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## EDITORIAL

### A Silent Change

The only constant is change. And not just in business. The digital revolution is a phenomenon that society has been experiencing since 1950. The digital revolution has transformed the technology that had been analogue into a digital format. Some significant milestones in the digital revolution:

- The years 47-'80 – the advent of the transistor, integrated circuits, microprocessors, and the Internet (the ARPANET network in 1969), the development of computers, video games, ATMs, mobile phones, as well as industrial robots and television.
- In the 1990s – with the rapid expansion of the Internet, the World Wide Web became publicly accessible.
- In the 2000s – present – mobile phones have become just as ubiquitous with the advent of smartphones, new technologies such as the cloud, edge and grid computing, big data, IoT (Internet of Things), blockchain (with applications for bitcoin and smart contracts), social networks, 5G (with the benefits in telemedicine and cybersecurity, almost total connectivity), artificial intelligence.

Let's look at the main inventions of the digital revolution: industrial robots; TV; personal computers; the Internet; mobile phones – smartphones. Then, let's talk about three important digital tools:

- Digital signature – it is a sequence of data in electronic format, obtained by asymmetric encryption and logically associated with an entity (message, document, file) also in electronic form, which provides support for: the services of identifying the origin of the entity to which it is associated (authentication), the services of verifying the integrity of the signed content, the services of subsequent non-repudiation by the signatory of the signed content. The signature is attached to the document and any change to the document will invalidate the digital signature. The digital signature is a fingerprint of the signed document, a fingerprint that is calculated by applying a hash function to the document to be signed. If the sender of a message encrypts his message with his secret key, any of the recipients of the message can decrypt it with the public key of the sender, thus making sure that the message was transmitted by the sender (the only one who holds the secret key). The digital signature has

the following characteristics: it is impossible to obtain the signature from the content of the document (this condition ensures the non-repudiation feature) and it is impossible to find two identical digital signatures for two different documents (this condition ensures the data integrity feature).

- Time stamp – it is a collection of data in electronic form, uniquely attached to an electronic document. It certifies that certain data in electronic form has been submitted at a given time to the time-stamping service provider. A timestamp is a trusted service that guarantees and certifies the time associated with an electronic document. No „past” time stamps are issued (the unique chain of time stamps). Some of the time stamp applications are an electronic notary and archiving.

- Business informatics systems – we can list the following types of systems: informatics systems for decision support, Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) informatics systems, informatics systems for document management, Business Intelligence – BI software tools, Sales Force Automation – SFA software tools, Warehouse Management Systems. Sales Force Automation refers to the process of automating repetitive activities performed by a sales agent. Warehouse Management Systems – WMS automate and optimize the activities of reception, storage, collection, and shipment of goods, constantly providing real-time information on the status of stocks and storage space.

Last, but not least, the concept of open office and flexibility in the workplace are offered today by many companies. Telework is a reality, regulated in Romania as well. New approaches to health care delivery have also emerged: „drive-through” testing and vaccination centres, telehealth – the care solutions offered through technology. Change is the constant.

Bogdan Ţigănoaia  
Senior Editor

## ABSTRACTS

### **Emerging Security Measures in the Digital Age**

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*ABSTRACT: The digital transformation and reshaping of the way companies operate depends directly on technology and electronic communications, which provide opportunities unimaginable before the advent of the Internet, but also bring new vulnerabilities that could be exploited by cyber attackers. Everything must be interconnected, easily accessible, personalized as much as possible, preferably with the help of state-of-the-art technologies, and no doubt in strict accordance with all regulations. The present research aims to determine the main concerns of businesses regarding sensible data and the barriers to adopting security measures inside Romanian SMEs.*

**KEYWORDS:** security measures, Romanian SMEs, cyber attack

## Marketing Ethics in the Age of Digital Technology

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*ABSTRACT: A prominent question among researchers was concerning the ethical dimensions of marketing communication. To put it another way, if the primary purpose of marketing is to sell a service or product, are there any ethical methods to the communication process? Moreover, should the commercial communication approach be ethical or only pragmatic? These are the paper's primary questions. To begin, all organizations (public or private) see marketing as a fundamental instrument for reaching their goals. In this scenario, one aspect that may be considered is how ethical the aims are. During the earlier time, both businesses and communicators faced new obstacles. Modern technology and globalization have had a direct impact on how marketing communications work. In essence, a new set of tools was introduced, resulting in new trends and possibilities. The internet and technological advancements have revealed the effectiveness of marketing communication 2.0 or its brand-new online form. A new tool that is greatly wanted by companies. And, in this scenario, if the organization's goals are ethical, we may assume that the methods used are equally ethical. The paper aims to emphasise the role of ethical marketing in digital times.*

**KEYWORDS:** marketing, ethics, economic, social, digital technology

## Digital Marketing Channels for SME

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**ABSTRACT:** *Digital marketing represents a new perspective and conception of the orientation, organization and development of the economic activity. Currently, companies focus on promoting in the online environment, to easily reach the customer and meet their requirements. The link between the two main components of the market, production and consumption or supply and demand, marketing directs the production activity to meet the needs of consumers while ensuring the necessary information and positive relationships that the company must have with its environment. The authors make an analysis of the main means of promotion in the digital environment and present the results obtained following an online survey for small companies in Romania, which operate in the IT market.*

**KEYWORDS:** digital marketing, IT SMEs, Romanian business environment

## Forecasting of Electric Car Sales

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**ABSTRACT:** *The transport sector is the largest contributor to greenhouse gas emissions in the EU. Reducing emissions from transport is therefore essential to meet the EU's climate neutrality targets. Sales of electric vehicles have increased significantly since 2020, and a continued increase in sales of electric vehicles in Europe could help the EU reach its CO<sub>2</sub> emission reduction targets. Our paper presents an analysis of electric car sales in Romania, together with a forecast for the coming years. For this study, data from Eurostat was collected and used for analysis to present the results. To obtain the desired results, the collected data were analysed using forecasting methods that can help to resolve uncertainties about the future. Sales of electric cars in Romania were analysed using both linear and exponential function methods. The results showed that the exponential function analysis of total sales of electric cars in Romania had a higher forecast accuracy than the linear function method. From the analytical methods used we can conclude that the sales of electric cars are on an increasing scale and the choice of an appropriate method is important in data analysis.*

**KEYWORDS:** air pollution, electric cars, forecasting, time series, analytical method of analysis

## Renewable Energy Sources

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**ABSTRACT:** *Energy is one of the most important physical concepts discovered by man. A correct understanding of energy is a prerequisite for the analysis of energy systems and energy processes. The Earth's resources are depleting faster than they can be replenished. In fact, mankind uses the resource equivalent of 1.6 planets to supply the materials used and to absorb the waste, which means that the Earth regenerates in one year and six months the materials used in one year. Renewable energies, also known as „green energies”, are considered in practice, energies that come from sources that either regenerate themselves in a short time or are virtually inexhaustible sources. The term renewable energy refers to forms of energy produced by the energy transfer of energy from renewable natural processes. This paper presents the renewable energy sources available on the planet.*

**KEYWORDS:** renewable energy, solar energy, water energy, biomass energy

## Relational Marketing Era

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**ABSTRACT:** *The economic transactions of commodities, services, and capital influence the quality of life and, more broadly, the well-being of any community. Furthermore, it enables resource access, but probably most critically, it creates a multilayered interdependent network, from the family and community level to global trade networks and financial flows unique to the contemporary economy. As a result, we value the fact that the economic transaction is in a close interdependent connection, which is directly affected by the relationship between the persons taking part in this process. Even the most basic transaction needs to get in touch (at least with an electronic environment built and fitted to it) and an aim as well as an engagement, and most commonly a conversation, of varying duration. This paper aims to highlight the contribution of relational marketing, as an integral part of the interaction of economic actors, to the dynamics that take place between the subsystems of the market economy, government levers and the process of academic reflection.*

**KEYWORDS:** marketing, relational marketing, communication

## Innovation Through Online Marketing

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**ABSTRACT:** *Digital marketing is on the rise Technologies are constantly evolving and the way people use them is changing not only the way personal information is accessed but also the way they interact on a global scale. The evolution of technology has also changed the way products and services are chosen and purchased. This article examines the promotion techniques used by eMAG (the largest e-commerce platform in Romania). Following the analysis, the authors found that although it is an online platform, eMAG successfully uses, in addition to online marketing techniques, traditional marketing techniques that have the role of attracting more conservative customers. From the very beginning, the eMAG company understood these defining aspects for a good promotion policy, which is also because the ones from eMAG started the business in the online environment, and later they went to open physical points, respectively. showrooms. The digital marketing techniques are SEO, Social Media, and Affiliate Marketing, and the traditional promotion techniques are: price reductions; promotional packages; organizing competitions and street signs.*

**KEYWORDS:** traditional marketing, digital marketing, technology, eMAG