

Digital Marketing Communication

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1. External Corporate Communication and Global Markets

Corporate communication is an intentional process whose aim is to convey messages containing information and/or symbols that address several publics (internal, external, co-makers¹), pursuing goals that may be commercial, organisational or institutional, and can be activated using personal, nonpersonal or personalised mass tools (integrated communication)².

Corporate communication that addresses external audiences can therefore pursue commercial, institutional or organisational goals, singly or jointly, depending on the specific targets that it addresses and the contingent needs that triggered its implementation. For example, advertising that announces the opening hours of the branches of supermarket chains on holidays meets both organisational and commercial goals. Similarly, public relations initiatives that promote a business with specific audiences cannot be simplistically catalogued as pursuing institutional goals, without also recognising their commercial goals.

However, a significant part of external corporate communication is activated with commercial or primarily commercial goals and, in this case, it identifies so-called marketing communication. This communication is therefore designed to convey to specific audiences messages designed to simplify marketing processes and, for this reason, it primarily addresses intermediate and/or final demand.

Final demand identifies the last purchaser of a product, who often coincides with its consumer; intermediate demand, on the other hand, identifies the customer or customers who are in an intermediate position on the supply chain and who purchase a product to use it in their own activities, whether these entail manufacturing or commerce.

The distinction between the targets of marketing communication clarifies the various ramifications of this type of communication in global markets and originates inside the company, reflecting the different commercial and therefore communications goals that characterise relations with intermediate demand and those put in place with final demand. However, better understanding of the motivations that induce companies to

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develop different types of marketing communication (related to the tools activated, the subject of the communication and the manner and times that characterise it) leads us to consider certain clarifying elements that are exogenous to business management. In this sense, the competitive dynamics that characterise the market context in which each business operates may be a useful interpretative key: scarcity markets, controlled-competition markets and over-supplied markets³.

1.1 Product Communication and Scarcity Markets

In global, scarcity markets, where global demand exceeds supply in terms of available goods, marketing communication tends to concentrate on the product or, more generally, on a company's product range, with the primary goal of informing final demand.

□ *Advertising campaigns by vehicle fuel manufacturers communicate the existence of a new product with particular properties (for example, in Italy, VPower diesel from Q8).*

A scarcity market (i.e. where the quantities offered and their prices are controlled by the supplying businesses) forces demand to search for the product anyway, and the purpose of commercial communication, usually conveyed by advertising, is to inform final demand of the presence of new initiatives, or to simplify the development of 'loyalty' to a brand or name. Faced with scarce supplies, customers tends to be motivated by reasons of proximity, so that they repeat the purchases where they can do so, according to their needs and consumption habits. In this context, rather than putting it down to purchasing loyalty, it should be simply seen as repetition, often motivated by the absence of valid alternatives⁴.

In fact, one of the main characteristics of scarcity markets is the presence of distribution structures that play a passive role in negotiations with the manufacturers that they depend on, either by direct ownership or by contract agreements (for example franchising, forms of exclusive licence, etc.), allowing the quantities to be sold and the price applied for the end customer to be determined for them.

The particular relationship that is created between manufacturer and distributor explains why the communication that the manufacturer addresses to his commercial intermediary is normally straightforward, essential and instructive. The distributor in turn organises his own marketing communication with the clientele (on the basis of precise agreements and with the manufacturer's explicit authorisation), normally using the points of sale, exploiting the opportunities for direct contact offered by proximity. The contents of these communications are usually limited to promotional offers that aim to attract consumers to a specific outlet and a particular purchasing method, in a competitive context usually distinguished by price competition.

1.2 Marketing Communication and Controlled-Competition Markets

In global markets where competition is controlled, and the various businesses share – and control – a saturated market, where corporate demand still has some

room to expand, marketing communication has plenty of possible applications, and tends to represent the key instrument for the expansion of corporate demand. In fact, on these markets, the alternative between competitive proposals is based less on immediately comparable variables such as price, than on 'soft' variables that mitigate the harshness of direct confrontation, like the image, perceived quality, design, etc. (non-price competition)⁵.

□ *The world's leading producers of industrial beer are also strong investors in external corporate communication, not only advertising, in order to promote the awareness and image of their corporate products. Advertising investment by the sector must be seen as one of the elements by which large manufacturers maintain their competitive position of market domination. In Italy, for example, the main beer producers that invest in advertising (Heineken Italia, Birra Peroni Ind., InBev Italia, Carlsberg Italia and Ceres) constantly invest between 4 and 5 percent⁶ of sales to sustain the expansion of global demand and to consolidate brand demand. Brand advertising aims to spread positive associations in the public, enhancing attributes of youth, fashion and dynamism, regardless of the product's alcohol content. In fact, the need to promote their brands by 'freeing' them from the negative connotations of alcohol, has led certain producers to innovate, introducing alcohol-free beer, often selling it under the same brands as their alcoholic products (Beck's for example), so as to transfer the positive connotations obtainable from suitable external corporate communication.*

Marketing communication addressing final demand adopts both indirect methods, i.e. communication tools which, like advertising, need the support of third parties (the media), and direct methods, structured to reflect the sector's specific needs.

□ *In the case of industrial beers, for example, one direct tool of external communication is the single-brand pub which makes it possible to convey corporate communications on the spot to a clientele that shows an active interest in the communication and, above all, can respond immediately to the communication received.*

In these competitive conditions, marketing communication is therefore the main means of conveying to final demand the brand identity that helps to differentiate corporate products and to ensure the support of specific brackets of the public, who respond with repetitive purchasing behaviour motivated by appreciation of a clear system of attributes and values promoted by the corporate brand communication. Purchasing loyalty is therefore sustained first of all by emotional factors of involvement and agreement, and then by cognitive support which tends to make the brand, and the product it represents, be seen as the best, because it is

perceived to be of better quality than competitive products. But this is entirely subjective and is the fruit of the complex system of supply and communication implemented over time by the businesses in the sector.

In this case, the pull policy takes hold, which 'envisages that it is the end consumer, on the basis of his own motivation, who chooses the product on sale at self-service outlets directly, or expressly asks for the product from the retailer in traditional shops. This policy presupposes that manufacturers will invest huge resources in persuasive communication tools (primarily advertising) to achieve good brand awareness and a very distinctive image. The product is therefore requested ('pulled') by the end consumer and retailers must make it available to the clientele and above all keep it in stock'⁷.

The price, although important, becomes a secondary variable in the consumer's selection process, partly because the competitive system of manufacturers and distributors tends to propose prices that are generally aligned at the same level.

□ *Cigarette smokers are little inclined to change brands and often maintain that their choice is the fruit of comparative analysis of different alternatives, and that the chosen brand has the most enjoyable taste. Any blind product taste shows that it is practically impossible to distinguish between 'similar' cigarettes. This underlines that what pushes demand towards a specific brand of cigarette is not so much the price, which is generally aligned between competitive products, but rather the system of attributes that each brand promotes to the public, using marketing communication.*

In this competitive context, marketing communication that addresses final demand concentrates on the development of a brand's quantitative (awareness) and qualitative connotations (image), and identifies the specific relationship between corporate supply and demand, tending to activate a system of responsibility which the business adopts in relation to the market⁸. A brand associates itself with specific products, but acquires an identity that is separate from them, enabling businesses to adopt policies of brand expansion and, generally, to articulate their use (for example, licensing⁹ or product placement¹⁰) and that of the portfolio of brands that they hold¹¹.

In scarcity markets, marketing communication is therefore quantitatively limited and concentrates on conveying information about the product, while in controlled-competition economies, the economic resources earmarked for external corporate communication are consistent and promote supply through the brand identified with it.

With particular regard to advertising communication (one of the tools used most frequently in communication that addresses final demand), the system of investments undertaken in global, controlled-competition markets, becomes a significant element that can influence corporate performance. On one hand, advertising communication aims to maintain awareness and to qualify the brand image (communication effect) in order to maintain or acquire share of mind in

demand, stimulating the purchasing process in time (sale effect). On the other hand, investments in advertising also represent a precise system of governing competitive relationships in the sector, and they represent the competitive position that each business intends to occupy. The overall effects of marketing communication for the brand are the result of continuous pressure exerted by businesses, i.e. by the accumulated resources focused on a target public for a specific period of time, and they force businesses to plan their investment. To avoid nullifying investment in their brands over the years, businesses must continue to spend to maintain the positions of awareness won, and to confirm the image connotations established with the public, continuously earmarking large percentages of their sales to external corporate communication. Targeting economic resources in this way, is compulsory in a competitive context where demand is saturated, in which a business's market share can only grow if the market share of other businesses declines. Investments in advertising therefore tend to be taken as an indicator of the trend of a business's market share. In time, an investment policy that is one of aggression, maintenance or withdrawal from a market will translate into a corresponding increase, maintenance or reduction of the market share¹².

This means that the leading companies in a specific sector can use their investment in advertising communication to maintain the competitive status quo, establishing a common spending level, to sustain the role of the brands in relation to final and intermediate demand, and controlling the stability of market share.

However marketing communication is used not only to support relations between the manufacturing concern and final demand, but also those between manufacturing concerns and intermediate demand, and between intermediate and final demand. In fact, in controlled-competition markets, intermediate commercial demand plays an active role in negotiations with the manufacturing system. The result is that the manufacturer is unable to impose his own conditions on the distribution system, but must take action, even in relation to his intermediate clientele, by developing suitable marketing tools (trade marketing), including marketing communication. This is what happens in the so-called push policy which 'envisages that it is the selling intermediaries, primarily retailers, who 'push' the product to the end consumer, both by a favourable display on the shelves in the point of sale, and by recommending the purchase of specific products and brands. This policy presupposes that manufacturers offer precise and continuous incentives to retailers (usually with elementary advantages, such as the concession of higher selling margins than those of the competition, the definition of exclusive selling zones, etc.) and that they maintain continuous contacts and relations with the sales force'¹³.

Of course, marketing communication that manufacturing companies address to the trade uses different tools from those used for final demand, partly because the goals of the communication, although essentially still commercial, are focused on bargaining relationships, where the 'soft' elements are supplementary and not fundamental. These relations stand out for the attention paid to the price and for the bargaining role that purchasers assume in relation to this variable. The price identifies the overall cost of the supply, which includes both the purchase cost of

the products and the costs linked to supply conditions (means of payment, delivery methods, delivery times, etc.).

Marketing communication between manufacturers and commercial intermediaries therefore draws primarily on direct personal relations between professional sellers and buyers, who undertake the selling or buying and specialise in bargaining relationships. In addition to the conditions that influence the purchasing costs and the potential margins achievable by the distributor, negotiations also regard communications between the manufacturer and final demand, autonomously (through advertising, price promotions, sponsorship, etc.) or at points of sale with the collaboration of the trade, and possible joint communication organised in partnership by distribution and the trade. The breakdown of the channel income represents the fulcrum of negotiations between industry and distribution. Different bargaining positions emerge depending on whether the relationship is forged with leading manufacturing companies (which are usually large, with good bargaining power because it is sustained by the potential to access consistent financial resources, and have well-known and successful brands in individual markets), or with smaller manufacturing companies with less bargaining power. In the first case, manufacturing companies manage to maintain leading positions and to impose conditions on the distribution system, taking advantage of the unique nature of their competitive brand position in relations with final demand and exploiting the competition between distribution firms in their own favour while, in the second case, smaller companies must adapt to the role that is left to them by the relationship between large manufacturers and the trade.

Marketing communication between manufacturers and distributors therefore focuses on the price and variables most closely linked to it (realisable margins, product rotation, brand awareness and image on the market, etc.) and is achieved by personal communication tools between professional groups, with the help of numerous forms of sales promotion to support negotiation¹⁴.

And finally, marketing communication also regards commercial communication flows from the trade to final demand (communication flows that support the distributor's marketing) which supplement the communication undertaken by manufacturing brands. This communication develops, in most cases¹⁵, thanks to the possibility of direct contact with the clientele at the point of sale, and the prime goal is to promote sales so as to create continuous opportunities for shopping expeditions and, in the long term, to favour bonds of loyalty with the neighbouring clientele.

1.3 Corporate Communication and Over-Supplied Markets

In global, over-supplied markets, marketing communication is part of a complex system of relations with the market, in which the achievement of commercial goals presupposes a competitive orientation to the market (Market-Driven Management). In fact, the state of over-supply is generated by businesses which, as a whole, propose products to the market that exceed the absorption capacity of demand in range and quantity. Global demand is therefore saturated and corporate demand has no room to grow, except by very aggressive

competitive action designed to exclude certain competitors from the market, or to incorporate them with takeovers or mergers. The competitive intensity that is generated on over-supplied markets means that businesses must be able to offer products which, in terms of variety and efficiency, allow them to reach intermediate and final demand 'before and better' than their competitors.

□ *The global system of car production and sales is an example of an over-supplied market, in which a few large manufacturers are gradually concentrating, acquiring smaller companies to increase their corporate market share and to boost their critical mass on global markets (for example, Ford and General Motors, which have acquired well-known European brands that are unable to face up to global competition, like Volvo, Saab, etc.). However, the global competitive system tends to favour businesses that really do act before and better than their competitors, like Toyota which overcame the supremacy of Ford and General Motors, launching continuous innovations to its own products (for example the hybrid petrol-electrical engine that powers the Prius and the Hybrid Drive family of the Lexus brand owned by the Toyota Motor Co.).*

Marketing communication therefore combines with the other forms of external corporate communication to manage the two-way relationship with the market. As a result, the subject of the communication is not just the product, or the company's products identified by a brand, but the company itself as the subject of the relationship with the market, capable of ensuring that a definite and subscribed system of responsibility is maintained¹⁶.

The importance of the relationship with the market attributes a key role to corporate communication in the competitive process of business management. Communication is the tool that develop this relationship from the business to the market (corporate communication to the outside world and to co-makers) and in the other direction, from the market to the business (corporate information system), but also in the distribution and sharing of communications and information inside the business (internal corporate communication).

In fact, complex organisations develop in global markets in response to the need to govern the competitive relationship, structured according to network models that are ramified in space and in competitive relationships (networks), so that internal communication and that between different poles of the network becomes a fundamental factor of constituent relations.

In these markets in particular, the boundaries between publics, tools and forms of corporate communication tend to overlap, reducing their significance. The publics addressed by corporate communication are increasingly interrelated, and the importance of the relationship that develops between a business and its publics make it impossible to classify and distinguish communications that are addressed strictly to external or internal publics or to co-makers. Communications that traditionally address internal publics also become important for external publics.

□ *Global interest in Corporate Social Responsibility in recent years and the response of demand and of the financial markets to certain global corporate crises have highlighted the importance of transparent behaviour regarding the use of child labour, the protection of workers, etc.. These provisions, whose primary purpose is to protect employees and society, have also become extremely important for other external publics who, spontaneously or helped by suitable initiatives by competitors, feel closer than ever and more involved in their consumption decision by businesses' behaviour.*

Or communication created to meet the specific needs of certain co-makers can also become significant for internal publics or for specific portions of external publics.

□ *The Internet sites of numerous global businesses (for example CNH, Unilever, Monsanto, etc.) include highly ramified and up-to-date sections that contain information regarding investor relations. This information draws together the financial sheet data and the main financial metrics for all the parties that have an interest in the economic-financial aspect of business management. These publics include institutional investors to whom other specific communication is obviously addressed, but also internal and external publics, not necessarily interested in investing in a company's risk capital.*

Marketing communication tools also tend to converge on combined and joint uses of traditionally planned tools that are applied independently and not only for marketing purposes. So direct marketing is combined with dedicated events and with advertising campaigns, with sponsorship associated with licensing, or the sales promotion that is activated for product placement initiatives, etc..

Where the form is concerned, the application of digital technologies allows corporate communication to combine the features of personal tools with the distinctive elements of nonpersonal tools, boosting the communication and information flows and channels that address the market and flow from the market to the company.

Even in this competitive context, marketing communication continues to underpin marketing relations with the market, and takes shape in the communication flows from the company to intermediate and final demand, and from intermediate demand to final demand. In fact, one peculiarity of over-supplied markets is the significance acquired by marketing communication flows, which develop between manufacturing companies and marketing companies, and between marketing companies and final demand, in other words the importance that marketing communication acquires in the context of trade marketing and the distributor's marketing.

In over-supplied markets it is global demand that is insufficient in relation to the potential supply. The result is that the system of supplier, manufacturing and distribution companies has to face up to conditions of intense competition. Distribution companies in particular are less protected from the proximity of demand due to the multiplication of competitors and purchasing alternatives, and must take competitive action both in relation to their direct competitors, and to manufacturing companies with which, nonetheless, they have to share a channel income that tends to become more slender as competitive intensity increases on the market. With the result that the critical aspect of marketing relations is shifted from the relationship between the manufacturing company and the final customer, to the relationship that develops with the intermediation of trade.

Manufacturing companies therefore develop trade marketing communication that helps to support the bargaining process with distribution. As the difficulties involved in sharing channel income are aggravated, companies have to be able to respond to trade on several fronts: selling prices, logistic solutions, product rotation and involvement in communication initiatives promoted by the trade.

□ *In 2004 Wal-Mart informed its major suppliers that by the end of 2006 they would have to be able to apply RFID (Radio Frequency Identification, a technology that uses radiofrequencies to transfer data from an aerial to a moving object to identify, track and locate the object itself) to materials handling. This imposition on its suppliers was motivated by the conviction that being a pioneer in the application of new technology could represent a significant competitive advantage. But then, studies analysing the impact of RFID technologies have shown that the use of these technologies in points of sale can bring a 16% reduction in out of stock products. This is of huge potential significance if we consider that for Wal-Mart the value of goods that are unsold because of stock breakages at point of sale level, is estimated to be \$1 billion¹⁷.*

In fact, thanks to the proximity of final demand and the availability of direct information about consumption, distribution has an undoubted bargaining advantage. This enables it to develop its own marketing communication initiatives in relation to actual and potential customers and to involve manufacturing companies in these initiatives, adopting an approach of governing the references and supplies so as to maximise the overall result. Manufacturing companies thus become the promoters of communication using classic tools such as advertising, often choosing joint initiatives in order to usefully involve manufacturing companies, or by activating 'new' tools such as customer magazines, i.e. magazines owned by distribution companies, issued regularly, distributed widely and with contents chosen and managed by the trade to reflect the needs of marketing communication. In this sense, distribution companies act as means of communication, and can choose how and when to promote their communication with the end consumer to supplier companies (trade media)¹⁸.

□ *The best known retail publications in Italy are the monthly 'Consumatori' from Ipercoop (founded in 1983), the magazine 'Bene Insieme' from the Conad and Margherita supermarkets, 'Despar Express' from the Despar consortium, 'Scegliamo Insieme' from GSCarrefour, 'Primizie' and 'Viviclub' from Selex, 'Gente Crai' from Crai, 'News' from Esselunga and 'Delizie' from the Interdis group.*

Italian retail customer magazines are all free, whereas that is not always the case abroad. In the United Kingdom, for example, two well-known retailers sell their customer magazines: 'Sainsbury's Magazine' costs £1.20, and 'Waitrose Food Illustrated' costs £2.20, while the others distribute theirs free of charge. We should point out that the magazines mentioned are renowned for the high quality of the services and articles they contain, as well as for their circulation and distribution all over the country (cf. Internet sites of the companies mentioned).

2. Digital Communication Flows and Channels

For the purposes of corporate communication, it helps to distinguish between communication channels and flows. The former are the means used to transmit a signal from the transmitter to the receiver¹⁹; they are therefore structures built specifically to convey communications and can comprise different elements, for example physical structures and roles organised to assist the transfer of the communication from the transmitter to the receiver.

A communication flow can be seen as an organised system of communications that travels from a transmitter to a receiver, usually following a channel. The purpose of the communication channel is to convey the communication flow. However, the communication flow can also pass outside the channel, finding a different route from the established one, and even creating a new channel to take additional flows.

Channel and flow can be differentiated because the former is a relatively static entity (i.e. varying very little in time) while the latter is by its very nature dynamic. The flow is associated with an action: it is important that at a given moment a transmitter activates the flow that will or will not be able to travel along a channel. The channel on the other hand exists regardless of the fact that there are flows transiting through it.

This distinction between channels and flows is an important aspect of corporate information and communication management. In fact, to transmit information and communication flows, businesses must invest in the creation (or identification) and maintenance of the most suitable channels.

The investment of resources in the creation of a channel, or in the maintenance that naturally follows, is therefore a positive factor if it is linked to efforts to cut the cost of transmitting information and communication flows. The more dedicated a channel is, the more expensive it will be to set up and manage, but the less it will cost to transmit the flows. In practice, the flows will be able to transit according to

the needs of the owner of the channel, with fewer risks of interference by external agents, i.e. with fewer costs to protect the flows themselves.

The channels along which the flows travel were not necessarily built for that specific purpose, but may have been ‘discovered’: whoever manages information and communication flows must therefore also identify and exploit channels not built explicitly for this purpose, but which nonetheless transmit the flows effectively. That is the case, for example, of virtual communications, many of which are created by parties who share a common interest, without the prior intervention of a company or a specific association. Businesses may consider these communities as channels to convey their information and communication flows²⁰.

In today’s global markets, where ICT (Information Communication Technology) is now widespread, information and communication channels are primarily digital channels (adopting specific technologies that continue to evolve in time, from the duplex telephone line, to optic fibres, wireless connection, etc.), while communication flows are digital packages that can contain data, sound, images, film or various combinations of the same, indifferently²¹.

Digitalisation has made it possible for numerous channels to develop (analogic first and then digital), both reserved and public, which clearly simplifies the circulation of information. The former entail high development and maintenance costs, but they offer greater guarantees regarding the security of the transfers; the latter tend to be associated with almost non-existent costs to use the channel, but demand high investment to protect the flows transmitted and received²².

The activation of communication and information flows and the use of suitable channels also depend on the costs and advantages obtainable. In this sense, ICT technologies based on digitalisation have fixed acquisition costs and gradually decreasing flow transmission and management costs. The highest cost may be associated with the development of a private channel, with consequent economies in the transit of flows that do not need dedicated investment to protect them. The use of public channels, on the other hand, cuts channel development costs, but entails high variable costs to govern the flows sent.

For the purposes of corporate communication, one of the most significant aspects of digital technologies is the possibility of controlled execution (feed-forward) and the return flows (feedback) associated with every communication flow. The result is that correct outgoing flow programming makes an adequate return flow possible, at no or at most very modest cost²³.

And finally, the alternative of using private or public channels is linked to the identification of suitable security supports for the flows sent and received by every type of channel. In fact, neither for digital communication flows, nor for analogue flows, is there any guarantee of perfect protection, because the development of protection solutions that cost less is also associated with the evolution of the capacity to ‘disturb’ that makes it necessary to search unceasingly for new ways to protect the communication and information flows and channels used by businesses.

3. Digital Marketing Communication and Information in Global Markets

The digitalisation of flows and channels impacts on all marketing activities, from analysis to operations, the definition of the most suitable product for the market, its distribution, price setting and, obviously, communication.

One important effect of digitalisation on marketing activities can be seen in particular in the way the boundaries between certain activities are collapsing, for example, in the field of communication and information. Corporate communication is used not only to convey a message to the market, but above all for the feedback that it can generate.

As digital technologies spread, each communication is also a 'launch' by the transmitter to trigger a response from the receiver. However, although it is embodied in the digital flow, this response is not in itself an 'automatic' reaction. There has to be some sort of stimulus that makes the receiver interested in responding to the communication received. This happens thanks to the active interest (i.e. the attention that the listener voluntarily dedicates to the communication) which develops in the targets of the communication, thanks to digital communication, or rather, to the fact that digital technologies make it possible to target communication flows precisely, determining their launch and reception in such detail, and intervening specifically on the contents, thus guaranteeing that the promoted communication can become a communication that impacts on the audience's active interest. In practice, thanks to digital technologies, information flows that would interrupt the audience's enjoyment of a medium in analogue mode, become an object of interest as such, and are sought after and acquired by the public.

□ *CdNow, a well-known Internet site that sells musical CDs (www.cdnow.com) asks potential purchasers to register. CdNow acquires certain essential data about each user, gradually updating them after each visit, by recognising the connection IP and using tools such as cookies, and is able to propose customised offers whenever the site is accessed, or even by email.*

Tailor-made offers and refined selection and promotion criteria are guaranteed by the contact established with each customer, who is asked to express his opinion of the proposals (with profiles made up of a combination of products, promotional price, etc.) in order to analyse each user's usage system and to propose purchasing solutions that meet the wishes of the potential purchaser.

This represents the change from push communication to pull communication²⁴. In push communication the company promotes a message and communicates it by 'pushing' it along a channel to an audience that is usually not directly interested in it (passive interest), whereas in the case of pull communication, the communication flow is actually requested by the market. So the market takes action to acquire the information flow (business communication), and thus has a precise interest in it (active interest).

The transformation of the passive interest of many communication flows into active interest is one of the most important innovations introduced to marketing communication by digital technology, responding to a precise communication objective of global corporations, to maximise the efficiency of the expenses met.

□ *The banners, buttons, etc. which open up in Internet connections to numerous sites, are forms of online advertising whose aim is to prompt the surfer to 'click' to obtain information about a product, a brand or a company offer. They demand the user's involvement and he chooses to search for more information, thus making it possible to transmit the corporate communication in a personalised form, in a timeframe and content that can develop an active interest in the user.*

Reactions that respond to digital marketing communication have a dual significance for the company that promotes them: on one hand they measure the effectiveness of the communication itself, while on the other they allow information to be acquired about specific figures targeted by the communication, enriching the knowledge profile and offering the company elements that are decisive for the entire marketing process.

Digital technologies allow companies to suitably manage enormous quantities of replies received from the various interlocutors, developing understanding of them in time (profiling) and investing in the relationship established. Profiling is one of the basic activities of digital marketing communication. It is a process that is activated when contact is established with the potential and/or actual customer, and an electronic 'reference' (IP, email, cookie, etc.) is associated with a person who is usually described and classified by identifying a first group of essential socio-demographic elements (for example, age, gender, cultural level, area of residence). The profile is built up gradually, with each new electronic contact, following the individual's behaviour, accumulating information about his Internet surfing and classifying his responses to precise, programmed stimuli, such as the proposal to purchase a promoted product.

The profile obtained is an important innovation in the development of marketing processes and communication in particular. In a context of analogue contacts, it would be entirely impossible to acquire knowledge of each individual making up final demand. For this reason, companies identify global demand for their products, analyse it and divide it into segments outlined on the basis of criteria that are consistent with their ability to affirm and communicate offers to the market (segmentation). They then select the target segment or segments that they consider the most interesting on which to concentrate their marketing efforts, including marketing communication.

The target thus constitutes a theoretical group of individuals identified by a deductive process that originates from information about demand and can in no way lead to the precise identification of the objects that comprise it, which form indistinct groups, describable in general terms which can, as such, only be reached by mass communication. The profile on the other hand is obtained from

an inductive process, via contact with and knowledge about each individual, making it possible to develop personal and tailor-made mass communications.

Digital communication can measure results on the basis of numerous elements: the large number of targets reached (which is known and not just estimated as it is for analogue communication), the subjectivity and specific characteristics of the targets contacted, and the times and methods of the response obtained (of a cognitive nature, like a request for further information and a complaint; or of a behavioural nature, like a purchase). This type of measurement clearly differs from channel to channel and for each specific type of communication tool activated.

□ *Internet sites, for example, can analyse several aspects of surfers' actions. The number of clicks for each page and the time spent on the page can be measured; the IP (Internet Protocol, the code that identifies each computer in the network) recognises the geographical origin of the surfer and cookies track the surfer's movements. However, to commercialise advertising space, it is crucial to have measurement tools that share a common standard, and this has produced systems like Adserver, Audiweb and Audinet. Adserver is a software created in America to count click-throughs, i.e. to measure the percentage of banners clicked on in relation to the banners seen by users. The most advanced forms of Adserver also allow banners to be managed to reflect the intentions of advertising investors, linked to the number or the target of the parties to be reached (for example, country of origin, operating system, word entered in the search engine to access the page, etc.).*

Digitalisation is a key condition of the development of global markets. In fact, the diminishing importance of boundaries (physical, administrative, linguistic, currency, etc.) was facilitated by the presence of digital technologies, channels and flows, which allow information and communication to flow very rapidly, with no barriers to their spread. For this reason, in global markets, space is not only physical but can also be classified as virtual. In other words there is a space that goes beyond the physical, which is where relationships, communications, information, transactions, etc. develop. Virtual space therefore allows people (even several at a given time) to enter into contact and to perform all the activities that do not demand a simultaneous physical presence in a single place; on the contrary, virtual space allows relationships and contacts even between parties that would have no chance to approach each other in physical space. In virtual space, linguistic, social, economic, temporal and physical barriers collapse and contacts are founded on interests shared among subjects, even temporarily.

Marketing communication is therefore more important in virtual space than other marketing levers, and combines with them to create a supply system with a price and distribution method that can aggregate demand (demand bubbles), based on feedback from the 'launch' of digital communication, among other information.

Virtual and physical space in global markets are therefore an opportunity for companies that can choose how to use them, optimising the advantages and minimising the limits. The most effective corporate structures on global markets, the networks, do exactly that: they distribute themselves in physical space because they can exploit the advantages of virtual space and the flexibility of positioning to monitor physical and virtual space in competitive benchmarking with the market (market-driven management).

This gradual and partial dematerialisation of space – which means that certain exchanges of information and transactions no longer take place in physical space but only in virtual space²⁵ – combines with the accelerated process of the exchange of communications and information that has two important consequences for the dissemination of communications and the acquisition of information by businesses.

Where the acquisition of information is concerned, it simplifies access: for example, the Internet is a potentially inexhaustible source of public information and the problem lies in being able to identify and critically assess the reliability of the information obtained, in relation to the credibility of the source, the up-to-date information, etc..

Where the spread of communications is concerned, the virtualisation of space ensures this is rapid and economical, and can be addressed personally to specific, select parties, but it also multiplies the channels through which communication flows can travel, thus complicating one of the conditions of control. In practice, in a context where relations with the market (competitors and demand) is considered a key to business management, digital technologies make it easier to maintain relations (both the means and the cost) but are not always able to protect it. This means that anyone, in any way and in any position, voluntarily or not, can intervene and influence these relations, and there is often no way of controlling this intervention.

There are no longer closed domains where businesses activate and control communications in an established, closed physical territory; now communication first flows along specifically designated channels, and then develops and spreads by viral logics (viral communication) which are only partially predictable.

In this context, the so-called communication sensors or catalysers play a significant role, and the ability to identify and exploit them effectively enables a business to keep in step with its own competitive market orientation. It means identifying parties, physical and virtual locations, events, moments, etc. that constitute a crucial point in the information network and communication spreads, so that these points can be used as catalysers of information (input) and of corporate communication (output).

With relation to the collection of information, these sensors are used to identify evidence of phenomena and trends that are significant for the business collecting them, and a source of information to which the marketing information system and, more generally, the corporate system refer²⁶.

On the other hand, with regard to the spread of information, sensors – or rather diffusers – distribute information in the manner and times judged most significant by businesses, in global and digitalised markets where it is not possible to limit communication flows in pre-defined spaces addressing publics identified in advance. These diffusers increase the probability that the communication flows

will reach their target public. The diffusor may be a person, a physical or virtual location, a means of communication, etc. which is in a key position in the distribution of information, at a given moment or for a specific type of public.

□ *Youtube (www.youtube.com), the global film-sharing website, is used increasingly to spread film clips, making an event or an idea known to the public by a communication system that is propagated virally, based on contact between receivers and potential targets of the communication. This communication is extremely rapidly, and costs very little, by a pull communication approach in which the viral dissemination of information about the presence of a film stimulates contact with the site on the part of users, self-selected on the basis of interest in the message, in the capacity to reach it (availability of connection, computer literacy, etc.), and reveals an active interest in the communication disseminated.*

In this case Youtube is a disseminator of communication, proving particularly suitable for certain types of public. Other disseminators might be opinion leaders, virtual communities²⁷ – where people meet in a virtual space to tackle issues of common interest – or real or virtual events, or even products such as electronic games, films, etc. which use product placement to transmit corporate communication in a targeted way, exploiting the active interest of defined audiences.

□ *The case of electronic games is particularly significant for the public of young people aged between 13 and 30. Some advertising companies can place their trademarks or products in them through product placement contracts, adding to the realism of the context in which the game is played. For example, tennis, Formula 1 and football games envisage sponsors courtside or along the track, technical sponsors for the cars, equipment, clothing, etc.. Players may actively choose the sponsor of their player (from several alternative sponsors envisaged by the game) while their opponents or the side of the court or track are defined by the software, or by product placement contracts which have helped to fund the product. We refer you, for example, to www.ubisoft.com.*

The ease and unpredictability of dissemination of corporate communications has both positive and negative consequence for business management. Where opportunities are concerned, work of mouth, networks and disseminators of communication, if correctly used with suitable professional skills²⁸, permit rapid, economical distribution of corporate communication. On the other hand, when communication is disseminated ‘virally’ in a global, digital context, it is impossible to govern the communication flows issued. Once the communication has been transmitted, much of the route it follows is entirely unknown and unpredictable. Actually, finding the most economical and efficient way of ensuring that the

communication flows issued do not stop but reach the highest possible number of targets is a significant problem for businesses.

However there is also a negative aspect of the rapid and economical flow of communication in the global markets which it is observable in a crisis. There are critical situations caused by a company's negligence or misconduct that can place it in a difficult position with regard to the public. The communication that derives (normally activated by someone who, in good or bad faith, has a precise interest in discrediting a specific organisation) spreads uniformly, albeit always through the catalysers indicated, thanks to the simplifying effect of global digitalisation. This type of communication flows that are unwanted by the company becomes particularly crucial in global markets, thanks to the fluidity with which it spreads and the difficulty of preventing its dissemination, and this very extension introduces suitable corrective actions and communications. In this sense, the communication disseminators mentioned earlier acquire great significance, when they are implemented and utilised appropriately.

Virtual space therefore constitutes not only an exceptional expansion of the physical space which is thus amplified, made flexible and above all moulded to the users' needs, but also modifies the very concept of time. In virtual space, i.e. in a digitalised context, time undergoes two important evolutions: on one hand it is drastically reduced, while on the other it expands. The reduction in time concerns the possibility offered by digital technologies to minimise the contact time between the parties: communications and information flow very rapidly from one side of the world to the other and the time necessary is not decided by the physical distance between the connected parties, but by their technological distance, in other words the degree of evolution of the technologies used to exchange information²⁹. The expansion of time regards the fact that many digital communication technologies do not demand the simultaneous presence of the parties in the same virtual space for a relationship to be established³⁰, but allow each one to use time according to his needs. In virtual space there is therefore no beginning or end of the process, but a continuous time for the relationship to develop.

The flexible use of time made possible by digital technologies works perfectly in a context of time-based competition, a characteristic of global markets, particularly oversupplied markets, where the promotion of demand bubbles unifies the marketing efforts, in a continuous process of communication-information.

In fact, the creation and development of demand bubbles is founded on businesses' ability to constantly acquire information from the market and to respond at the appropriate time with supply profiles capable of grouping purchasers. Marketing communication therefore needs to be activated, to permit continuous feedback but, at the same time, making it possible to monitor the action taking place and, if necessary, to intervene, correcting it in line with the expected goals (feed-forward).

Bibliography

- Albanese Fabio, Merchandising e Licensing per lo sviluppo della Brand Equity. Il caso Coca-Cola, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 1, 2000-2001, pp. 73-89.
- Arrigo Elisa, Responsabilità aziendale e ipercompetizione. Il caso Ikea, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 2, 2005.
- Best Roger J. 2005, *Market-Based Management*, Pearson Prentice Hall, New Jersey.
- Brondoni Silvio M. (ed.), *La promozione delle vendite nella politica di comunicazione aziendale, Rapporto Riservato, Progetto Comunicazione Aziendale*, CREA-Centro di Ricerche Economico-Aziendali, Università Commerciale Luigi Bocconi, Milano, gennaio 1987.
- Brondoni Silvio M., *Comunicazione integrata d'impresa e 'nuove sfide' competitive*, AA.VV., *Progettare e gestire l'impresa innovativa*, Etas Libri, Milano, 1992.
- Brondoni Silvio M., *Comunicazione, risorse invisibili e strategia competitiva d'impresa*, *Sinergie*, n. 43-44, 1997, pp. 3-35.
- Brondoni Silvio M., Corniani Margherita, *Marketing Communication and Media Trade, Progetto Comunicazione Aziendale, Rapporto Riservato n. 2-2005*, gennaio 2006, ISTEI – Istituto di Economia d'Impresa, Università degli Studi di Milano-Bicocca.
- Brondoni Silvio M., Corniani Margherita, *Ricerca ISTEI – ASSOREL: Relazioni Pubbliche e Cultura della Rete*, Università degli Studi di Milano-Bicocca, 29 maggio 2001 (www.unimib.it/istei).
- Brondoni Silvio M., Gnechi Flavio, *La comunicazione di Corporate Governance, Relazione presentata al 18° Convegno Annuale di Sinergie, 'L'evoluzione del capitalismo tra teoria e prassi: proprietà, governance e valore'*, Capua, 26-27 ottobre 2006.
- Brondoni Silvio M., *La comunicazione integrata d'impresa nelle politiche di gruppo*, AA. VV., *Scritti in onore di Luigi Guatri*, Ed. Bocconi Comunicazione, Milano, 1988.
- Brondoni Silvio M., *Ouverture de 'Ricerche di Marketing e Mercati Globali'*, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 2, 2003, pp. 7-21.
- Brondoni Silvio M., *Patrimonio di marca e politica di comunicazione*, Giappichelli, Torino, 2002.
- Brondoni Silvio M., *Pubblicità, Sponsorship e Marketing delle sigarette*, *Mark-Up*, luglio/agosto 2006, p. 23.
- Brondoni Silvio M., *Risorse immateriali e concorrenza d'impresa*, S.M. Brondoni (ed.), *Il sistema delle risorse immateriali d'impresa: cultura d'impresa, sistema informativo e patrimonio di marca*, Giappichelli, Torino, 2004, pp. 3-26.
- Corniani Margherita, *Competitive intelligence e organizzazioni Market-Driven*, S.M. Brondoni (ed.), *Il sistema delle risorse immateriali d'impresa: cultura d'impresa, sistema informativo e patrimonio di marca*, G. Giappichelli, Torino, 2004, pp. 177-194.
- Corniani Margherita, *Product Placement e gestione del patrimonio di marca*, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 1, 2000-2001, pp. 91-109.
- Day George, *Market-Driven Winners*, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 2, 2000-2001.
- De Woot Philippe, *Le sfide della globalizzazione economica: imprese, concorrenza e società*, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 2, 2002.
- Fascina Giancarlo, *L'RFID rivoluziona la Supply Chain*, GEA (ed.), *Il Supply Chain Management dalla teoria alla pratica*, Isedi, Torino, 2005, pp. 79-94.

- Garbelli Maria Emilia, Localizzazione produttiva e dinamiche competitive, Giappichelli, Torino, 2004.
- Gnecchi Flavio, Corniani Margherita, Bolle di domanda, comunità virtuali e potenziale di domanda, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 2, 2003.
- Gnecchi Flavio, Corniani Margherita, Le comunità virtuali nella misura del potenziale della bolla di domanda, S.M. Brondoni (ed.), *Il sistema delle risorse immateriali d'impresa: cultura d'impresa, sistema informativo e patrimonio di marca*, Giappichelli, Torino, 2004, pp. 217-243.
- Gnecchi Flavio, Ricotti Paolo, La reingegnerizzazione del portafoglio di marca. Il caso Gruppo Coin, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 1, 2000-2001, pp. 61-71.
- Hennig-Thurau Thorsten, 'Word-of-Mouse': Why Consumers Listen to Each Other in the Internet, in *Yearbook of Marketing and Consumer Research*, Vol. 3, 2005, pp. 37-58.
- Hitt Michael A., Ireland R. Duane, Hoskinsson Robert E., *Strategic Management. Competitiveness and globalization*, South-Western College Publishing, Thomson, 2005.
- Lambin Jean-Jacques, *Marketing strategico e operativo*, McGraw-Hill, Milano, 1996.
- Ottman Jacquelyn A., *Green marketing: challenges and opportunities for the new marketing age*, NTC Business Books, Lincolnwood, 1993.
- Rancati Elisa, Concorrenza basata sul tempo e dinamiche competitive, E. Rancati, G. Del Chiappa, *La 'Time-based competition' nella gestione d'impresa*, Giappichelli, Torino, 2004, pp. 19-60.
- Reitano Antonella, *Telematica concorrenza e comunicazione integrata d'impresa*, Giappichelli, Torino, 2002.
- Salvioni Daniela M., Bosetti Luisa, Relazione di Governance e Stakeholder View, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 1, 2006.
- Salvioni Daniela M., *Il bilancio d'esercizio nella comunicazione integrata d'impresa*, Giappichelli, Torino, 1992.
- Shannon Claude E., Weaver Warren, *Teoria Matematica della Comunicazione*, Etas Kompass, Milano, 1971.
- Speckman Robert E., Sweeney II Patrick J., RFID: from concept to implementation, in *International Journal of Physical Distribution and Logistics Management*, vol. 36, n. 10, 2006, pp. 736-754.
- Winger Alan R., Face-to-Face Communication: Is It Really Necessary in a Digitizing World?, *Business Horizons*, Vol. 48, n. 3, May-June 2005, pp. 247-253.
- Ziliani Cristina, *e-Marketing. Direct, Database e Internet Marketing*, McGraw Hill, Milano, 2001.

Notes

¹ For a more comprehensive definition of co-makers cf. S.M. Brondoni, *Comunicazione integrata d'impresa e 'nuove sfide' competitive*, in AA.VV., *Progettare e gestire l'impresa innovativa*, Etas Libri, Milan, 1992; D. M. Salvioni, *Il bilancio d'esercizio nella comunicazione integrata d'impresa*, Giappichelli, Turin, 1992.

² Cf. S.M. Brondoni, *La comunicazione integrata d'impresa nelle politiche di gruppo*, in AA. VV., *Scritti in onore di Luigi Guatri*, Ed. Bocconi Comunicazione, Milan, 1988. The definition of integrated communication proposed by the author presents ITC communication as an alternative to personal and nonpersonal communication. In fact, ITC communication (the possibility of dialogue between two machines, or two ITC terminals) was established in a technological context characterised by early examples of the digitalisation of the signals and of communication flows, which is still far

from the convergence and expansion of digital technologies that we are becoming accustomed to. Personalised mass communication therefore refers to the sum of communications that exploit digital technologies and terminals making it possible to obtain the typical advantages of personal communication (for example, immediate feedback, feed-forward, interaction, customisation of communication, etc.) and nonpersonal communication (high number of parties reachable, low cost per contact, standardisation and controllability of the message, etc.). Cf. also A. Reitano, *Telematica concorrenza e comunicazione integrata d'impresa*, Giappichelli, Turin, 2002.

³ Cf. S.M. Brondoni, *Comunicazione, risorse invisibili e strategia competitiva d'impresa*, in *Sinergie*, no. 43-44, 1997, pp. 3-35.

⁴ For a definition of the concepts of repetitive purchasing and demand loyalty, cf. M. Corniani, *Segmentazione e aggregazione della domanda aziendale*, Giappichelli, Turin, 2004.

⁵ Cf. S.M. Brondoni, *Ouverture de 'Ricerche di Marketing e Mercati Globali'*, in *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), no. 2, 2003, pp. 7-21.

⁶ Elaboration of AdEx, Nielsen Media Research data, 1995, 2000, 2005 and 2006.

⁷ See S.M. Brondoni, *Ouverture de 'Ricerche di Marketing e mercati globali'*, in *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), no. 2, 2003, pp. 7-21, p. 13 and 14.

⁸ Cf. S.M. Brondoni, *Patrimonio di marca e politica di comunicazione*, Giappichelli, Turin, 2002.

⁹ Cf. F. Albanese, *Merchandising e Licensing per lo sviluppo della Brand Equity. Il caso Coca-Cola*, *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), no. 1, 2000-2001, pp. 73-89.

¹⁰ Cf. M. Corniani, *Product Placement e gestione del patrimonio di marca*, in *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), no. 1, 2000-2001, pp. 91-109.

¹¹ Cf. F. Gneccchi, P. Ricotti, *La reingegnerizzazione del portafoglio di marca. Il caso Gruppo Coin*, in *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), no. 1, 2000-2001, pp. 61-71.

¹² Exclusively for advertising, where the investment data for each sector can be monitored relatively comprehensively and homogeneously, we adopt the ratio between Share of Voice and Share of Market to identify each company's competitive intentions. A ratio of > 1 identifies the investing company's decision to attack the market, while a ratio close to 1 means maintaining the positions acquired, and one of < 1 indicates a decision to withdraw.

¹³ See S.M. Brondoni, *Ouverture de 'Ricerche di Marketing e mercati globali'*, in *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), no. 2, 2003, pp. 7-21, p. 13.

¹⁴ In controlled-competition markets, to achieve the planned sales levels with each commercial intermediary, manufacturing companies develop bargaining practices that are also based on sales promotions that address the trade, usually founded on access to significant discounts related to purchasing volumes or conditions, in other words the possibility of being rewarded if certain results are achieved. Cf. S.M. Brondoni (ed.), *La promozione delle vendite nella politica di comunicazione aziendale*, Rapporto Riservato, Progetto Comunicazione Aziendale, CREA-Centro di Ricerche Economico-Aziendali, Luigi Bocconi University, Milan, January 1987.

¹⁵ The marketing communication of the distributor also draws on advertising communication but, as a whole, tends to favour communication flows that target the point of sale (posters, sales promotions, private labels, etc.). Cf. S.M. Brondoni, M. Corniani, *Marketing Communication and Media Trade*, Progetto Comunicazione Aziendale, Rapporto Riservato no. 2-2005, January 2006, ISTEI – Istituto di Economia d'Impresa, Milan-Bicocca University.

¹⁶ Cf. E. Arrigo, *Responsabilità aziendale e ipercompetizione. Il caso Ikea*, in *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), no. 2, 2005; D.M. Salvioni, L. Bosetti,

Relazione di Governance e Stakeholder View, in *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), n. 1, 2006.

¹⁷ Cf. R.E. Speckman, P.J. Sweeney II, *RFID: from concept to implementation*, in *International Journal of Physical Distribution and Logistics Management*, vol. 36, no. 10, 2006, pp. 736-754; G. Fascina, *L'RFID rivoluziona la Supply Chain*, in GEA (ed.), *Il Supply Chain Management dalla teoria alla pratica*, Isedi, Turin, 2005, pp. 79-94.

¹⁸ Cf. S.M. Brondoni, M. Corniani, *Marketing Communication and Media Trade*, op. cit.

¹⁹ Cf. C.E. Shannon, W. Weaver, *Teoria Matematica della comunicazione*, Etas Kompass, Milan, 1971.

²⁰ Cf. F. Gneccchi, M. Corniani, *Bolle di domanda, comunità virtuali e potenziale di domanda*, in *Symphonya. Emerging Issues in Management* (www.unimib.it/symphonya), Issue 2, 2003; T. Hennig-Thurau, 'Word-of-Mouse': *Why Consumers Listen to Each Other in the Internet*, in *Yearbook of Marketing and Consumer Research*, Vol. 3, 2005, pp. 37-58.

²¹ The digitalisation of information/communication consists in transforming it into *bit* (*binary digital*), i.e. a binary number that becomes the measurement necessary to define each message within the possible alternatives. This means that a signal can be transmitted in a simplified binary form, but with content that can also be very complex and above all heterogeneous.

²² The great dissemination of so-called public channels, access to which is open to everyone at very low cost (like the World Wide Web), makes it possible to develop other 'independent' channels, in other words it ensures that it is the actual flows that determine the best routes (channels) for their transfer.

²³ For the concepts of feedback and feed-forward, cf. among others, S.M. Brondoni, *La comunicazione integrata d'impresa nelle politiche di gruppo*, in AA. VV., *Scritti in onore di Luigi Guatri*, Ed. Bocconi Comunicazione, Milan, 1988.

²⁴ Cf. S.M. Brondoni, F. Gneccchi, *La comunicazione di Corporate Governance*, Paper presented at the 18th Annual Congress of Sinergie, 'L'evoluzione del capitalismo tra teoria e prassi: proprietà, governance e valore', Capua, October 26-27, 2006.

²⁵ For example internet banking, or the gradual replacement of letters by email.

²⁶ Cf. M. Corniani, *Competitive intelligence e organizzazioni Market-Driven*, in S.M. Brondoni (ed.), *Il sistema delle risorse immateriali d'impresa: cultura d'impresa, sistema informativo e patrimonio di marca*, Giappichelli, Turin, 2004, pp. 177-194.

²⁷ Cf. F. Gneccchi, M. Corniani, *Le comunità virtuali nella misura del potenziale della bolla di domanda*, in S.M. Brondoni (ed.), *Il sistema delle risorse immateriali d'impresa: cultura d'impresa, sistema informativo e patrimonio di marca*, Giappichelli, Turin, 2004, pp. 217-243.

²⁸ Cf. S.M. Brondoni, M. Corniani, *Ricerca ISTEI – ASSOREL: Relazioni Pubbliche e Cultura della Rete*, Milan-Bicocca University, May 29, 2001, www.unimib.it/istei.

²⁹ A copper duplex cable is certainly slower than an optic fibre network, and more up-to-date processors make it possible to process larger quantities of information at the same time on a PC, thus speeding up digital contacts between machines, etc..

³⁰ Take the example of electronic mail management software, blogs, etc..