

Bogdan Mróz Szkoła Główna Handlowa w Warszawie

# CONSUMER SOVEREIGNTY AT A TIME OF GLOBALIZATION AND ICT EXPANSION

Living in a globalized world with robustly expanding information and communications technology, the 21st century consumer is exposed to innovative business models emerging in the cyberspace. On the one hand, this offers a chance of consumer empowerment and wider choice but on the other, previously unknown issues and threats are making themselves felt, among them electronic surveillance and loss of privacy. In the present article, an attempt is made to diagnose the chances for, and threats to, consumer sovereignty resulting from globalization and swift development of new information and communications technology.

Key words: consumer sovereignty, globalization, information and communications technology.

## Introduction

The purpose of this article is to specify how the growth of information and communications technology (ICT) influences the extent of sovereignty of the contemporary consumer, and also to identify possible threats in this field (electronic surveillance, profiling of internet users, loss of privacy, etc). The hypothesis put forward herein is that the contemporary consumer (especially in the lower age brackets) condones the loss of privacy, regarded as a sort of currency buying access to online content, which may result in a loss of consumer sovereignty.

### Source material and research methods

The author critically analyses specialist literature on ICT and consumer sovereignty (books, articles, research reports, etc.), while leveraging his own experience and reflections from an array of research projects on consumer behaviour.

# Results and discussion

ICT's capacity to process, systematize and group enormous amounts of data in different breakdowns is very useful in creating value-added for the consumer [Sobolewska 2011]. There are a number of conditions to be met in order to develop good relations with consumers based on a skilful use of collected data, both hard (e.g. demographic numbers) and soft (e.g. psycho- and sociographic information on lifestyles and consumer behaviour). Among these conditions are the following:

- well developed marketing procedures
- capacity to easily collect names, addresses/locations and data on consumers' shopping patterns

- capacity to collect repeat-purchase data upon sales
- capacity to create and browse the company's own databases
- capacity to offer customer loyalty programmes, bringing tangible benefits to both parties [Szwarc 2010].

The need to gather detailed information about consumers reflects the circumstance that the era of standardized marketing strategies is drawing to an end. Geodemographic specialists, profiling characteristics of populations in various geographic areas, note that consumers have been growing increasingly diverse in terms of ethnicity, income, wealth, lifestyle, embraced values, etc. As found in the 1970s by Claritas demography agency, 40 factors sufficed then to describe the lifestyles of the US population, but in the opening decade of the new millennium that number rose to 66 [Rigby and Vishwanath 2006].

Retailing has been the scene of tremendous technology change, from credit/debit card readers at point of sale (POS), to data mining software, to online sales, to radio-frequency identification (RFID) which uses chips to pinpoint and track tags attached to objects. As a result, merchants can access valuable data about local preferences and consumer behaviours, immediately identify differences between the structures of supply and demand in particular outlets, and swiftly react to make corrections bringing their offer in line with consumer requirements.

The US retailing giant Wal-Mart, in a search to establish the right pattern of supplies to its stores, uses a huge date base of its the Retail Link software, making it possible for local managers to go through a two-year history of daily sales of any product in any of the chain's outlets. Leveraging Retail Link, Wal-Mart and its suppliers can generate maps of local demand, indicating when and where a given product should be included in their offer. At the beginning of the first decade of the 21<sup>st</sup> century, Wal-Mart had only five planograms (schematic diagrams showing how products should be shelved) to align its soup offer with local preferences. Five years later, the chain and its suppliers had as many as two hundred carefully designed planograms for this purpose. The system is also used by producers, as a tool to monitor sales and inventories at Wal-Mart stores and distribution centers, and also develop pricing and marketing programmes to drive sales [Rigby and Vishwanath 2006].

In seeking to understand changes in consumer behaviours and quickly respond to new trends, the key to success is harnessing technology to collect consumer big data, process these data and use them for marketing purposes – which requires having effective in-house analytical departments and engaging with specialist agencies for market insights, marketing analytics, database storage, information processing, etc. Managements and marketing staffs today have access to huge amounts of consumer data, but they not always know how to handle this treasure. The "data flood" is a tough challenge that must be taken head-on by pretenders to a leading market position. This is how the US statistician Nate Slater describes the problem: "Every day, three times per second, we produce the equivalent of the amount of data that the Library of Congress has in its entire print collection. Most of it is...irrelevant noise. So unless you have good techniques for filtering and processing the information, you're going to get into trouble" [Nichols 2013].

An example of a company whose business models draw on consumer data and refined analytical tools is Netflix, a provider of on-demand internet streaming TV and

films, with an offer adjusted to internet users' personalized tastes and preferences. And Yahoo has acquired a data mining operator, whom the company tasked with researching correlations between the content of pages viewed by visitors (including advertising content) and the interest of internet users, as reflected e.g. in click-through rates.

Another way of leveraging technology to meet consumer needs has been employed by the UK company Tesco, which after entering the South Korean market faced problems caused by limited opportunities for expansion in the conventional distribution channel and a much smaller number of retail outlets as compared with the market leader. Upon closer scrutiny of local lifestyles and daily routines of in-a-hurry consumers, the company hit the nail right on the head: it installed virtual stores at subway stations, where commuters waiting for their trains can make a picture of selected items with their smartphone, and then order home delivery [Solon 2011].

Companies relying on one-on-one marketing collect information about their customers and then contact each one individually to create lasting personalized commercial relations. These customers themselves provide their data to the company, which may gain insight in a variety of ways, including:

- registration forms (completed while requesting a newsletter, opening a user account, etc.)
- questionnaires
- monitoring of shopping history and pages viewed by internet users
- statistics of website traffic
- reading comments and opinions on chat forums
- feedback monitoring and customer engagement systems (e.g. sugester.pl, uservoice.com)
- tracking click streams for e-mailed links
- e-mail communications [Szwarc 2010].

All these methods can be applied individually or in combination. With professional management of customer relations, the company gets previous information about the behaviour, preferences, expectations and unfulfilled requirements of its clientèle. An in-depth analysis of these characteristics is a *sine qua non* condition for effective marketing, thus enabling the company to quickly respond to the changing consumer expectations by adjusting its offer accordingly. At this time of fast changing market trends, customer data must be collected on a regular basis, as only in this way can the changes be identified and handled on time.

Special kind of insight – increasingly appreciated, because it is hard to obtain or entirely unavailable elsewhere – is provided by social networking services, offering communication channels for people gathered around common interests. Their users contribute contacts and connections (the so-called media graph), and can themselves meet new acquaintances. Mechanisms involving other kinds of knowledge, such as chat forums, are also involved in these services, but it is the cumulative "relationship capital" – a network of friends, translating into user numbers – which determines why a certain site overtakes others and pulls companies, advertisers and other entities [Doligalski 2009].

One such website, with over one billion registered users worldwide, is Facebook – a powerful marketing tool, where plenty of information about users is provided by the users themselves (e.g. while preparing and updating their profiles), thus

making it much easier to personalize offers and align the advertising message with user requirements and expectations. For example, if a user posts a photo from a skiing outing, or writes about it, it is very likely that an advert from a skiing gear and accessories shop will soon appear on his or her profile. Which adverts go there – taking up no more than a dozen or so percent of overall content – is determined by the Facebook algorithm known as EdgeRank [Miłosz 2013].

While offering internet users access to seemingly unbounded knowledge, a multitude of thrills and attractions, online shopping, etc., the cyberspace also poses threats which enthralled technology fans may easily overlook or neglect. Technology makes life easier, offering previously unknown opportunities for peer-to-peer communications (as reflected in the explosion of social networking) but also for business-to-people interactions. Companies have been handed a new, sophisticated tool to collect data about buyers of their products and services, with typical behavioural patterns being automatically identified and analyzed by servers, with the use of advanced data mining techniques. This process has revealed its added dimension when a recently published study found that 45% of the 185 most popular US websites share user data with other internet portals and services [Husak 2013].

Insights into the behaviour of online shoppers who use social media and engage in other kinds on web activity are "marketing munitions" for providers of various goods and services, who take advantage of the fast developing innovative software for network user profiling. Cyberspace marketing makes possible an interactive communication with customers, to whom a personalized offer can be presented, based on consumer data which were previously collected, processed and applied. The profiling of website users can yield marketing-worthy information about their preferences, skills, social and occupational status, finances, aspirations, requirements, interests, etc. which can be put to use with specialist online marketing tools.

User profiling can be open, drawing on registration questionnaires where the users themselves determine the extent and reliability of the information provided, or it can be hidden, where users' behaviours and reactions are watched on the visited websites, online stores, social networking services, etc., and then recorded using log files, cookies, session tracking modules, etc. [Husak 2013].

Typically, the collected user data are about demographics, knowledge and skills, interests, plans, preferences and patterns of online behaviour (e.g. using price comparison sites, appraisal and recommendation systems, etc.), which makes it possible to come up with highly accurate marketing offers and personalized promotional messages. This behavioural targeting, while arming marketers with a new weapon, also breeds potential threats to web users' privacy, personal data protection and, in fact, their sovereignty. In April 2012, Visa applied for a patent for a technology to profile credit card holders, based not just on transaction history but also information from social networking media and insurance companies, which would produce more refined profiling and improved offer personalization. More than that, Visa and MasterCard, the two largest payment systems, have plans to integrate their databases. The merging of transaction history on individual accounts with the account holder's personal data will create an ideal package for potential advertisers, setting the stage for an exchange of customer insights with marketing firms – a prospect which raises concerns among NGOs and institutions tasked with the protection of personal data [Husak 2013].

New profiling opportunities are also arising in respect of mobile phone users. With a technology developed by he UK company Path Intelligence, shopping malls in Europe, Australia and the United States can track shoppers' movement with the accuracy of a couple of meters, learning how much time an average visitor spends in a store, how many shoppers also visit other establishments, etc. – a kind of information which can be used in merchandising activity and promotional campaigns. But such hidden surveillance, which doubtless pleases marketers and distributors, is not necessarily to the liking of the consumers, because it poses a threat to their privacy and decision-making sovereignty.

What makes the highly personalized consumer offers possible is the collecting, analyzing and leveraging of big data (involving demography, socio- and psychography, click streams, etc.). Referred to as the "next best offers", they nudge consumers towards specific products and services. One case in point are Microsoft's e-mail offers (directing users to the Bing browser) which instantaneously get adjusted to the customer profile upon opening. In the space of 0.2 second, advanced analytical software presents an offer based on the latest information about the customer's location, age, gender, cyberspace activity (past and most recent), etc. [Davenport, Dalle Mulle and Lucker 2012-2013].

The "next best offers" (also known as predictive offers) target the customers who have already bought the company's products or services, those who will likely get hooked and make another purchase. In designing these offers the so-called predictive models are drawn upon, to get the highest possible probability of achieving a certain outcome.

The customer profiling tools may serve a number of company goals, including higher profitability, better competitive position, increased customer loyalty, etc. In Tesco's strategy of its next best offers, the emphasis has been on increasing sales to regular customers and tightening their loyalty via personalized Clubcard vouchers [Davenport, Dalle Mulle and Lucker 2012-2013]. The Clubcard programme tracks customer data (which Tesco stores they visit, which products they buy, how they pay), thus allowing the retail chain to adjust its offer to local tastes and diversify it between individual outlets of various formats (from small convenience stores to hypermarkets). For example, a Clubcard programme participant buying nappies for the first time will be mailed vouchers not only for that particular item, but also for paper tissues and children's toys [Rust, Moorman and Bhalla 2010-2011]. Tesco has also been experimenting with the so-called flash sales to make its next best offers even more tempting to selected clients. They are issued with vouchers of up to thrice the standard value, but there are also stricter redemption deadlines, with a clock ticking and showing how much time and how many products are left before the offer expires, cranking up suspense and goading customers to respond quickly, just as the company expects them to do [Davenport, Dalle Mulle and Lucker 2012-2013].

Some information needed to prepare bespoke offers is relatively easy to get (age, gender, children, address, income, assets), but other data are more difficult to reach and have to be obtained, for example, via loyalty programmes (such as Clubcard). With access to a customer's shopping history and behavioural analytics, the company can predict his or her next purchase with a fair level of probability. Data have also been obtained from increasingly accessible social, mobile and location (SoMoLo) sources. In designing their offers, more and more companies take into consideration the customer's

current location, their interests as revealed by social media entries, and even the purchases made and topics discussed by their online friends. The personalized offers of Foursquare company, for example, reflect the frequency with which a given retail outlet has been visited. In a search for the best methods of turning SoMoLo data into marketing tools, the top US retailer Wal-Mart has set up a digital strategy department (@WalmartLabs) and engaged in acquisitions of social media technology start-ups. One of the new department's priorities is to develop ways of predicting customer purchases based on insights into their interests, opinions and views revealed on social media. As some consumer rights organizations point out, this opens the door to discreet manipulation of consumer behaviour, posing a threat to their sovereignty as decision-makers. In this context, the ancient Roman warning *caveat emptor!* is assuming a new, contemporary importance.

The popular coffee shop chain Starbucks draws on no less than ten electronic channels to send personalized offers, measure the degree of customer satisfaction, and learn the frequency of their response, in order to develop concepts of new products, to be supported by its brand ambassadors. Using a Starbucks application, smartphone users can receive personalized offers of discounts on purchases of food, drinks and other items, wholly based on data from social, mobile and location sources [Davenport, Dalle Mulle and Lucker 2012-2013].

The clothing retailer H&M, operating in the fast fashion sector, has teamed up with the producer of MyTown online game to collect and use location data about potential customers. When these play MyTown on a mobile device in the vicinity of an H&M store and log in using this device, the company rewards them with virtual clothes and points, and if they scan promoted articles at a shop they enter a lottery. Early results are fairly encouraging: among the 700,000 customers who logged in, nearly 43% (300,000) visited the shop and scanned a product [Davenport, Dalle Mulle and Lucker 2012-2013].

Useful marketing software, developed by Sense Networks, compares data on a particular customer's movements with billions of data on changing locations and features of other customers. Based on a customer's mobility history the software can estimate their age, income/affluence level, travelling patterns and, importantly, their probably next location.

These examples of how consumer-related data are collected and put to marketing use, drawing on sophisticated information and communications technology, demonstrate that new, more refined customer insight tools have come into the picture, helping companies to align their offers with consumer requirements and expectations, thus winning a competitive advantage.

R.H. Thaler and W. Tucker also point to the other side of the coin: government agencies and companies can and should arrange for smart disclosure of big data collections to the consumers, thus helping them with going through multitudes of market offers and with making right choices. This would be achieved using smart choice engines, allowing consumers to instantaneously obtain the requested information via smartphone applications. The two authors give the example of Tesco, which plans to launch a service through which consumers holding loyalty cards would get access to their shopping history and to a number of other functionalities, such as rational planning

of purchases. Tesco intends to open company data bases to consumers even before government issues the relevant regulations [Thaler, Tucker 2013].

#### **Conclusions**

The rise of the internet has triggered a revolution not only in business-consumer relations, but also in mutual contacts among the consumers themselves. Online communities have been emerging for users of a given brand to share their experiences, which – while promoting durable emotional engagement with the company – also makes it possible to gather invaluable consumer insights, extremely hard to obtain otherwise (or not available at all).

By collecting data about internet users companies can learn their preferences and expectations, which opens the way to employing subtle segmentation techniques, profiling consumers, anticipating their behaviours and eventually to providing them with the right value-added mix.

But it is hard to dismiss the thought that what this brave new digital world has to offer is not only a blessing for the consumer. The price consumers pay for having company offerings better aligned with their requirements and expectations is the loss of privacy, the threat of electronic surveillance, and exposure to sophisticated techniques of invisible velvet manipulation by omnichannel providers of goods and services. Consequently the sovereignty of the consumer, which the growth of information and communications technology would be expected to promote, may in many instances turn out to be illusory.

#### References

Davenport, Th.H., Dalle Mulle L., Lucker J., 2012-2013. Poznaj potrzeby klientów wcześniej niż oni sami [Learn customers' requirements earlier than they do], Harvard Business Review Polska, December-January, 116-125.

Doligalski T., 2009. Społeczne uwarunkowania marketingu w Internecie i e-biznesu [Social determinants of online marketing and e-business], e-mentor 1, 82-87.

Husak, Z. 2013. Zagadnienie gromadzenia danych o użytkownikach portali internetowych na potrzeby profilowania marketingowego [Collection of website user data for profiling purposes], in : Współczesne uwarunkowania promocji i reklamy [Contemporary determinants of promotion and adertising], ed. by A.J. Kukuła, Difin Warszawa, 90-102.

Miłosz M., 2013. Krótki poradnik e-konsumenta [A concise guidebook for the e-consumer],

Dziennik Gazeta Prawna, 8–10 February. https://edgp.gazetaprawna.pl/wydanie/52892,8-lutego-13-nr-28.html, accessed: 12 October 2015.

Nichols, W., 2013. Advertising Analytics 2.0, Harvard Business Review, March, 62-63.

Rigby D.K., Vishwanath V., 2006. Między standaryzacją a lokalnym dostosowaniem: rewolucja na rynkach konsumenckich [Between standardization and local alignment: a revolution on consumer markets], Harvard Business Review Polska, June, 90-103.

Rust R.T., Moorman Ch., Bhalla G., 2010-2011. Zmiana podejścia do marketingu [A change in approach to marketing], Harvard Business Review Polska, December-January, 60-71.

Szwarc N., 2010. Od masowej komunikacji marketingowej po personalizację w e-marketingu [From mass marketing communication to personalization in e-marketing, e-mentor, 3, 75-81.

Sobolewska S., 2011. Pozyskiwanie i wykorzystanie wiedzy klienta - możliwości i ograniczenia [Gathering and making use of customer insights – opportunities and constraints], Studia i Materiały Polskiego Stowarzyszenia Zarzadzania Wiedza, 50, 154-165.

Solon O., 2011. Tesco Brings the Supermarket to Time-Poor Commuters in South Korea, *Wired*, 30 June. http://www.wired.co.uk/news/archive/2011-06/30/tesco-home-plus-billboard-store, accessed: 26 October 2015.

Thaler R.H., Tucker W., 2013. Smarter information, smarter consumers, Harvard Business Review, January-February, 44-54.

# Suwerenność konsumenta w dobie globalizacji i rozwoju nowych technologii informacyjno-komunikacyjnych

# Streszczenie.

Konsumenci XXI wieku żyją w epoce globalizacji i dynamicznego rozwoju nowych technologii informacyjno-komunikacyjnych owocujących m.in. pojawieniem się innowacyjnych modeli biznesowych w przestrzeni wirtualnej. Z jednej strony daje to szansę upodmiotowienia konsumentów i zwiększenia zakresu ich swobody wyboru, z drugiej – stwarza nieznane wcześniej problemy i zagrożenia, związane m.in. z elektroniczną inwigilacją, utratą prywatności itp. W artykule podjęto próbę diagnozy szans i zagrożeń dla suwerenności konsumentów wynikających z procesów globalizacji i szybkiego rozwoju nowych technologii informacyjno-komunikacyjnych.

**Słowa kluczowe:** suwerenność konsumenta, globalizacja, nowe technologie informacyjno-komunikacyjne.

#### Informacje o autorze:

**prof. dr hab. Bogdan Mróz** Szkoła Główna Handlowa w Warszawie,

Kolegium Zarządzania i Finansów, Instytut Zarządzania, Zakład Badań Zachowań Konsumentów, ul. Madalińskiego 6/8, 02-513 Warszawa, e-mail: bogdan.mroz@sgh.waw.pl.