

They know when you are sleeping, they know when you're awake

The busy elves of geodemographics are hardly Santa Claus. Their aim is to separate you from your money, by tracking consumer habits across the country, postal code by postal code. Businesses and politicians say it helps them serve you better. At the least, reports ERIN ANDERSSON, it makes for a most peculiar map of Canada

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It is Tony Lea's job to know what's on your Christmas list. Hand over your postal code, and he can say whether you're more likely to watch Will and Grace or World Cup Soccer, and whether you probably prefer rice cakes or pasta sauce, Zellers or Banana Republic.

A few mouse clicks on his computer, and he knows that WASP men in Canada spend half as much money on their hair as other Canadian men do. He can find the country's leading coffee addicts, in Medicine Hat, Alta.; the main connoisseurs of quality wine, in Quebec City; and the coolers stocked in the hunting lodges of Northern Ontario.

On his map of Canada, Oshawa, Ont., has more bottle blondes than the national average, while Shawinigan, Que., has the most people -- by far -- in dentures. The citizens of Barrie, Ont., are among the most likely to be on a diet. Calgarians are busy jet-setting off to exotic locales, Vancouverites like to be the first to own new gadgets and, in Sherbrooke, Que., they're investing in more than the average share of condoms.

Tony Lea is a data miner. For the past 20 years, he has been tabulating and mapping bits of information from surveys and census data about the consumer dreams and financial realities of Canadians, and popping out a statistical prediction of their likely behaviour the next time they pick a movie or a restaurant, or hand over their credit cards at the mall.

Mr. Lea doesn't know your name. But from juggling postal codes and probabilities, he claims he has a good idea how you live and what you buy -- and a lot of high-profile companies believe him.

As a vice-president at Environics Analytics, he runs one of the Canadian companies that tell people trying to sell you stuff how to track you down and get your attention. He advises banks where to locate new branches, he knows which grocery stores should stock thin-crust pizza and he can design direct mail to your presumed tastes. A few years back, with great success, he told the Liberal Party what to say (and not to say) to woo swing voters in certain neighbourhoods.

This season, the average Canadian will spend more than \$500 on Christmas gifts, and another \$400 on all the seasonal trappings, including food and entertainment. That's a whole lot of credit-card and company-reward-card swipes at the cash registers of the nation -- to say nothing of the smiling salespeople asking for your postal code. With each transaction, buyers give a little snippet of information to the sellers who hope to pry open their wallets again in the future.

In the old days, a company could run a commercial on a couple of national television networks and wait for the shelves to empty. Today's buyer is more elusive, more variable and more immune to the ubiquitous sales pitch. We watch cable networks and satellite TV, and hide from commercials altogether by downloading our entertainment. The mass has disintegrated into segments; the nuclear family into random sortings. Swamped in the white noise of endless advertising, we have tuned out.

To tune us back in, market researchers have taken to clustering our life choices into trendy categories, hoping to figure out what we want before we even know we want it. Privacy laws in Canada mostly prevent companies from

trading our names, so they are stealthily charting our locations.

They're counting on the prevailing theory of ravenous consumption -- that we are what we buy. And that along with all those Christmas presents they entice us to shove under the tree, we, too, can be packaged into a nice, tidy box.

Mr. Lea's field of geodemographics is based on the simple premise that people act and live roughly like their neighbours. Neighbourhood spending patterns can be drawn on a map the same way a cartographer would sketch a mountain or river valley.

Demographers group people into clusters, using census data to determine factors such as income, education and ethnicity, and overlay the findings with consumer purchase and attitudinal data. The information is matched to the country's smallest census areas -- there are 53,000, averaging about 350 households each. A computer program "clusters" the areas by demographics, behaviours and values; for practical use, such as direct mailing, postal codes are matched up to the clusters created.

For instance, when Environic Analytics ran their Canadian data through the computers, 66 consumer clusters were identified and tagged: The Young Digerati live in the city with prosperous jobs, get their clothes dry-cleaned and eat yogurt; the middle-income Ontario Originals frequent casinos and prefer pickles; the Nearly Empty Nests watch the Weather Network over bowls of bran cereal.

Not surprisingly, the wealthiest cluster -- the "Cosmopolitan Elite," representing only 0.21 per cent of the country -- shows up in the postal codes of Toronto's Forest Hill and Montreal's Westmount, where annual earnings average more than \$330,000 and the neighbours go sailing on the weekend.

This kind of research has been occupying geographers since the 1920s, when they first started mapping out where elderly people lived and which neighbourhoods had higher incidences of diseases. The technique has been used to chart school scores and to locate clinics in communities with low-birth-weight babies. In the 1970s, an American company called Claritas hit on the idea of using it to track consumers; they were the first ones to give the clusters trendy-sounding names.

Since then, geodemographics has become a mainstay of marketing research, with faster computers cataloguing larger piles of data. Using postal-code clusters, companies have positioned billboards, charities have targeted their mailbox appeals and universities have matched up college roommates.

A bank wanting to sell more GICs, for instance, would study the profiles of its existing GIC-owning clients to find customers residing in the same cluster, betting that they're the ones most likely to respond to a direct mailing.

An expanding company would analyze which clusters included their biggest customers, and open new locations in neighbourhoods that have more than their share of that sort of person. That's one reason why you get asked your postal code so often at the cash register these days. Retail stores want to track where their customers live and what they purchase, in order to target the biggest-spending potential buyers.

One of Tony Lea's early commercial successes using his geography training came in 1985, when he set up a program for a real-estate firm that helped find homes for transferred executives. Until then, the employees were promised a housing allowance for whatever home they found and otherwise left alone. Of course, most people picked a place better than the one they had left.

"Corporations like the banks just got killed in transferring people around, because everybody went up two notches in their neighbourhood type," Mr. Lea says. He designed a system to match the living standards and demographics of the employee's old neighbourhood with residential areas in the new city. A Toronto executive arriving in Calgary would get a map of all the streets where he could buy a house and be covered by the company. If he moved into a higher-end neighbourhood, he would have to bear some costs himself.

Next October, Fairmont Hotels will open a new resort in the Mexican Riviera, based largely on information from geodemographic research. Sean Taggart, executive director of marketing services for the Canadian-based Fairmont chain, says cluster data showed that the chain's typical client was likely to be travelling to Mexico. And the useful thing, Mr. Taggart says, is that Fairmont can use addresses to compile such information without hassling a single customer.

Politicians, too, naturally see the value in a system that increases their odds of delivering a customized message to the voters most likely to listen.

In the last U.S. election, Republicans combined television-viewing habits with lifestyle data to target their advertising dollars. They discovered, for instance, that their party faithful tended to stop watching TV earlier in the evening than Democrats. Americans most likely to vote for George W. Bush often favoured the Golf Channel, while John Kerry voters liked the Game Show network.

The Liberal Party of Canada began using cluster research in 1993, with the assistance of Mr. Lea and a team at CompuSearch, his then-employer. Using clusters, the party focused its mailings on issues believed to be key to the people living at certain postal codes within swing ridings.

Young City Singles received flyers on education costs, and Mortgaged in Suburbia opened their mailboxes to brochures on deficit control. Of the 40 ridings where pamphlets were targeted by cluster, 35 went to the Liberals, sweeping Jean Chrétien into power.

Senator Terry Mercer, the Liberals' former national director, says MPs are now urged to buy the cluster program to direct messages to different groups of constituents -- a tool particularly useful in ethnically diverse ridings.

"If you know that within one postal walk, there's a very high density of seniors, then there's not much sense in sending them a letter on primary education," Mr. Mercer says. "Anybody who ignores geodemographics today is going to pay the price at the polls."

If this all strikes you as an unsettling trespass into personal privacy, experts say not to worry -- yet. For one thing, cluster research can't find you. It's only good at finding groups of people who might look like you.

"Demographics are crude predictors of behaviour," says Dan Putler at the University of British Columbia. Cluster research does a good job of pinpointing neighbourhoods and weighing out averages, he says, and it comforts advertising executives with a mental image of their target consumer. But it becomes a fuzzy instrument when focused on individuals.

Geodemographics can find a clump of married professionals with expensive houses in the West Side of Vancouver, but it would probably miss the starving university students renting out their basements. It could report that the average person in one cluster zone spends, say, \$300 a year on bicycle gear -- but it can't tell you which households are buying bikes for their kids and which ones are single guys buying a set of high-performance carbon-fibre pedals.

"At some level, there is a form of sausage-making going on," Dr. Putler says. "But it's hard to argue anyone is being harmed."

Compared with consumers south of the border, Canadian shoppers can count on more privacy at the cash register -- in part because the country's smaller market makes it less profitable. There is no equivalent to the massive data-farming firms south of the border that have collected birth records and property transfers and spending patterns for 200 million specific American addresses.

If you lived in the States, those firms could stand at your door and tell a marketer roughly how much money you make. In Canada, new privacy legislation -- both federal and provincial -- makes it harder to gather personal information and illegal for companies to share lists. Even Statistics Canada makes companies pay for census information that is freely accessible on the Internet in the United States.

According to a recent study, Canadian companies are more likely than American firms to see a corporate benefit in protecting privacy.

A summer survey of large companies in North America, conducted by the Ponemon Institute in Arizona, found that 61 per cent of Canadian firms linked strong privacy practices to customer trust and brand loyalty, while only 17 per cent of U.S. firms said the same. Canadian companies were far more likely to have privacy training and dedicated privacy officers, more likely to collect customers' preferences on privacy and more likely to give consumers a say over how their personal information is shared.

Joan Hazar, president of the Consumer Council of Canada, says the main issue now is making sure customers know exactly where their information is going and how it might be used. Last month, for example, her husband went to the emergency room of a Toronto hospital, and a few weeks later, he received a call from the hospital foundation asking if he wanted to make a donation.

She thought the two incidents were tied, that perhaps he had unknowingly given consent in the small print of a form he signed while waiting in Emergency. But it's not the call she objects to -- it's not being certain of its origin. That's why, she says, consumers rarely call her council to complain about the issue: By the time they get a flyer in the mail or a telemarketer on the phone, they can't track the path of their personal information. Legislation is a good step, she says, but it can't eliminate misuse.

This month in Edmonton, the bank records and cellphone contracts of thousands of consumers were discovered in a hotel room after police arrested two suspects in an identity-fraud scheme.

"The good guys are probably doing what they have to," Ms. Hazar says. "But with most situations it's not the good guys we have to worry about."

Consumers get increasingly uneasy the more personal the pitch, says Dale Griffin, a marketing professor at the University of British Columbia. "When someone says, 'I know you really care about this issue, that you really worry about this,' it makes consumers feel they are losing control. It's as if they can't fight against it."

But Tony Lea and his colleagues say an effective cluster system has advantages for the consumer. In an ideal world, it would cut down on junk mail, because you would be more likely to receive flyers that match your interests. At the cash, a well-informed salesperson would know the coupons you would use, or the sales merchandise you would like to hear about. In a well-clustered world, you would feel honoured and valued, not spied upon.

Mass personalization may be the "Holy Grail of marketing," Prof. Griffin says, but corporations aren't anywhere close to finding it. For one thing, he suggests, they haven't figured out how to effectively sort the mounds of consumer data they have been collecting. Consider the information drawn from a single grocery reward card entered on every purchase of fresh broccoli and frozen pizza, pile on a million other customers making their own purchases every week -- and then try to cherry-pick a relevant pattern to shape consumer behaviour.

"They have a million things that you do," Prof. Griffin says. "Even for their own good, they probably know too much."

What they do know, however, suggests just how much our shopping habits are shaped by environment and our desire to belong. The cluster data say we shop in packs -- that you'll find Volvo drivers on the ski slopes, and people with MP3 players sitting in the stands of a soccer game.

And it makes a strong case for cultural influences. When Environics ran its numbers, it produced 15 clusters that were distinctly Québécois. Quite aside from French as a first language, Roman Catholic faith and common-law partnerships, Quebecers shop differently than English-speaking Canada. Quebec cities appear as almost uniform groupings, keen on good wine, fine restaurants and high fashion. One study found that Quebecers and New Yorkers together outclassed the rest of the continent in fashion-consciousness.

At the same time, only 16 Canadian clusters easily correspond to those in the United States in identities, values and purchasing habits -- leaving 50 clusters unique to Canada.

The numbers highlight cross-border differences: Our ethnic groups are more tightly knit; our richest citizens tend to live downtown, whereas the wealthiest Americans live in the high-end communities outside the urban core. Canadians are more likely to cycle; Americans are more likely to play basketball.

They also belong to more auto clubs, but then we spend less per capita on our cars than our southern neighbours, and we buy vehicles differently. In Canada, large SUVs are family transportation; in the United States, they are more commonly purchased by petite women with security concerns in big cities.

We eat and drink differently: Americans are more than twice as likely to snack on doughnuts as Canadians, surprisingly enough. And Pop Tarts, a big seller in the Southern United States, found similar favour in Canada

only among families in rural Newfoundland.

In the States, ice tea has been found to be more popular in mid-Atlantic cities such as Washington and Philadelphia than even the traditional south; in Canada, the biggest ice tea drinkers are found on the prairies in Regina and Saskatoon, a completely different demographic.

Americans drink more bottled water, and pop more pills for their headaches. However, while the United States is statistically more crime-ridden than Canada, consumer data say burglars are equally likely to find security systems in homes in both countries.

For marketers, the differences mean an advertising campaign can't always jump borders, even in the relative homogeneity of North America. Even in a global economy, consumers don't abandon their communities -- or their countries -- to blindly shop "on message."

As for those glittering boxes under the Christmas tree, their contents, according to Tony Lea's calculations, depends on the neighbourhood.

If you live in Cape Breton, your odds of ripping open a shiny new watch are better than average. And if you live in Brantford, Ont., you better stock up on batteries: There's a good chance Santa left someone in your family a remote-controlled toy car.

Erin Anderssen is a feature writer for The Globe and Mail.

Test your Canadian consumption quotient

The marketing science of geodemographics breaks the country down into recognizable "clusters" of consumer habits, by region, city and even neighbourhood. Can you connect each illustrated category of purchase to the Canadian city where it's unusually popular? The answers are in the accompanying story, but for a cheat sheet check page F8. (Information based on data from Statistics Canada, Environics Analytics, Print Measurement Bureau, and BBM Canada.)

Answers to quiz on page F1

Coffee addicts - Medicine Hat; wine connoisseurs - Quebec; bottle blondes - Oshawa, Ont.; denture wearers - Shawinigan, Que.; dieters - Barrie, Ont.;

remote-controlled car fanatics - Brantford, Ont.; gadget-mad - Vancouver; condom users - Sherbrooke, Que.; Pop Tart eaters - Newfoundland;

ice-tea drinkers - Regina

What's next, mind readers? Yes

In the study of shopping, the consumer is the lab rat enticed into the mall maze -- an odd creature, alternatively fickle and fawning over brand names, demanding of choice and then flummoxed by too much of it. Trying to figure out this creature is a \$550-million industry in Canada alone.

Research suggests that social networks and attitude play a key role in human consumption. One study found that men are more likely to overspend if they are with a woman they consider a potential mate; other research has suggested that shoppers in a good mood are more easily swayed by celebrity endorsements.

Other studies have reported the "compromise effect": Faced with three products of increasing cost, consumers are more likely to choose the medium-priced item, even if it hasn't many more features than the cheapest. Companies have freely admitted to using this research, says Ian Skurnik, a marketing professor at the University of Toronto, by introducing inexpensive models just to spur sales in the more profitable mid-range options.

Faced with this conflicted, impulsive, wavering customer, market researchers have turned to technology to unlock the secrets -- literally -- of the buyer's brain.

Neuromarketing. This fledgling area of consumer research -- with its creepy-sounding name -- caught on after a recent experiment that strapped subjects to MRI machines and recreated the Pepsi taste test. In the blind tests, brains scans showed that people favour Pepsi over Coke. But when the participants were told what they were drinking, Coke became king, lighting up the medial prefrontal cortex, a higher-thinking region of the brain, even if the subjects proclaimed their love for Pepsi -- hard-science proof of an effective ad campaign.

More experiments are under way to chart how the emotional part of the brain reacts when watching commercials and deciding purchases. Specifically, says Steven Quartz, a Canadian researcher at the California Institute of Technology, marketers hope for a hit in the brain's Brodmann Area 10, which lights up when a product accords with our self-image.

Dr. Quartz has used brain scans to test how women reacted to movie previews with former wrestler The Rock. In questionnaires they generally rated him as unattractive -- but when they watched him, the scans flagged activity in the part of their brains linked to facial beauty. Marketers think that the brain gives a more honest opinion than a focus group.

Commercial Ethnography. If they can't get inside our brains, marketers will do their best to get inside our lives. Commercial ethnography studies and films consumers in their natural environment, the way anthropologists first began studying other cultures more than a century ago. The technique has been used to brainstorm new products and test designs.

For instance, one U.S. company followed and videotaped engaged couples using J.C. Penny's wedding registry, to suggest ways the retail chain could redesign its Internet service.

In its latest incarnation, "global ethnography," researchers compare consumers in different countries to determine how culture affects the use of products and how international marketing campaigns can be adapted to sell them.

The Internet. Why drag people off the street and solicit their opinions, when consumers can volunteer their thoughts and feelings in their pyjamas, sitting at the home computer? The Internet costs less and offers faster results, and the use of on-line diaries and surveys has caused a major shift away from traditional focus groups.

Some companies test commercials by e-mailing them to selected customers who record their feelings about it on a mood meter. One Boston-based marketing firm tracks subjects throughout the day, monitoring purchases and peppering them with regular questions via wireless connections: What magazines are they reading? What conversations are they having with their friends? What ads do they remember? And what products they finally buy?

"There's almost no excuse for a marketer not to be digging into their customers' spending preferences," says James Chung, president of Reach Advisers. "It's within everyone's reach."



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