

Digital technologies for business development: modern marketing**Tecnologías digitales para el desarrollo empresarial: el marketing moderno**

GUTIÉRREZ-CIGARROA, Dionisio Lenin†* & POSADAS-RODRÍGUEZ, Guillermo

*Tecnológico de Estudios Superiores de Chicoloapan, México.*ID 1st Author: *Dionisio Lenin, Gutiérrez-Cigarroa* / ORC ID: 0009-0007-9719-7186ID 1st Co-author: *Guillermo, Posadas-Rodríguez* / ORC ID: 0009-0004-5765-7107

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Abstract

In 2020, COVID-19 was declared a pandemic, the world came to a standstill and the business sector entered a crisis from which many businesses did not recover and disappeared, this generated an impulse in the search for alternatives to create businesses based on technologies of digital communication and information. Modern marketing, driven by digital technologies, is essential for business development in the current era. Its advantages include wide reach, precise segmentation, real-time interaction, measurement and analysis, and reduced costs. However, it faces challenges such as market saturation, constant changes in digital trends, privacy and security concerns, depersonalization, and information overload. To succeed, companies must leverage the advantages of these technologies and carefully address their disadvantages, constantly adapting to an ever-evolving digital environment. In modern marketing, strategies are applied with digital technologies that are essential to promote online products, services or brands in the marketplace and e-commerce and reach specific audiences locally or globally, breaking the barriers of international borders.

Resumen

En el año 2020 se declara al COVID-19 pandemia, el mundo se paralizó y el sector empresarial entró en una crisis de la cual muchos negocios no se recuperaron y desaparecieron, esto generó un impulso en la búsqueda de alternativas para crear negocios basados en tecnologías de la comunicación e información digital. El marketing moderno, impulsado por tecnologías digitales, es fundamental para el desarrollo empresarial en la era actual. Sus ventajas incluyen un amplio alcance, segmentación precisa, interacción en tiempo real, medición y análisis, y costos reducidos. Sin embargo, enfrenta desafíos como la saturación del mercado, cambios constantes en tendencias digitales, preocupaciones sobre privacidad y seguridad, despersonalización y la sobrecarga de información. Para tener éxito, las empresas deben aprovechar las ventajas de estas tecnologías y abordar cuidadosamente sus desventajas, adaptándose constantemente a un entorno digital en constante evolución. En el marketing moderno se aplican estrategias con tecnologías digitales que son fundamentales para promocionar en marketplace y e-commerce productos, servicios o marcas en línea y alcanzar audiencias específicas en forma local o global rompiendo las barreras de fronteras internacionales.

Marketing, Marketplace, Ecommerce**Marketing, Marketplace, Ecommerce**

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* Correspondence to Author (E-mail: dleningutierrez@gmail.com)

† Researcher contributing as first author.

Introduction

The digital era has radically transformed the way businesses operate and compete in the global marketplace. In this context, Digital Technologies for Business Development have become a fundamental element for the growth, efficiency and survival of organisations in the 21st century. These technologies span a wide spectrum of tools and platforms, from advanced software and data analytics to artificial intelligence and process automation solutions.

The importance of adopting and leveraging Digital Business Development Technologies lies in their ability to improve productivity, optimise internal processes, facilitate decision-making and open up new business opportunities. Companies that effectively incorporate these technologies can experience greater agility, faster response to market demands and competitive advantage.

In addition, Digital Technologies not only offer internal benefits, but also enable a closer connection with customers, enhancing the user experience and providing opportunities for product and service innovation. In an increasingly dynamic and changing business environment, the ability to adapt and adopt digital technologies strategically has become crucial for the sustainable development and long-term success of organisations. It is indicated that the effective use of Digital Technologies for Business Development is not only an option, but a necessity to stay on trends and meet certain human needs.

Description of modern marketing and the use of technologies

Modern Marketing has been profoundly influenced by Digital Technologies, transforming the way companies promote and market their products or services.

Some important characteristics of how communication technologies have positively impacted the marketing environment are highlighted.:

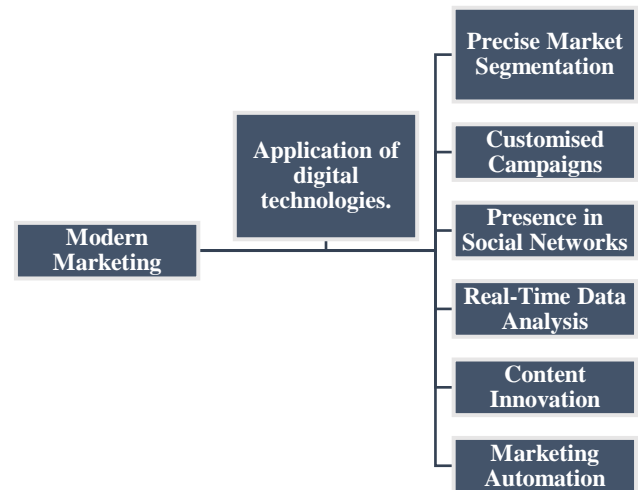


Figure 1 Characteristics of the positive impact of technologies for modern marketing

Source: Own elaboration

Precise market segmentation

Digital Technologies enable more precise and detailed market segmentation. Thanks to advanced data analysis tools and algorithms, companies can identify specific groups of consumers with similar characteristics, which facilitates the personalisation of advertising messages and marketing strategies.

Personalised campaigns

Personalisation has become essential in Modern Marketing, and digital technologies make it possible to create highly personalised campaigns. From emails to social media ads, companies can tailor their messages based on individual consumer behaviour and preferences, improving the relevance and effectiveness of campaigns.

Social media presence

Social media is an integral part of contemporary marketing. Digital technologies enable companies to build and manage their presence on platforms such as Facebook, Instagram, Twitter and LinkedIn. Direct interaction with customers, content promotion and targeted advertising are possible on an unprecedented scale, providing an effective channel for building and maintaining audience relationships.

Real-time data analytics

Digital analytics provides businesses with the ability to measure the performance of their campaigns in real time. Through web and social media analytics tools, marketers can evaluate the effectiveness of strategies, adjust them as needed and make data-driven decisions to optimise return on investment (ROI).

Improved customer experience

Digital Technologies enable the creation of more seamless and personalised customer experiences. From responsive website design to the implementation of chatbots and virtual assistants, companies can improve customer interaction, providing quick responses and tailored solutions.

Content innovation

Content creation and distribution have undergone a revolution with digital technologies. From blogs and videos to virtual reality, companies have the ability to innovate the way they present their messages, reaching audiences in creative and engaging ways.

Marketing automation

The automation of marketing processes, such as sending scheduled emails or managing advertising campaigns, has become more efficient with Digital Technologies. This allows marketers to focus on more strategic and creative strategies, while operational tasks are managed in an automated way.

Modern Marketing benefits greatly from Digital Technologies by providing tools and approaches that allow for greater precision, personalisation and efficiency in marketing strategies, improving the connection between brands and their audiences.



Figure 2 Own creation and Source pixart IA platform Methodology on New Technology Trends in Business Development

Business development in the era of new technological trends requires a sound methodology to make the most of the opportunities and face the challenges. A general methodology is presented that is adapted to the specific needs of a business process.

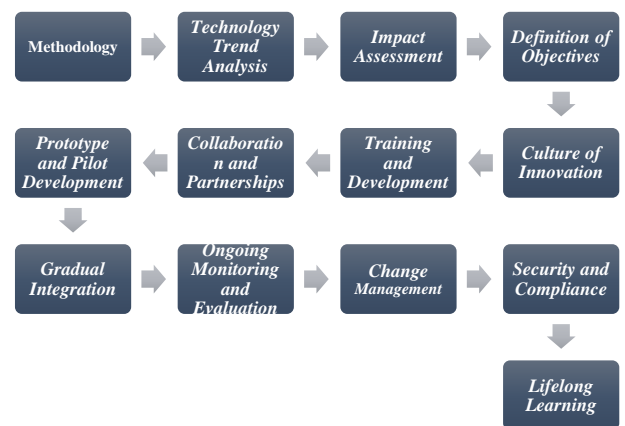


Figure 3 General methodology for business development Source: Own elaboration

1. Analysis of Technological Trends:

- a. Conduct a comprehensive analysis of technology trends relevant to your industry.
- b. Identify emerging technologies that could have a significant impact on your business.

2. Impact Assessment:

- a. Assess how these trends may affect your operations, products and services.
 - b. Analyse the impact on efficiency, competitiveness and customer relations.
3. Define objectives:
- a. Establish clear and measurable objectives that reflect the use of new technologies.
 - b. Align objectives with the long-term business strategy.
4. Culture of Innovation:
- a. Encourages a business culture that promotes innovation and adaptability.
 - b. Encourages employees to propose ideas and solutions based on emerging technologies.
5. Training and Development:
- a. Provides ongoing training for employees on new technologies.
 - b. Ensure that staff are equipped to use new tools efficiently.
6. Collaboration and Partnerships:
- a. Seek collaborations with technology companies and startups.
 - b. Establish strategic alliances to accelerate the adoption of new technologies.
7. Development of Prototypes and Pilots:
- a. Develops prototypes to test the feasibility of technology solutions.
 - b. Implements pilot projects to assess impact in real situations.
8. Gradual Integration:
- a. Implements new technologies gradually to minimise disruption.
- c. Ensure that integration is compatible with existing systems.
9. Continuous Monitoring and Evaluation:
- a. Key metrics are established to measure the success of technology initiatives.
 - b. Conduct periodic reviews to adjust strategies as needed.
10. Change Management:
- a. Effectively communicate changes to employees.
 - b. Addresses concerns and resistance through effective change management.
11. Safety and Compliance:
- a. Integrates security measures from the outset into all technology initiatives.
 - b. Ensures compliance with relevant regulations and standards.
12. Continuous Learning:
- a. Establishes a cycle of continuous feedback and learning.
 - b. Adapts strategy according to evolving trends and business environment.

This methodology provides a general structure for business development based on new technological trends. It is crucial to adapt it according to the specific characteristics of the company and the environment in which it operates.



Figure 4 Own creation - technology trends and Source pixart IA platform

Business development is constantly evolving, and emerging technologies play a crucial role in this process. *The new technology trends that are transforming the business development landscape are described:*

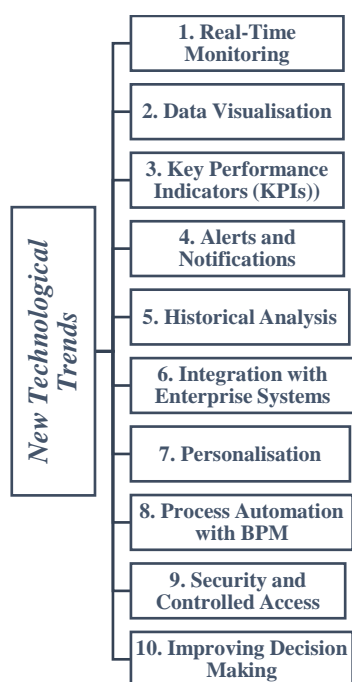


Figure 5 New Technological Trends and Source own elaboration

1. Real-time monitoring:

Real-time monitoring has become a fundamental element for modern enterprises. Monitoring solutions provide instant information on the performance of systems, processes and operations. This enables organisations to identify problems quickly, optimise resources and make informed decisions in a more agile way.

2. Data Visualisation:

Data visualisation has become essential to understand patterns, identify trends and communicate information effectively. Advanced visualisation tools enable companies to turn complex data into understandable graphical representations, facilitating data-driven decision making.

3. Key Performance Indicators (KPIs):

KPIs are crucial metrics for assessing a company's performance. Today's technologies allow the collection, analysis and presentation of KPIs in an automated and real-time manner. This helps companies measure their progress towards strategic objectives and adjust their strategies as needed.

4. Alerts and Notifications:

Automated alerts and notifications systems offer companies the ability to receive instant alerts on important events or changes in data. This enables rapid response to critical situations and improves operational efficiency.

5. Historical Analytics:

Historical analysis provides insights based on past data, which is critical to understanding the evolution of the business and making decisions based on previous experiences. Advanced technologies facilitate the analysis of large historical data sets to identify long-term patterns and trends.

6. Integration with Enterprise Systems:

Enterprise systems integration is crucial to ensure smooth operations. Enterprises are adopting solutions that enable the seamless integration of applications and platforms, improving efficiency and reducing data redundancy.

7. Customisation:

Advanced technology solutions enable personalisation of experiences for customers and employees. Tailoring products, services and processes to individual needs improves customer satisfaction and internal productivity.

8. Process Automation with BPM:

Business process automation (BPM) uses technologies such as artificial intelligence and machine learning to optimise and automate repetitive processes. This not only improves operational efficiency, but also frees up resources for more strategic tasks.

9. Security and Controlled Access:

The growing threat of cyber-attacks has elevated the importance of enterprise security. Companies adopt advanced security technologies, such as encryption, biometric authentication and behavioural analytics, to protect their data and ensure controlled access to sensitive information.

10. Improved Decision Making:

Real-time data collection and analysis, along with effective visualisation and KPIs, contribute significantly to improved decision making. Emerging technologies provide accurate and timely insights that support strategic and operational decisions.

The adoption of these new technology trends in business development not only improves operational efficiency, but also enables companies to adapt quickly to an ever-changing business environment. Those organisations that leverage these technologies will be better positioned for long-term success.

Historical results of Digital Marketing in the world 2000-2023

An overview of the evolution of digital marketing from 2000 to 2023:

Years 2000:

Start of Online Advertising:

Online advertising started to gain popularity with the emergence of banners and pop-ups. Search engines such as Google began to offer advertising programmes.

SEO and SEM:

- SEO (Search Engine Optimisation) became a key strategy to improve search engine rankings.

- SEM (Search Engine Marketing) focused on paid search engine advertising.

Emerging Social Networks:

Platforms such as Friendster and MySpace ushered in the era of social networking.

2010s:

Rise of Social Networking:

Facebook, Twitter, Instagram and LinkedIn became key platforms for digital marketing.

Brands began to use social media to interact directly with consumers.

Visual Content and Video Marketing:

Visual content and video marketing gained importance.

YouTube became a crucial channel for marketing strategies.

Mobility and Mobile Marketing:

The rise of smartphones led to the rise of mobile marketing.

Mobile applications and ads adapted to mobile devices became essential.

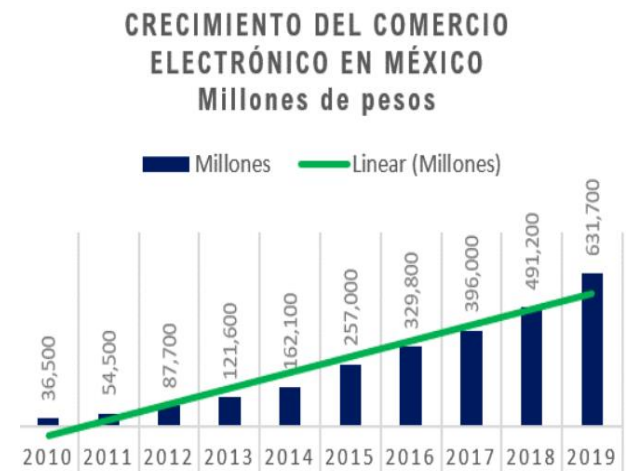


Figure 6 E-commerce in Mexico
Source: https://www.researchgate.net/figure/Figura-3-Crecimiento-de-Comercio-Electronico-en-Mexico-Fuente-Elaboracion-propia-a_fig3_349234045

2020s:

Artificial Intelligence and Automation:

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Artificial intelligence and automation transformed marketing strategies.

Chatbots, predictive analytics and data-driven personalisation became commonplace.

Interactive Content:

Interactive experiences, such as online surveys and immersive content, became more popular.

Augmented reality (AR) and virtual reality (VR) were incorporated into marketing in some sectors.

Omnichannel strategies:

Brands adopted omnichannel strategies to provide a consistent experience across all touchpoints.

Real-time customer data integration became essential.

To 2023:

Focus on Customer Experience:

Digital marketing became more focused on creating meaningful customer experiences.

Advanced personalisation and segmentation became standard.

Blockchain in Advertising:

Blockchain technology was used to address issues of transparency and fraud in digital advertising.

E-Commerce Growth:

E-commerce experienced a significant increase, with a focus on improving the online shopping experience.

Increased Privacy Regulation:

There was an increase in data privacy regulation, with laws such as GDPR and a focus on user consent.

Dominance of Live Video:

Live video became increasingly popular for real-time marketing and audience engagement.

Digital marketing has evolved significantly over the years, adapting to new technologies and consumer behaviours. The continuing trend towards personalisation and the integration of emerging technologies will continue to shape the future of digital marketing.



Figure 7 Own creation - evolution of digital marketing on the pixart platform

Conclusions

Clearly explain the results obtained and the possibilities for improvement

Digital technologies have significantly transformed the modern marketing landscape of business development. In today's digital age, effective implementation of digital marketing strategies is crucial for the success and sustainability of businesses. The accessibility of advanced tools, such as social media, data analytics, artificial intelligence and digital marketing, allow companies to reach different customers regardless of distance, territorial boundaries, cultures, languages, etc....

Modern Marketing, supported by Digital Technologies, is characterised by its customer-centric approach, interactivity, real-time measurement of results and the ability to adapt quickly to changes in the market. Massive data collection and analysis have paved the way for evidence-based decision making, allowing companies to optimise their strategies and allocate resources more efficiently.

Mobility and constant connectivity have opened up new opportunities for real-time marketing, where companies can interact with their customers in an instant and personalised way.

In addition, artificial intelligence has taken personalisation to an unprecedented level, allowing companies to anticipate customer needs and deliver highly personalised experiences.

However, the ethical use of technology and the protection of privacy have become growing concerns. As companies leverage Digital Technologies to collect and analyse data, it is essential to strike a balance between personalisation and respect for user privacy.

In summary, the impact of Digital Technologies on business development, especially in the modern marketing environment, is undeniable. Those companies that effectively embrace these emerging technologies have the opportunity to stand out in a highly competitive marketplace, build strong customer relationships and adapt nimbly to the changing demands of the business environment. However, sustainable success requires not only the adoption of advanced technologies, but also careful consideration of ethics and privacy to ensure long-term customer trust and loyalty.

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