combining Native American mysticism with Asian inspiration is just right for touchy-feely Silicon Valley. Even better, his salary is less than $2 million--a bargain for tech CEOs.

CHIEF FINANCIAL OFFICER: Joseph Graziano, former CFO, Apple Computer. Apple is the closest thing to a consumer electronics company the industry has had. And after Newton, Graziano knows what doesn't make for a good consumer computer product. Anyway, he needs a job.

VICE PRESIDENT OF MARKETING: Paul Orfalea, CEO, Kinko's. Copiers and printers keep getting cheaper, but Kinko's keeps getting richer. That's because Orfalea keeps finding new ways to improve POCS: Plain Old Copy Service. If he can do it for copies, he can do it for PCs.

VICE PRESIDENT OF ADVERTISING: Mike Drexler, chief media officer, Bozell Worldwide. Got Milk? That's the question dreamed up by Bozell Worldwide for the Milk Board. The advertising campaign features milk-mustachioed celebs on billboards and in magazines. Milk never seemed so sexy before. For that, we like this Mike.

PCWEEK

PC Week July 1, 1996 v13 n26 pA5(1)

The consumer pulse.

(computer industry analysis) (PC Week Inside) (Industry Trend or Event)(Brief Article)

Author

Houston, Patrick

Full Text

Based on a survey that started with 50,000 individuals, the Consumer Technology Index from Computer Intelligence divines Insights from the purchasing habits of John Doe and Joan Q. Public

The consumer market consists of computing neophytes for the most part, right? Wrong. Computer Intelligence's recently released annual consumer survey shows that a shift--from first-time buyers to repeat buyers--is gaining momentum. Last year, consumers who bought a replacement or additional machine accounted for 56 percent of the U.S. market. The big Implication: Maybe it's time to stress steak, not sizzle. CI analyst Dave Tremblay says this includes those things that keep customers loyal, such as good technical support.

Replacement buyers comprise 56% of PC customers.

A catch-22 emerges from the CI survey. Even as the market is being populated with more experienced repeat buyers, the demographics of new buyers were getting--how do you put this politely?--more downscale. Median income among first-time buyers stood at $33,000, or well below the $50,000 median for all PC owners, Tremblay says. As you might expect, today's new buyers aren't as highly educated as buyers of the past. How to deal with the growing disparity between new and repeat buyers? Three ways: segment, segment and segment.

The auto industry can provide a page for PC makers. The link: CI estimates that 2.4 million used computers changed hands in 1995. And not just through the classifieds. Retail outlets specializing in secondhand computers are being established. "We're seeing a used computer channel open up," says Tremblay. And, finally, CI's survey measured loyalty. The big news lies at the bottom of its list. Packard Bell, along with NEC and Zenith (not shown), are the three brands least likely to keep a customer. They're also the three recently united under Packard Bell, by acquisition and partnership. This, of course, leaves plenty of room to wonder: Just how potent will the newly constituted Packard Bell NEC be?

Many 1st-time and repeat buyers get used PCs.

Who Commands Loyalty?

Apple	87%
Dell	74%
Hewlett-Packard	72%
Acer	68%
Gateway 2000	66%
IBM	54%
Compaq	53%

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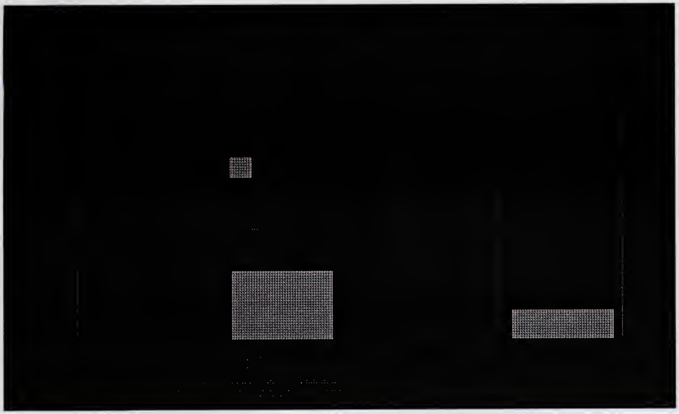
Replacement buyers comprise 56% of PC customers.

Many 1st-time and repeat buyers get used PCs.



InformationWeek

InformationWeek June 17, 1996 n584 p164(1)

Is there an afterlife for PCs?

(market for used computers remains untapped)(Desktop Agenda) (Industry Trend or Event)

Author

Manes, Stephan

Abstract

The market for used computer equipment remains untapped, but used equipment could be a valuable source of revenue for computer makers. The recent demand for network computers represents an ideal market for used computers. The computer market Is currently dominated by users who want the most current equipment, but many users do not really tap the potential of the latest technology and could make do with older equipment. Low-power 486-based systems are inexpensive, but are quite capable of performing business and personal tasks. To interest consumers in used equipment, vendors must provide warranties, upgrade opportunities and easy-to-use, pre-loaded software packages. Used equipment is also ideal for the education market, which needs equipment of all kinds.

Full Text

Here's a sporty number; hasn't been driven more than a couple of million keystrokes, tops. Just check out that mouse ball; plenty of original tread left. And talk about low-mileage disk heads: This little beauty was owned by a computer illiterate, a guy who didn't know the meaning of the word "compile." He had 16 meg of memory, yet never did a lick of multitasking, so there was hardly ever a swap file. The pizza stains? The Jolt Cola sticker? They'll rub right off. What do I have to do to make this deal?

High-pressure used-computer salespeople are not yet part of the culture, but maybe they should be. All the hype about network computers has convinced me of one thing: There really ought to be a market for cheap PCs.

That market is mostly ignored by the makers of new computers. Instead, vendors keep adding largely unnecessary power and goodies to maintain prices and margins. To the Great Unwired, the industry must look a bit like the mid-'60s car business--lots of horsepower, fins, and chrome--but hardly any cheap, dependable transportation.

Horsepower? Companies add "value" like 8X CD-ROM drives because customers figure they must be better than lame old 4X units. But the majority of users will see no performance boost. Same thing with the processor. To the consumer, faster must mean better, but for most applications (and particularly whenever a modem is involved), a low-powered Pentium or even a 486 can do the job just fine. They're cheap, but just try to find one; nowadays they're largely relegated to tiny print in mail-order catalogs.

Chrome? Fins? Hewlett-Packard now sells machines with snapshot scanners built in. Nice, but maybe customers would be better off with a simple integrated backup device--or a cheaper machine. Or even a decent monitor, rather than that classic price-point come-on, "monitor extra." Free advice to Sony: Banish those two evil words from your return to the computer market and customers will applaud.

Rust Spots?

But how about used computers? If there really is demand for cheap Web-access machines, used

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computers get interesting. Even corporate users and new-computer makers might get a boost out of a viable used-computer market: If you could get a few bucks for your old machines, it might help make upgrading more attractive. If members of the Great Unwired could be certain a "pre-owned" machine wouldn't die on the way out of the showroom or would be fixed or replaced promptly if it did, that machine might find its way to a totally untapped market, the one that buys its transportation secondhand.

The key, along with an ironclad guarantee, would be a good, simple all-around software package on every machine, like a Works program, bundled with a decent browser and cheap World Wide Web access. To convince skeptics, a clever demo and benchmark disk on every machine in the store would show what kind of performance the unit could deliver. To the perennially underfunded education market, these pre-owned machines could do more than most teachers ever dream of.

Circuit City has entered the used-car business with the professed aim of eliminating much of the typical buying hassle. So is turnabout fair play, General Motors? How about trying to rationalize the used-computer business? It may not have the prestige of EDS, but it's not chopped liver, either. Start thinking about the wired equivalent of the little old lady from Pasadena.

Stephen Manes is co-author of Gates: How Microsoft's Mogul Reinvented An Industry (Touchstone/Simon and Schuster).

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Column

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InformationWeek

InformationWeek June 3, 1996 n582 p48(3)

The PC still matters.

(desktop computers to improve in price/performance ratio, gain in importance) (Industry Trend or Event)

Author

Johnston, Stuart J.
Needle, David

Abstract

Desktop PCs are under pressure from handheld devices, the Internet and other innovations that extend the computing landscape, but are far from obsolete and will actually grow in importance in the near future. IS managers, market watchers and suppliers all state that the PC is here to stay. Costs have been dropping steadily and performance increasing rapidly since the PC was introduced in 1982, and prices could again fall substantially. Low-end, full-function PCs will soon be available for $1,000, with faster, more powerful systems selling for $2,000, an entry-level price in the past. Some say entry-level PCs may eventually cost as little as $500. Some users are already buying less-expensive PCs used. Advanced technologies growing in importance include thin flat-panel displays. Hitachi PC Corp is developing a 13.3-inch flat screen only one inch thick, and a large hospital in Long Beach is already using flat-panel PCs for point-of-care information. Ownership costs have long been a problem, but ingenious users are building long-term cost-savings strategies around the PC.

Full Text

Flash ahead two years: the PC is obsolete, replaced by cheap, Internet-cruising devices and wireless personal digital assistants. Windows is a memory. Bulky applications have given way to lithe applets written in Java, downloaded on an as-needed basis and paid for the same way. Best of all, now that everything is on the Net, security problems are virtually nonexistent.

And pigs can finally fly.

Rest assured. The PC still matters. And, say a variety of IS managers, market watchers, and suppliers, the PC will continue to matter. "For the foreseeable future, PCs are here to stay," says Roger Kash, manager of manufacturing systems at carmaker Saturn Corp. in Spring Hill, Tenn., and the overseer of 1,000 PCs.

Investment giant Merrill Lynch in New York is bullish on PCs. The financial services company is installing 25,000 Windows NT workstations, says Paul Sciabica, VP of new media strategy. Merrill Lynch also is working on using the Internet and intranets, along with image and document management, to communicate internally and with clients worldwide. "PCs can't get big enough or fast enough for people," says Sciabica. "The PC is the life-blood of Wall Street. We don't use information appliances on the Street. We use industrial-strength PCs."

In the 14 years since its birth, the PC has led a revolution that shows no sign of ending. First the PC toppled the mainframe, reducing it to an expensive server. Then the PC played a key role in the client-server movement, as desktops became network clients able to share information, applications, and peripheral devices. Now the PC is a key enabler of the Internet, giving millions E-mail, Web access, and much more.

Along the way, a new breed of PC suppliers arose, among them Compaq and Dell, and became major industry powers. Eckhard Pfeiffer, CEO of Compaq, is positioning his company to take advantage of

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changes in computing while leveraging the PC's vitality and longevity. "We are not leaving our PC roots behind," he said recently. "If anything, we've proved that PC technology is so strong and versatile, it can respond to the continuum of customers' information needs. The PC has yet to reach its full potential."

In fact, PCs should surge in all phases of performance as they seep further into corporate IT strategies. PCs will get smaller, more powerful, more communicative, easier to use, and cheaper. "If PCs don't continue to improve, just like everything else in the world, they deserve to be threatened," says Steve Ballmer, Microsoft's executive VP. "Improvements have to come." Adds Andy Grove, CEO of Intel, "To throw out [the PC] on an economic basis for a cheaper device just won't happen." (See interviews, pp. 52 and 56.)

The cost of a PC could drop substantially. Vendors have held the price of a basic machine at around $2,000, while increasing power, speed, memory size, and storage capacity. But Microsoft's Ballmer says PC suppliers soon will offer full-featured PCs--though with less powerful processors, less memory, and less disk capacity than today's standard models--for about $1,000. Bill Gates, CEO of Microsoft, hinted last week at a Harvard University speech that prices for full-function PCs could drop to the $500 mark.

Some users aren't waiting. They're buying cheaper PCs now--in the form of used computers. In fact, about 30% of first-time PC buyers last year acquired used machines, according to Computer Intelligence, a market research firm in La Jolla, Calif.

The PC will almost certainly get smaller, too, as screens for portable computers grow larger and help make portables more versatile. Hitachi PC Corp. is developing a 13.3-inch flat screen, just one-inch thick, that swivels; the San Jose, Calif., unit of the Japanese electronics giant expects to start shipments by year's end. "The right of people to say they need a big office with a big PC is disappearing rapidly," says David Hancock, president and CEO of Hitachi PC.

On The Wall

Thin screens already are helping Long Beach Memorial Medical Center in California. In a few weeks, physicians and nurses at the 850-bed facility will start using flat-panel PCs, outfitted with 10.4 inch touch-sensitive displays and virtual keyboards, that fit flush against the building's walls. The PCs can be located, telephone-like, wherever doctors and nurses need them, whether for emergency or operating room functions, lab or pharmacy work, patient records, or anything else.

Ultimately, 68 of these unusual PCs, developed by Datalux Corp. in Winchester, Va., will be installed in hallways, patient rooms, emergency and operating rooms, and rehab wings. They'll be tied to the medical center's backbone Novell network. Sixteen already are in place.

Virginia Moulton, the medical center's director for clinical informatics, calls the flat-panel PCs "point-of-care devices" and says, "we wanted something that's nurse-proof. It's going to get spilled on, left on for extended periods, and heavily used." That's no problem. The Datalux units are housed in a heavy-duty, waterproof aluminum case. Yet their open, PC-based x86 architecture works with off-the-shelf software and hardware.

PCs' ability to send and receive data, including multimedia files, over networks should get a boost, too. A long list of communications innovations-including cable modems, wireless links, and high-speed copper technologies-promises faster PC-to-PC links. Looking ahead, some industry executives foresee personal servers that will let mobile users synchronize files. More improvements are likely. "Ninety-five percent of commercial desktop systems sit on LANs, so we intend to continue to enhance network functionality," says Rod Adkins, VP and general manager of IBM's commercial desktop systems.

Some PDA-like devices will provide PC capabilities for mobile users, yet connect to LANs to exchange data with deskbound PCs. "Stationary desktops will become more rare," says Larry Blevins, senior VP of Harris Methodist Health System, a $1 billion HMO in Houston that runs some 3,500 PCs. Mark Weiser, principal scientist at Xerox's Palo Alto Research Center, believes that PCs could act as servers for PDAs, pagers, and handheld electronic organizers. The Pilot, a PDA from U.S. Robotics, automatically synchronizes data files when connected to a PC. "Some of these devices don't do much by themselves," Weiser explains, "but they could work with other devices to help you do more than you could before."

Costly To Own

If the PC has an Achilles' heel, it's undoubtedly the high price of owning one. Gartner Group Inc., an IT advisory firm in Stamford, Conn., has pegged the five-year ownership costs of a PC at $39,000 to $44,000, depending on the operating system. That number compares unfavorably, on a per-user basis, with total ownership costs for mainframes. For example, while one support person can take care of 1,000 mainframe users, that same support person can handle only 25 PC users. "To say the PC is a good cost-of-ownership investment-no way," says Gene Raphaelian, an analyst at Gartner Group.

Yet ingenious users, seizing on recent gains in the PC's raw processing muscle, are building money-saving strategies around the PC. Automaker Saturn, for example, is replacing costly custom factory applications on its Digital VAX machines with cheaper PC versions. The General Motors unit is moving all data between its programmable logic controllers on the manufacturing line and a Microsoft SQL Server database, and making it accessible in a Microsoft Excel spreadsheet. "We don't need to program reports," says Bruce Bemisderfer, a Saturn manager of strategic planning and software development.

The move also has freed Saturn from using highly vertical, manufacturing-oriented databases that need trained experts to keep them running. These database gurus are expensive to hire and difficult to replace. By contrast, the standard apps can be learned by any average user willing to attend a training session or read a software manual. In fact, Bemisderfer likes to say the new approach "lets Microsoft train the users."

Yet even with these high costs, businesses and consumers continue buying tens of millions of PCs. Market watchers expect worldwide PC sales will climb 19% this year. Though that marks a drop from last year's 23% rate, it's still a level envied by most industries.

More specifically, Computer Intelligence predicts that total shipments of new PCs in the U.S. will reach 37 million units in 1998, more than half again the 24 million units shipped last year. And Dataquest Inc., a market research firm in San Jose, Calif., predicts that Microsoft will ship nearly 73 million copies of its Windows 95 operating system for PCs worldwide in the year 2000, up from about 63 million copies this year. So much for the sales slump proclaimed by Network Computer proponents.

Users are constantly redefining what "state of the art" means for the PC. For some, it's as simple as needing a machine that runs even when it's not connected to a network. "We're not going to want to dial in from an airplane for $5 a minute," says Walter Taucher, president of Corporate Computer Inc., a systems integrator in Seattle.

For others, it's a lot more. World Wide Waiter, a Los Altos, Calif., startup, uses portable PCs to market its service. Restaurants in Northern California that use the service let their customers place orders over the Internet. The orders go to World Wide Waiter's server, which then faxes the order to the restaurant.

The company, founded last year by two Stanford Business School graduates, found the level of networking sophistication among potential customers varied greatly. So Michael Adelberg, the company's VP and

co-founder, takes his Zenith Data Systems Z-Noteflex 486 DX50 notebook PC-equipped with a wireless modem-on sales calls to restaurant owners. Often, he programs the menu and fax number on his PC, places a mock order, then transmits it to the restaurant's fax. "My notebook is a very powerful selling tool," Adelberg says. "They can see how quick and easy it is to place an order."

Oregon State University's College of Business in Corvallis plans to use PCs this summer to let students log onto its Web site. There, they'll be able to register for classes, take tests, pick up grades, share course materials and class notes, even discuss courses with classmates. "We're looking to deliver our course curriculum across any site in the state," says Greg Scott, the school's information services manager. "But it really has no boundary, so it could be anywhere." Fueling the move: Half of Oregon State's first-year business students already own PCs. Scott expects the figure to hit 80% in the next few years.

Of course, the exciting future of the PC doesn't preclude an equally exciting future for the Network Computer. After all, Net-surfing devices just might catch on. What would it take for the NC to obliterate the PC? Says Microsoft's Ballmer: "If the leaders screw up, they won't be leaders tomorrow."

Topic

Microcomputer Industry
Industry Trend
Intel-Compatible System
Market Trend/Market Analysis

Record #

18 355 443

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COMPUTER SHOPPER

Computer Shopper April 1996 v16 n4 p633(2)

Up-to-date technology at yesterday's prices.

(purchasing refurbished PCs)(includes related article on computer terminology)

Author

Harvey, David A.

Abstract

Purchasing a refurbished PC can result in the ownership of a fully-configured multimedia system for a fraction of the price of a new machine. These systems can be located online through America Online, the Computer Shopper Forum, Computer Database Plus or the PC Hardware Forum. Users can also search vendors' Web sites. The IBM PC Factory Outlet's FTP site lists a wide variety of computers, ranging from old 486 ValuePoint PCs to almost new ThinkPad notebooks. NEC Technologies' site lists a variety of Pentium-based multimedia PCs and several PowerMate and Image systems. Other companies with Web sites that provide information on refurbished systems include Gateway 2000, Compaq and CompUSA. Users should continually monitor the top vendors' Web sites in order to locate the best equipment at the lowest-available price.

Full Text

You can play with semantics--like car dealers who say "pre-owned" rather than "used"--but the thought of buying a demonstrator, a magazine-review unit, or a returned-to-the-factory PC may not thrill you like the idea of a brand-new computer nestled in pristine foam and cardboard. A refurbished desktop can, however, deliver a ready-to-rumble punch of multimedia Pentium power or workhorse DX4 dexterity for a much lower price than that of a new machine. And savings beat semantics any day.

While scouring the ads in Computer Shopper may turn up comparably equipped systems at equal prices, the potential appeal of a refurbished PC is that you can buy--from a well-known vendor--a fully configured system with a slew of extras. For this article, we focused on slightly used systems rather than the excess or discontinued models often available at closeout prices. (See the sidebar "By Any Other Name..." for a definition of refurbished systems.)

When I started calling, I made sure I had a clear objective: to secure a Pentium-class, multimedia-equipped desktop (including a sound card, speakers, a CD-ROM drive, and a monitor) with enough RAM to run Windows 95 and enough hard drive space for several acres of applications.

When looking for a reconditioned unit, comparison shopping is the key. To make an initial assessment of what was available, I hit the Internet. My first stop was the FTP site for the IBM PC Factory Outlet (800-426-7015; ftp://ftp.pcco.ibm.com/pub/hardware_announcements/pcoutlet.txt).

A quick scan of this frequently updated file turned up everything from fairly new ThinkPads to old 486 ValuePoint desktops. The only Pentiums for sale were Aptivas, ranging from an 8MB, 75MHz model to a well-decked-out P133. All were refurbished, and all came with CD-ROM drives, sound cards, stereo speakers, and fax modems.

At NEC Technologies' site (800-632-4636; http://webserver.nectech.com/likenew/eleclike.htm), the company's "LikeNew" program was prominently featured and easy to navigate. I found well-delineated

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specs of refurbished, Pentium-equipped Ready multimedia PCs, as well as a set of monitorless, custom-configured PowerMate and Image systems.

Other Internet sites offered no useful information about remanufactured systems. These included Gateway 2000's (605-232-2454; http://www.gw2k.com), Compaq's (800-318-6919; www.compaq.com), Micron/Zeos's (800-438-3343; http://www.mei.micron.com/meihome.htm), and CompUSA's (800-266-7872; http://www.compusa.com). To find out about refurbished systems from these vendors, I had to call their regular sales lines. The same is true of Dell's Web site (http://www.us.dell.com), although the company maintains a separate phone number for its Dell Factory Outlet (800-336-2891).

After doing my homework, I began calling vendors. My first queries were simple: What hardware and software are included with the system? Which components were reconditioned, refurbished, or remanufactured? Does the PC include the latest BIOS and operating system?

One of the more helpful things I found was that all the vendors used the same basic definition of remanufactured PCs: The systems were torn apart and inspected, and all the software was reinstalled. Gateway takes an extra step, running refurbished systems down a factory line in its outlet store.

Some vendors don't sell their slightly used PCs direct. Despite its huge inventory and sales volume, CompUSA denied any sales of refurbished units. So did Micron/Zeos. And shopping for Compaq's retreads requires a sojourn to the company store in Houston.

As far as getting through by phone: IBM picked up quickest. Gateway made me wait interminably. And NEC invited me to leave a voice-mail message.

Peas in a Pod?

In the final analysis, configurations for 100MHz Pentium multimedia desktops varied among Gateway, IBM, and NEC only in minor detail. IBM's $1,889 Aptiva M71 came with 8MB of RAM, a 1.6GB hard drive, a quad-speed CD-ROM drive, a 1MB VRAM graphics card, a 28.8Kbps fax modem, speakers, and an MWave sound card. Adding 8MB of RAM and a refurbished 15-inch monitor to get the system up to spec tacked on $803 to the price for a total of $2,692.

Gateway started with an almost identical package, except that its $2,194 P100 Multimedia desktop had a slower 14.4Kbps fax modem, a DRAM rather than a VRAM graphics accelerator, and a smaller 1GB hard drive. It did, however, come with 16MB of RAM and a 15-inch monitor.

NEC's $1,799 Ready P100 was nearly complete with 16MB of RAM, a 1.2GB hard drive, a quad-speed CD-ROM, speakers, a microphone, and a 14.4Kbps fax modem. The only thing missing was the monitor; purchasing NEC's cheapest reconditioned MultiSync 3V added a mere $299 to the package for total of $2,098.

It's the Extra Touches That Count

Though its price was the highest, IBM offered the best multimedia software bundle, including Microsoft Windows 95, Microsoft Works 3.0, Quicken, Wall Street Money, WinComm Lite, the usual troika of online services, an Internet access kit, Compton's Multimedia Encyclopedia, and a host of other edutainment titles. Gateway 2000 tossed in Windows 95 and Microsoft Office Professional 95. And NEC's system came only with Windows and DOS.

When it came to support, Gateway offered a three-year Gold Premium Support package, including onsite service. IBM's three-year warranty offered no onsite-service option. And NEC trailed with a 90-day limited warranty. All three vendors had a no-questions-asked return policy, though their time limits differed.

For the most part, the price difference between new and refurbished PCs is unpredictable. "I've seen savings as low as $80 and as high as $600," the IBM sales rep told me, and Gateway and NEC reps concurred. A spot check of prices in Computer Shopper confirmed these figures.

The best advice is to monitor the big-name vendors continually. As with any outlet store, inventories and prices fluctuate wildly. When I called Gateway again one day later, for example, I was offered a loaded P133 system for $2,894. The only successful way to buy remanufactured equipment is to keep a running check on the latest in price and availability.

Note, too, that I set out to shop for a fairly high-end multimedia desktop. If you're upgrading an existing system or don't need a CD-ROM drive or other extras, you'll find even better deals on bare-bones Pentium systems of every speed level and price. The bottom line is patience and research.

Shopping List

Use the following fields to create your own desktop-PC comparison-shopping chart. To get a feel for changing inventories and prices, call or visit online sites every few days and track your favorite vendors for at least a week.

CPU and Clock Speed:
Secondary (L2) Cache:
System RAM:
Hard Drive (Size and Interface):
Graphics Card (Chip Set, Amount and Type of Display RAM, Any Multimedia Features):
Sound Card and Speakers:
Monitor:
Bundled Software:
Warranty:
Return Policy:
TX:Online Sources

Before buying a used system, you should find out about other buyers' experiences. Are system returns and resulting bargain-basement prices just a matter of buyers' whims and inventory adjustments, or should you consider shopping elsewhere? Dial up and tune in to your fellow users' reports.

ZD Net/CompuServe Edition
Computer Database Plus (GO ZNT:COMPDB)
PC Hardware Forum (GO CIS:PCHW)
Computer Shopper Forum (GO ZNT:CSHOPPER)
America Online
Computer Hardware (keyword Hardware)
TX:Individual Vendor Forums

Try vendor names as keywords, or as search terms in search services offered by online services, the World Wide Web, or Usenet.

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Related Article: By Any Other Name...

Before heading for the channel to buy a refurbished system, it helps to know the sometimes slippery terms vendors use to describe used or almost-used computers.

The critical factor Is a federal law that defines a computer as "used" if it's been tried out and returned within 30 days of the purchase date. A counterpart to that statute is that an unused PC sold and returned within the 30-day period can be returned to inventory. If, however, there's any indication that the computer has been used--say, broken shrink-wrap, or added or removed components--then it cannot be placed back into inventory for sale as new.

If you're technically savvy and can negotiate a good warranty, used equipment can be a bargain. The problem, vendors admit, is that the adjective "used" covers the gamut from almost-pristine PCs to almost-worn-out retirees and systems with unknown problems. That's why most vendors don't refer to their close-to-new PCs as used PCs. Instead, they tag them with one of two labels: remanufactured or refurbished.

Technically, the term remanufactured denotes that a system has been used briefly, returned, and then subjected to a thorough going-over by the vendor. This can be as extensive as installing a BIOS upgrade or any other component upgrade. Refurbished PCs are one step down. Unlike remanufactured PCs, these units are not upgraded. They are, however, thoroughly tested and cleaned, and refitted with replacements for missing or damaged components.

In practice, the words reconditioned, refurbished, and remanufactured are used synonymously. So it's up to you to ask what a PC's past

---

Type

Buyers Guide

Topic

Hardware Selection
Used Equipment
Hardware Buyers' Guide

Record #

18 134 180

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Los Angeles Times

Los Angeles Times Dec 20, 1995 v115 pD4 col 1 (25 col in)

Integrating old PCs back into society.

(market for used PCs expands) (Industry Trend or Event)

Author

Kaplan, Karen

Abstract

The market for used computers is beginning to expand as companies such as Rumarson Technologies emerge. Rumarson is at the forefront of desktop recycling in a role similar to major manufacturers that remanufacture and resell their computers abroad. Rumarson is playing a critical role in keeping computers in use by buying systems from corporations, in the process of upgrading, and reselling them to casual PC users at a cost far below new computers. Although consumers are inundated with advertisements emphasizing speed and new features, most users require significantly less. A market for slower computers has gradually evolved consisting of novice users that find the older models less intimidating and less expensive. Rumarson sends acquired PCs to its recertification facility where 80% are refurbished.

Company

Rumarson Technologies Inc.

Topic

Used Equipment
Recycling
Market Trend/Market Analysis

Record #

17 910 128

INPUT®

6F#B MITOSHIRO BLDG..
1-12-12,UCHIKANDA,
CHIYODA-KU,TOKYO 101 JAPAN
TEL:03-3219-5441
FAX:03-3219-5443

FAX TRANSMITTAL FORM

Date: 10/15/96

Confidential: Y / N

Urgent: Y / N

To: Name: Tom

Tel./Location:

Co.:

Page: 1 of 2

Fax No:

File: Chron

Contact

Other:

From: Name: K. Takeda

Subject: FRI's RFP / NRI DATA

① Ms Usui of FRI asked me to prepare the proposal today. She was introduced by Mr. Asai
INPUT

If you have question, please ask Usui or Horii.

There are competitors too.

② I will send you later for Middleware's question.

ADM 341/10 8/93

Rick - Let's talk about this Thurs.

1 of 2

Tom

746-0425

X-Sender: satoko@taurus.fri.fujitsu.co.jp
Return-Receipt-To: satoko@fri.fujitsu.co.jp
Date: Tue, 15 Oct 1996 17:38:44 +0900
To: kk-kosei@po.iijnet.or.jp
From: satoko usui <satoko@fri.fujitsu.co.jp>
Subject: Request for Quotation

インプット株式会社
代表取締役 マーケティング担当 武田光正様

拝啓 貴社益々ご清祥のこととお喜び申し上げます。

私は富士通システム総研の碓井と申します。
当社の研究開発部主幹研究員であります浅井からの紹介により、
このようなレターを送付させて頂くことに致しました。

さて、私どもでは、「ONSALE」というパソコン関連のオークションを
している会社について、以下のレターにある様な調査をして頂ける会社を
探しています。

以下のレターをご一読の上、お見積を頂ければ幸いです。
お見積のご回答につきましては、恐れ入りますが、10月22日までに
お送り頂きますよう、宜しくお願い申し上げます。

敬具

------以下、レターです------

Fujitsu Research Institute for Advanced Information Systems & Economics
New Pier Takeshiba South Tower, 16-1, Kaigan 1-Chome,
Minato-ku, Tokyo, 105, Japan

To: Mr.Takeda of INPUT K.K

From: Haruo Horii

Tel: 81(3)5401-8396
Fax: 81(3)5401-8439

Date: 15 October 1996
Subject: Request for Quotation

Research Section:

I am a senior consultant of Fujitsu Research Institute(FRI). FRI is a think tank of Fujitsu Corporation. I am researching the viability of EC business in Japan. I would like to know the following items. I would appreciate it if you would inform me on the following points:

Category A : About ONSALE(URL:http://www.onsale.com)

FRI knows that the company *ONSALE* is operate an auction for PCs on the Internet. One of our customers is considering starting such an auction in Japan. So, FRI would like to ask you to research the following questions.

INPUT®

400 Frank W. Burr Blvd.
Teaneck, NJ 07666
Tel. (201) 801-0050
Fax (201) 801-0441

FAX TRANSMITTAL FORM

Date: Oct 21

Confidential: Y / N

Urgent: [✓ Y] / N

To: Name: Wilson

Tel./Location:

Co.:

Page: 1 of 3

Fax No:

File: Chron

Contact

Other:

From: Name: Tom

Subject: "Category A" ONSALE

I believe we could get this info from them if we said (correctly) that we had a foreign client interested in becoming a licensee (or some such story line)

Rich - Let's talk about this Thurs

1 of 2

Tom

746-0425

satoko usui, 17:38 96/10/15 +09, Request for Quotation

X-Sender: satoko@taurus.fri.fujitsu.co.jp
Return-Receipt-To: satoko@fri.fujitsu.co.jp
Date: Tue, 15 Oct 1996 17:38:44 +0900
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敬具

―――――――――――――以下、レターです―――――――――――――

Fujitsu Research Institute for Advanced Information Systems & Economics
New Pier Takesiba South Tower, 16-1, Kaigan 1-Chome,
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Category_A : About ONSALE(URL:http://www.onsale.com)

FRI knows that the company *ONSALE* is operate an auction for PCs on the Internet. One of our customers is considering starting such an auction in Japan. So, FRI would like to ask you to research the following questions.

① Does ONSALE have some patents relating to its Internet auction? If so, what patents does it have?
② Regarding the contract between ONSALE and the merchant:
- What are the contract matters between ONSALE and the merchant?
- What kind of commission is paid to ONSALE? How much is paid?
- Who decides the minimum bid and bid increment, ONSALE or the merchant? How are they decided?

③ How does the settlement process flow ? When is the settlement done between ONSALE and the merchant? When is the settlement done between the bidder and merchant?
④ Why does ONSALE restrict the choice of carriers to Fedex or UPS exclusively? Is there some reason relating to the settlement?
⑤ How does ONSALE protect their auction from ill-will bidders? Are there some legal protections?
⑥ How are used or refurbished PCs are distributed in the U.S.A?
⑦ How does ONSALE set up barriers to new coming auctioneer?
1／2
⑧ How does ONSALE seek new merchants?
⑨ What kind of promotion did ONSALE do when they began operating the auction? Why so many people are attracted to the ONSALE Web site?

Category B : About the Internet exposition market:

① Internet exposition market size
- Current market size and expected market size for the next 3 years.
- How does Internet expositioner take benefit ?

② How does Internet expositioner relate real world exposition?
③ Which services does it provide? Is there any service menu ?
④ Which company is leading this market? How much revenue does its get? How much share do they have ?

Please provide us with a separate quotation with the cost of this research and term for following items by 10/22.
① Category A: ①to⑦
② Category A: ①to⑨
③ Category B

Yours sincerely,

Haruo Horii

―――――――――レター終了―――――――――――――

碓井 聡子 (Usui Satoko)
(株)富士通システム総研 コンサルティング事業部
Tel : 03-5401-8396 (ex.7076-4943) 竹芝サウスタワー
E-Mail: satoko@fri.fujitsu.co.jp NIFTY : GDC01020

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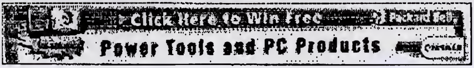
How to Play
Auction Formats
Customer Testimonials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Tom

- ONSALE Exists
  - Interesting
- Have list of expos

I'll call

1/4

CATEGORIES

- Desktop PCs
- Servers
- Notebooks
- Networking
- Plotters, Scanners & Faxes
- Apple/Sun Products
- Drives & Controllers
- Monitors
- Printers
- Audio/Video
- Car Audio
- CD-ROMs & Multimedia
- Consumer Electronics
- Computer Accessories
- Memory & CPUs
- MICE & Keyboards
- Modems/Sound Cards
- Software
- Motherboards
- Video Cards

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- Packard Bell Multimedia 75MHz 486 DX4 w/ 8MB RAM, 850 MB Hard Drive from $100!

- Hewlett Packard LaserJet IIIP Printer from $100!
- NEC PowerMate V75R w/ 16 MB RAM, 1.2GB HDD & 4X-CD ROM from $100!
- IBM Aptiva Pentium 166 Mini-Tower with 16 MB RAM, 1.6GB HD from $100!
- COMPAQ 4500 PROLIANT (PENTIUM PRO QUAD PROCESSOR CAPABLE) from $1,995!
- NCR Globalyst 630 P133 Mhz Multimedia Computer from $230!
- Pentium 166 MHZ Power Plus System 32 MB/3.2 GB HD/8X CD/28.8 V.34 from $450!
- Canon BJC-610 Color Bubble Jet Printer from $25!
- IBM ThinkPad 720C 4Mb, 160Mb HD Notebook from $99!
- Relisys 2058 20" Super MultiScan Monitor from $199!
- Lexmark Laserprinter 4039 10 plus from $100!
- QMS ColorScript 210 Network Color Printer from $499!
- MAG DX1595 - 15" Monitor, 28mm dp., 1280x1024 Res., Digital Controls from $100!
- Dell 17" 1728 SVGA .28 Dot Pitch Monitor from $25!
- Caviar 1.6 GIG Hard Drive from $5!
- 10X CD-ROM with SCSI II Interface from $99!
- IBM 2.1Gig 68 Pin Ultra Wide SCSI-III Disk Drive 40Mb/Sec Trnsfr. from $1!
- Lumina 2000: The Plain Paper Fax Machine, Copier, Scanner from $5!
- Nokia Multigraph 449E 15" Monitor from $25!
- NEW! 8MB 72 PIN SIMM 70 NS (2X32) (Non-EDO) from $10!
- NEW! 8x32 32MB 72 pin SIMM EDO 70ns from $25!
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- Hewlett Packard Networking Extravaganza!!
- Simms, Simms, Simms & Intel Pentium Processors!

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Subject Grouping

- *Group 1:* **development, microsoft, user, dci's, internet**
  - **Q** **S** DCI's Internet Expo & Internet Developers Compeitition
  - **Q** **S** DCI's Internet Expo
  - **Q** **S** DCI's Internet Expo
  - **Q** **S** DCI Internet Expo
  - **Q** **S** DCI's Internet Expo
  - **Q** **S** DCI's Internet Expo
  - **Q** **S** DCI's Internet Expo, Web World & Email World
  - **Q** **S** Networks Expo Boston
  - **Q** **S** Netscape Internet Developers Conference
  - **Q** **S** Microsoft Internet/Intranet Conference
  - **Q** **S** DCI's Microsoft User/Developers Conference
- *Group 2:* **internet, commerce, expo, mar, sep**
  - **Q** **S** America's Internet Expo & Conference
  - **Q** **S** Internet Commerce Expo
  - **Q** **S** Internet & Electronic Commerce Conference & Exposition
  - **Q** **S** Internet & Electronic Commerce Conference & Exposition
  - **Q** **S** Spring Internet World
  - **Q** **S** Internet World Canada
  - **Q** **S** Marketing on the Internet
  - **Q** **S** COMDEX/Internet
- *Group 3:* **internet, computer, fest, canadian, network**
  - **Q** **S** Networks Expo Dallas
  - **Q** **S** Networks Expo Dallas
  - **Q** **S** Computer Fest Fall
  - **Q** **S** Computer Fest Spring
  - **Q** **S** Computer Fest Winter
  - **Q** **S** Computer Fest Christmas
  - **Q** **S** Atlantic Canada Business Computer Show
- *Group 4:* **internet, intranet, dci's, microsoft, strategic**
  - **Q** **S** I2-Internet & Intranet Expo/I2 Developers Conference
  - **Q** **S** ASAE Technology Conference & Expo
  - **Q** **S** Business Online Conference: Internet & Intranet Strategy
  - **Q** **S** Leveraging the Power of the Internet
  - **Q** **S** TCP/IP & Intranet Expo
  - **Q** **S** Business Online Conference: Internet & Intranet Strategy
- *Group 5:* **communications, com, internet, telecommunication, commerce**
  - **Q** **S** MultiCom Communications Expo & Conference
  - **Q** **S** E://Comm Europe
  - **Q** **S** E://Comm USA
  - **Q** **S** Com-Expo/Communications Expo
  - **Q** **S** Communications Expo

Q S Online Expo
Q S Online Expo
Q S Expo! Expo!
Q S Can Technology Conference & Exposition
Q S Expo Market

Legend:

Highly Relevant
Probably Relevant
Possibly Relevant

Q: Query By Example. Find similar documents.
S: Summarize. Generate a short summary of the document.