

Computers in advertising and marketing communication : a user's point of view

Campbell, William S.

1995

Campbell, W. S. (1995). Computers in advertising and marketing communication : a user's point of view. In AMIC Update on communication technology: a user-friendly guide to the new communication technologies, Singapore, November 24-25, 1995. Singapore: Asian Media Information and Communication Centre.

<https://hdl.handle.net/10356/93159>

**Computers in Advertising & Marketing Communication :
A User's Point Of View**

By

William S Campbell

COMPUTERS IN ADVERTISING & MARKETING COMMUNICATION

A USER'S POINT OF VIEW

William S. Campbell

Abstract: The speaker reviews, from a user's point of view, the growth and development of computers as tools for advertising and marketing communication and how computerization is leading to a more "personal" relationship between marketers and their customers.

INTRODUCTION:

Generalizing about computers in advertising and marketing communications is a bit like reading tea leaves. It all depends on whose teacup you are looking into – and when – since no two markets are ever at exactly the same stage of development.

As we all know, Singapore is determined to become "digital," within certain limits. Video on Demand in Tampines; interactive shopping; as many telephone lines as you want; "smart cards," and now three Internet servers. Hong Kong and Japan are forging ahead too, for their own reasons. Other countries may be more "open" regarding computerized communications, yet lag behind because of economic reasons.

For example: in Sri Lanka, where I live, there are 85 persons per telephone. Microwave sends calls between main cities and towns but once a local exchange is contacted, the caller is usually back to copper wire, rotary dialing and operator-assisted long-distance calls. Some communities now have turnkey digital exchanges, literally dropped into place in ocean shipping containers, which at least offer IDD facilities.

Bar codes appear on imported merchandise but to my knowledge, not a single retail establishment in the country has a bar code reader.

This is not to say that some markets are more backward than others. Numerous satellite dishes dot the Colombo skyline and yes, there is an Internet server. What this really means is that the present infrastructure investment has to be amortized and otherwise "used up," to some investor's satisfaction, before more new-fangled ideas are tried. I suspect that, to some degree, this need to amortize existing investment will continue to be a factor in every market. That is not to say that new investments will not be made. They will. But perhaps not as quickly as some of us would hope for.

Regardless of the market, and even if they don't exactly understand how, nearly everybody accepts that computers in some form or another have an impact on their lives. Many people recognize that a computer is not just the screen-cum-keyboard that has come to symbolize this intrusion of technology. Microprocessors operate in various parts of our cars; in our appliances; magnetic strips in credit cards, phone cards and in transit fare

cards all perform some kind of “computing” function. Even the now-ubiquitous bar-code on a can of beans “computes” somehow.

And more and more, people see computers as ways to increase control over their lives. In Singapore, recognition strips in road surfaces will soon detect your car’s passage and charge your usage of that road accordingly. Microprocessors in identity cards will be able to keep track of more information about you, maybe a good, maybe a bad, thing.

One of the most intriguing areas for computer applications today is in advertising and marketing communication. Whatever happens, breakthrough developments today will be history before we go to bed tonight. Yet we have to start somewhere and realize a fair return on the investments we’ve already made, before leaping on to the next development.

First, some marketing background.

For years, management and marketing pundits like Peter Drucker and Theodore Levitt have preached that “The sole purpose of a business venture is the creation, and retention of a customer.”

In a world of mass marketing and mass communication, computers are beginning the process of de-massification and the development of personal relationships between marketers and their individual customers. What does all this mean?

For generations, enterprises have made a product, then gone forth to find customers for that product. Customers took what they got — or they did without, until somebody came along with a choice.

Henry Ford told car buyers “You can have any color you want, as long as it is black.” Take it or leave it. General Motors, offering a similarly-priced car said “You want white? red? blue? black? green? Certainly.” General Motors became brand leader and Ford never caught up.

Soap manufacturers spend millions on research to generalize about the preferences of sufficiently large groups of housewives for a particular combination of attributes in a household detergent. When they get it right, they get rich. When they get it wrong, they start over, but always based on research results about consumers and their preferences.

Computers are helping marketers to reach out more precisely than ever before to establish personal relationships with their customers and to understand their wants and needs and how to satisfy them.

Nowadays, we bellyache about junk mail, mail we don’t want. But what if the mail that came to us was mail we did want? Would it still be junk mail?

Today, I'll discuss the impact of computers on five separate aspects of advertising and marketing communication:

1. CREATION OF A MESSAGE
2. PRODUCTION
3. AUDIENCE RESEARCH / MEDIA EVALUATION
4. MESSAGE DELIVERY
5. FEEDBACK

1. CREATION OF A MESSAGE

As little as five years ago, many advertising copywriters and art directors looked upon computers as devices that would sap their creative juices and leave them lying like dried husks on a compost heap.

Admittedly, being able to write a slogan once, store it on a disk and then retrieve it at will to drop into the next ad for the product was convenient, but heaven forbid trying to create an illustration on a screen. It was all just too . . . unreal.

I suspect that the real fear was of being replaced by machines.

So copywriters might use a word processor program — just.

Art Directors barricaded themselves behind rows of felt-tipped pens, all keyed to pantone color codes, and tried to ignore the whole thing.

Studio managers, however, weren't so sure. After all, once the stuff was created, they have to paste it up into camera-ready art—by hand.

And that's where the thin edge of the wedge was. In the studios.

Techno-fear can still be found, even in the most sophisticated of ad agencies but that is changing:

You can take a 16-million color computer home with you today and plug it in. Price: around \$3,000.00

You can use highly sophisticated page makeup programs right out of the box. Price: around \$1,000.00

You can create, import, and otherwise manipulate photographs, illustrations, and graphics to a high professional standard using programs such as Photoshop, again right out of the box. Price: around \$1,000.00

And what you can't do yourself can be done by myriad specialists, subcontracting all kinds of services.

2. PRODUCTION — FILM

Not so long ago, film began to gradually, grudgingly, make room for video. Most agency creative people didn't like videotape because film was supposed to be "sharper." The compromise was to shoot and edit on

film and finish on tape, because the stations no longer accepted film for broadcast. They wanted hi-band U-matic tape instead.

Computers got in the door here, first through being able to do new kinds of special effects with programs like Video Paintbrush. Art Directors liked that.

From there, it was just a short jump to the complete replacement of standard animation techniques with computerized productions.

Today, there is no limit to what computerized effects can do to a film.

A few years back, the film "Who killed Roger Rabbit" used a combination of live action and computer animation in a seamless presentation of animal and humans conversing and interacting.

In "Forrest Gump," our hero is seen, thanks to computerization, having what seems to be real conversations with John Kennedy, then with Lyndon Johnson, both of whom had died years earlier.

But beware.

Agency standards of practice all over the world vigorously exercise constraints against deceiving the public. What you offer for sale on the screen must be what the customer really gets for his money.

So while the magic of computerized video and print techniques offer unlimited opportunities for creative license, users will always have to take into account the need to be utterly truthful.

To do otherwise courts disaster. Probably legal action.

PRODUCTION — PRINT

Here is a supermarket ad from the Straits Times.

Let me tell you how we produced these ads "B.C." Before Computers.

This kind of ad is called, in the trade, a loss-leader ad.

The idea is to present a wide range of products with discounted prices, available only on certain days, usually Fridays and Saturdays in Singapore.

The premise is that the housewife visits the supermarket to buy one or more advertised bargains and, since she is there, she buys other items as well.

Ad agency management just love this kind of advertising.

Usually it means running an expensive, full page ad like this at least once a week, every week of the year. Money in the bank.

To repeat an ad implies "left-overs," "unsold goods." So each ad has to be a new ad. Production money in the bank.

The supermarket doesn't mind because they charge a percentage of the ad's cost to the vendor of each product shown in the ad.

But again, beware: what you advertise must be offered for sale in your store at the price you advertise.

If a construction company in Indonesia suddenly buys up all the stocks of a brand of orange juice you planned to advertise as one of this week's loss leaders, you must withdraw the product from the ad.

If the juice is bought thirty minutes, even ten minutes, before the ad closes at the newspaper, you must still withdraw the product from the ad.

This leaves a great gaping hole, which no self-respecting supermarket manager will leave empty.

Enter the Friday Night Watch.

The newspaper's material deadline for, say, Saturday morning's ad is 10 PM Friday night, but they will extend to midnight (they want the money too).

The agency Account Executive hovers on the phone with the client, both referring to a fax or photocopy of the ad.

Art director, copywriter, paste-up artist and studio manager hover over files of tiny photographs of alternative items, with alternative price points, to drop into the paste-up, should the need arise.

A dispatch rider waits to whisk off the final pasted-up artwork to a film-maker in Tanjong Pagar, thence to the newspaper.

If all goes well, which it seldom does, the paste-up is closed around ten and given to the dispatch rider, who sees to the making of the film and its delivery to the newspaper. Everybody heaves a sigh of relief and prepares to go home, after the rider calls in to confirm delivery to the newspaper.

But some nights, there can be as many as three changes, suddenly called in, often after the dispatch rider has left. A call to the film-maker brings him back. Fortunately the streets are empty at that time of night.

Remember, the supermarket is there to sell merchandise — and not always to Mrs. shopper, one piece at a time. If they can make a single big sale to an institutional customer, they won't hesitate to do it — ever.

The worst incident was one night when, after several last-minute changes, we all rushed off to the film-maker, finished the film at five minutes to midnight and handed it over to the dispatch rider, who disappeared into a rainstorm on his motorbike.

Minutes later, we heard a crash. We found him and his wrecked motorbike in an excavation.

One of us took the film to the newspaper.

The rest of us took the dispatch rider to the hospital with a broken arm.

Now let us move on to "A.C.," After Computers.

Some agencies, gluttons for punishment, still follow the “B.C.” protocol, but the smart ones do the entire process on computers, with the client, the agency, even the newspaper, all linked together by modem on Friday night for simultaneous updating and finalization of Saturday morning’s ad.

The paste-up is electronic, using page makeup programs like PageMaker or Quark Express and custom-made clip-art files of product photographs and price points assembled in TIFF, Pict or other formats, for instant, electronic pasting in place.

When the paste-up is finally closed, the newspaper either has the file already on its screen or will receive it immediately via modem.

The newspaper then instructs the computer program to produce reproduction material to go onto the press. Time for a drink before you go home.

3. AUDIENCE RESEARCH / MEDIA EVALUATION

Years ago, the principle behind media selection was the audited circulations of newspapers and magazines. At the very least, an audited circulation was supposed to keep the publishers honest.

But all that didn’t matter because what was—and is—important is not how many copies are distributed but how many eyeballs see it. What’s more, one cannot accurately “audit” the “circulation” of a television or radio station.

“Target audience” became the standard descriptor. Populations were examined and defined according to agreed criteria: demographics (age, sex, occupation, location, household income, marital status, and so on), psychographics (people are placed in clusters according to shared values, attitudes and lifestyle. “Yuppie” springs to mind.).

Throughout all this vagueness, attempts were made to quantify message delivery and place a value on it. Reach and frequency analysis became the foundation for media planning.

Massive computer programs are used to churn out alternative ways to spend media money, yielding different kinds of results. Do you want to maximize the number of mothers between 20 and 35, with two children and a household income of S\$3,000 per month that you can reach? Or do you want to reach them with great frequency? You can do both but it all depends on how much money you have to spend. Most marketers seek a balance, based on a fixed budget. For the same sum of money, greater reach equals lower frequency, and greater frequency means lower reach.

Then there is television, still the most powerful medium around. Yet, measurement of audience remains ephemeral. Today, TV audience data comes in from research companies to ad agency media planners in real time via modem. How many TV sets are tuned into channel 5 between 7PM and 7:15 PM? All very well until one realizes that bookings for

advertising time must be made well in advance, often several days in advance. So what's the point in all this instantaneous information that one cannot react to? Even if the set is on, is anybody watching? If so, who?

Various systems have been tried: viewer diaries, which depend on the viewer remembering to fill the information in — accurately. People Meters, little black boxes on your set that track channel changes throughout the day—but not who is in the room, if anybody. Recently, People Meters have been developed with sensors which detect movement into and out of the room.

“Who was that?”

“John?”

“Mary?”

“The dog?”

Yet standard media evaluation criteria can be expected to prevail well into the next century, mostly because of the huge investments in newspaper and magazine printing, television and radio production and broadcasting, plus the ownership of TV sets, videos and other home entertainment equipment. Contrary to some beliefs, most people do not rush out to buy the newest multi-media equipment just to stay up to date. True, more of them are buying new technology for specific purposes, like computers, CD-Roms and modems to surf the Net, but most of them still make do with whatever entertainment equipment they've got until it wears out. Then they go for whatever they think is “the latest.”

Here are some recent numbers to illustrate the point:

Home PCs USA:

Market penetration of US households as of July

	1994	1995
Home PCs	27%	32%
Modems	13%	18%
CD-Rom drives	6%	13%
Online services	6%	9%
CD-Roms*	8.2	13.4

*Number of titles per household with CD-ROM drive.

Sources: Odyssey homefront survey, Newsweek, 9 Oct 95.

1994 ownership of home computers in Singapore: 31% (SRS)

4. MESSAGE DELIVERY

Mass advertising media is characterized by the following:

It is public: — Press, radio, TV, magazines, posters, hoardings, so on.

It is a monologue: — It talks to you. Try talking back.

It is by appointment: — When the paper is delivered or the program runs.

It is delayed: — you can't see it when you want to, unless you save (delay) it for later, which you usually don't.

Much has been made in recent months about "convergence," where the computer, television and the telephone will meet to create truly new communications products. Where people and communicators can "interact." In Singapore, the most immediate development in the new convergence mixture is Video on Demand. Other speakers here cover these subjects in detail, so I'll confine my remarks to say that the key to all these new forms of interactive media in the future is bandwidth, the capacity of a medium to deliver messages. As more and more messages are digitized, fiber optics will become the standard. So far, nobody has been able to say just how many digitized messages can travel on a single fiber optic, but it is well up in the millions. If a fiber optic cable fills up, open another. After all, they're just sand.

Yet there is, and has been, an immediate role for computers in message delivery; one that has been steadily growing over the past few years. It takes into account the consumer as an individual and the process is called Database Marketing.

Those who had the sense to collect information about their customers a few years ago are getting rich from it today. Here's one example:

All electrical appliances sold usually come with a guarantee card. The purpose of the card was originally to date the purchase so that one knew when the guarantee expired. If something went wrong "inside the guarantee" it was fixed for free or for a subsidized charge. If it went wrong "outside the guarantee" the buyer paid for the repair. Despite the fact that the cards provided for the buyer's name and address, few marketers paid any attention. Instead, file cabinets, boxes, whole rooms, filled up with moldy guarantee cards, held to ensure that free repairs only came "inside the guarantee."

One day, one of my clients and I hit on the idea of examining guarantee cards to see how much time had elapsed since the purchase of the item on the card. It was dirty, dusty work but after a while, we were able to say that, in one community, people bought new TV sets on average once in every six to seven years. They didn't always buy the brand they had been using but in most instances, they did consider it in their shopping process.

We sorted out all the guarantee cards for sets 5 years old and older and sent a letter to each owner, reminding them that their set was due for replacement soon, and offering an incentive to buy a new model of their "preferred" brand. We offered linked incentives to the local appliance dealers to encourage them to stock the sets we wanted to sell. The plan worked and we sold so many TV sets that we temporarily ran out of stock.

Primitive database marketing, no doubt, but no matter how sophisticated one gets, the principles remain the same. The computers make it easier, faster, more regular — and less dusty.

As the guarantee cards come out of the storerooms and onto the computer databases, as credit card and other information accumulates with each transaction, marketers are learning more and more about their customers: their preferences, their dislikes, their habits, what annoys them, what does not.

For the purpose of this discussion, it is worth noting that a marketing database:

“is an organized collection of data about individual customers, prospects or suspects that is accessible and actionable for such marketing purposes as lead generation, lead qualification, sale of a product or service, or maintenance of customer relationships.”

“Enables you to isolate someone as an individual.”

“Enables you to build a continuing relationship with that individual.”

Through testing, testing, testing, enables you to continue to make offers to individuals with whom you have built relationships, that result in repeat sales.

A Computer Database Engine can:

sort prospects by demographic characteristics,

sort prospects by values, attitudes and lifestyle characteristics,

determine if they have ever bought from you before and if so, what,

When attended to regularly, automatically updates each individual's record,

Send reminders, such as birthday greetings and other relationship-building messages.

Database marketing is not the only way being used to create and keep a customer. Across large parts of Southeast and South Asia, satellite television has become a part of middle-class life. One either has a satellite dish or subscribes to a cable-based provider.

Satellite depends more and more on digitization of messages and the use of broadband technology to send more and more information to receivers. In the next twelve months, new satellites are expected to be in place with a whole range of KU band transponders that will beam much stronger signals to earth than the current C-band transponders do. The result will be a much wider “footprint,” smaller dishes and bigger audiences, especially in the Subcontinent and China.

Presently, trans-national advertising, using either “pan-Asian” or overtly western models proliferates on satellite. In the absence of agreed cross-

border standards, quality suffers, with lots of loud, somewhat vulgar pitches for exercise equipment and “special” health products, accompanied by telephone numbers to call in Dubai, Bahrain, Bombay, Bangkok, Jakarta, Darwin, and so on. Have your credit card ready.

Interspersed in all this hype, one finds low-key, corporate campaigns by international engineering companies and others, trying to make friends and establish a favorable image umbrella, under which they can promote their suitability for specific projects. Marubeni Corporation springs to mind in India.

Satellite has had another impact on marketers that one can expect to grow and develop: the standardization of products and brands.

In many markets that did not justify in-country production of international brands, distributors were often given considerable latitude regarding packaging, even branding, of the products they marketed. Often a marketer would resist a manufacturer’s new name for a brand on the basis that the change would negate years of investment in the old name. Where they were strong enough, they made their decisions stick.

For years, Guinness was called “Cat Brand” black beer in certain parts of Indonesia. The word “Guinness” on the English-language label was unpronounceable, and meaningless, to most drinkers. What they looked for was the picture of the cat on the neck label — “Cap Kucing”.

With advertising opportunities that now transcend national boundaries, marketers must rationalize their brands to avoid confusing the customer with conflicting, cross-border messages. Whether old-line distributors and agency house like it or not, brands must fall into line if market shares are to be supported with planned, coordinated, trans-national advertising and marketing communications campaigns. Imagine the confusion if you saw two conflicting campaigns for the same product on Malaysian and Singapore television.

Then there is the Internet.

Anything you want to say about the Internet is probably true. Or, depending on your point of view, probably not true. How one uses it depends on what you want it to do. For example, you can read most international newspapers on the Internet. No newsprint. Just electronic bits. Make your selection from a menu, decide what you want to keep, and save it to a file to read later. If you really need to, print it out on paper.

Open your e-mail box and find a huge wad of unsolicited messages offering you everything from time sharing holidays on the Costa Brava to subscriptions to “unusual” electronic photo libraries. Truly a bore to sort through but keep in mind, no paper goes into the wastebasket. Being digital, you just dump the bits. And you can always download a program from the Net that sorts through the junk for you.

This is just the beginning. In 1994, two hundred million dollars in sales were made on the Internet through credit and charge card transactions.

And it doesn't end there. Barry Diller, former CEO of Fox. Inc. who moved on to QVC, which taps more than 650 on-line databases, had this to say earlier this year about "Smart Agencing:"

"Smart Agencing' uses a computer to construct a profile of you – your tastes, habits, your likes and dislikes. You build that profile by answering questions with precise grades of sensitivities. Then, with that profile stored away in its microprocessor, that box does what none of us has the time or energy to do: it searches every corner of the information universe. It searches wide and targets narrow. It comes back to you in a split second. and it offers the goods and services, and information you – you personally – want."

5. FEEDBACK

With the proliferation of computerization, marketing feedback has become more immediate and direct. You make your pitch to the customer over a multi-media connection. He or she will say yes or no, and the circle will be closed, for that particular moment.

Before we reach that stage, however, marketers must continue to make do with the resources they have at hand, especially in the analog marketplace – at retail. The two most widely used computer resources at retail are the bar-code and the magnetic credit, charge or bank card.

We've all watched the clerk pass the bar code on a can of beans across a scanner at the super market check-out. We then see a price come up on the cash register display. Eventually, there is a total that we have to pay. it's all pretty handy and tends to reduce mistakes to a minimum. Today, a check-out clerk doesn't even have to know how to count.

But the bar code does a lot more. As stocks are drawn down in supermarket chain's various retail outlets, electronic messages are being sent by the bar code scanners to a central clearing house. When stocks drop to predetermined levels, the computer instructs warehouse staff to replenish the supplies at the stores in question. At the same time, re-orders are sent to suppliers, based on agreed discounted prices for volume purchases.

And while all this goes on, accounting software examines the sales movements of the products in question to see just how much contribution they make to overall income and profits and whether they continue to justify the shelf space allocated to them.

After the check-out clerk has passed all the goods over the scanner and come up with a total, most customers produce a piece of plastic with their signature on it and various information on a magnetic strip. The clerk passes the card through an electronic device that says whether the user

pays his or her bills on time, and a record of charge is produced for signature and retrieval of the goods purchased. Transaction completed.

Not entirely. If you are a regular customer of a retail establishment, they may, from the bar codes and your credit card information, maintain records of the items and brands you regularly purchase. From this information the marketer can reach out to you as an individual, with offers “just for you.”

In the United States, retail chain Wall-Mart, with more than 2,000 stores uploads 20 million point-of-sale transactions to a centralized database every day. Engaging in a process called Data Mining, Wall-Mart analysts use a large, multi-processor AT&T system to dig through and analyze enormous amounts of data, upon which they can base marketing decisions, right down to specific products stocked in individual stores.

For those who don't have the resources for such an in-house operation to shed light on customer preferences and buying patterns, there is A.C. Nielsen's Spotlight. Nielsen's clients use Spotlight to mine point-of-sale databases. These terabyte-size databases contain facts, (e.g. quantities sold, date of sale, prices) about thousands of products tracked across hundreds of geographic areas for at least 125 weeks. Nielsen has changed the U.S. version of Spotlight for use in other countries.

As I said at the beginning of this talk, whatever happens, breakthrough developments today will be history before we go to bed tonight.

The microprocessor-equipped “smart card” is about to make much of the kind of marketing I've discussed, redundant.

Able to carry many times more information than an ordinary magnetic-strip card, one smart card can store everything from your health records, age, marital status, credit rating, university transcript, home-ownership records, and still have room to trace the last trip you made abroad. Such cards exist — now — three leading Singapore banks already use them and they are spreading fast across Asia, where the infrastructure of magnetic-strip cards is not as solidly entrenched as in the West.

These cards, plus, inevitably, the ability to carry out secure financial transactions on the Internet, herald the next steps in computerization of advertising and marketing communication.

When I wrote this a few days ago, I had not heard of the Swindon experiment. Since July, some 8,000 of Swindon, England's 190,000 residents have been test-driving a cybercash system called Mondex. So have 750 of the town's 1,300 retailers. Like the transit cards used in Singapore, Mondex cards contain microprocessors that can be “charged up” through user's bank terminals located, like ATMs, around the city. Mondex cards can then be used for purchases at the accepting retailers, who like it because their bank accounts are instantaneously credited with the payments made. No cash to carry down dark streets after closing. No cheques to bounce. Users can transfer funds from one card to another,

and, in the case of, say, children, expenditures can be limited to certain kinds of purchases.

Using this kind of technology suggests that using E-money for transactions on the Net is just around the corner.

As we speak, Digicash, an Amsterdam-based company and Mark Twain Bankshares holdings of St. Louis Missouri, are testing a new digital currency for use on the Internet. Others across the world cannot be far behind.

CONCLUSION

Sooner than later, the marriage between computers, TV and bandwidth will be consummated and more and more of us will have access to interactive, multi-media information and entertainment.

The permutations are legion but the one common thread that runs through all of this is the fact that you and I, as users of the new technology, will be identified; our preferences, our likes and dislikes will be solicited, measured, classified and pursued and courted by marketers who will, perforce, have to treat each one of us as individuals, if they expect to sell anything to us.

“You want white? red? blue? black? green?”

“Certainly.”

“By This Thursday?”

“Thursday morning?”

Certainly.”

Bibliography:

“Being Digital”

N. Negroponte, Head, MIT Media Lab

Hodder & Stoughton

ISBN 0 340 64525 3

“Marketing Myopia,” other titles

Peter Levitt,

Harvard Business Review

“Managing for Results,” “Managing for the Future,” other titles,

Peter Drucker

Various publishers

“Marketing Management, 7th Edition”

Philip Kotler

Prentice-Hall

ISBN 0 87692 684 7

“Ogilvy On Advertising”

David Ogilvy

Pan Books

“Common Sense Direct Marketing”

Drayton Bird

ISBN 1-89051-5444-X

“What Do Your Customers Really Want?”

John F. Lyttle

ISBN 81 7446 000 4

“Wired” magazine

Various issues, particularly February, May, September 1995

‘Byte’ magazine

Various issues

“AsiaWeek”

Various issues

Advertising Agency Standards of Practice:

Malaysia, Singapore, Thailand, Hong Kong, U.K.