# MOBILE APPS & E-COMMERCE





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#### EDITOR'S NOTE /-

Artificial intelligence (AI) is becoming a game-changer in how businesses manage risk and turn potential pitfalls into opportunities.

Al can analyze vast amounts of data to identify and predict potential risks much faster and more comprehensively than traditional methods. This allows businesses to be proactive in addressing issues before they escalate.

Al can analyze complex data sets to uncover hidden patterns and trends.

In this edition, in our featured article we'll take a look at how to apply AI in this article to reduce business risks in your company.

Also in the ecommerce section, we explain how AI can transform your company into a profit making machine, and 10 ways AI can transform social media for your business.

In the mobile section, we explore the impact of apps on online businesses in Dubai, Apple's WWDC event, and role of AI in custom app development.

I wish all our readers success and hope you benefit from the information presented in the magazine and stay with us in the future.

#### **ABOUT THE EDITOR**



Rajib Roy is a software developer, entrepreneur, and author of two Books. He obtained a Bachelor's in Electrical and Electronic Engineering Chittagong University Engineering and Technology and a Master's in Computer Engineering from Heriot Watt University. Today, Rajib lives in Dubai, with his wife and his two sons. In his day job, Rajib runs his own Mobile apps and site Development Ecommerce Rovex company named with branches Technologies, Dubai, Qatar, India, and Bangladesh. He has been instrumental in the start-up of several businesses and been responsible for building several projects.

Rajib Roy

(CEO, Royex Technologies)

Ecommerce platforms, features, tips, and reviews



Artificial intelligence (AI) is rapidly transforming the landscape of business risk management. By leveraging its exceptional data analysis capabilities, AI offers a multitude of advantages that can significantly enhance a company's ability to identify, mitigate, and even exploit potential risks.

One of the key strengths of Al lies in its ability to analyze vast amounts of data from diverse sources.

This allows for the identification of subtle patterns and trends that might be missed by traditional methods.

This proactive approach to risk identification empowers businesses to address potential issues before they escalate into costly problems.

Furthermore, Al can play a crucial role in supporting data-driven decision making. By analyzing complex datasets and uncovering hidden insights, Al can provide valuable recommendations that enable businesses to make informed choices regarding risk mitigation strategies.

We explain this in detail in our first article explaining how AI can turn business risks into opportunities.

In the second article, we'll explore how AI can transform your company into a profit making machine. In the final article, we list 10 ways AI can develop social media marketing strategies for businesses.

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#### 06 HOW AI CAN TURN BUSINESS RISKS INTO OPPORTUNITIES

Risks must be taken in the business world. We'll take a look at how to apply AI in this article to reduce business risks in your company.

## 19 10 WAYS AI CAN TRANSFORM SOCIAL MEDIA MARKETING STRATEGIES FOR BUSINESSES

In this article, we will explore 10 ways in which AI can transform social media marketing strategies for businesses, shedding light on cutting-edge techniques.

# CAN ARTIFICIAL INTELLIGENCE TRANSFORM YOUR COMPANY INTO A PROFIT-MAKING MACHINE?

You may have heard a lot about artificial intelligence (AI) recently and its potential to transform various aspects. So how could this smart technology help a company make more money? Find out in this article.

#### HOW AI CAN TURN BUSINESS RISKS INTO OPPORTUNITIES



From fluctuating markets and cyber threats to regulatory changes and stiff competition, challenges come in many forms. Yet, amid this unpredictability, there's a powerful tool emerging that can transform these risks into opportunities: Artificial Intelligence (AI).

From the convenience of virtual assistants like ChatGPT, Gemini, Siri and Alexa to the sophisticated predictive models used in finance and healthcare, Al's applications are vast and varied.

For businesses, integrating AI into operations isn't just a futuristic idea—it's a current necessity to stay competitive.

Beyond boosting efficiency and driving innovation, Al has a unique capability: it can reshape how businesses manage risks, turning potential threats into chances for growth and advancement.

Risks must be taken in the business world. Certain risks are too tiny for you to detect, while others are so large that they could stop you in your tracks.

For businesses, integrating AI into operations isn't just a futuristic idea—it's a current necessity to stay competitive

But now that artificial intelligence (AI) has developed leaps and bounds, you may turn these dangers into possibilities.

We'll take a look at how to apply AI in this article to reduce business risks in your company.

#### **AI in Risk Identification**

One of Al's most significant advantages is its ability to identify risks with remarkable precision.

Traditional risk management often relies on historical data and human judgment, which can sometimes miss the mark.

Al, however, analyzes vast amounts of data in real-time, spotting patterns and trends that might escape human notice.

Take the financial sector, for example. At algorithms can sift through transaction data to detect fraud, recognizing unusual activities that hint at fraudulent behavior.

These systems learn and improve over time, becoming increasingly accurate.

By catching potential fraud early, businesses can minimize losses and enhance their security measures.

What starts as a major risk can be transformed into an opportunity to build greater trust and reliability with customers.



#### **Did You Know?**

- The global AI market is set to expand from \$62.4 billion in 2022 to \$429.9 billion by 2028, marking a 24.5% annual growth rate.
- Al is expected to create 133 million new jobs and generate an extra \$13 trillion in business revenue by 2030.
- Global Al is growing at a CAGR of nearly 40%. Al service revenue will increase by over 6x in five years.



#### **Proactive Risk Mitigation**

Al doesn't just identify risks—it also helps in mitigating them before they escalate. Predictive analytics, powered by Al, can forecast potential issues before they become serious problems.

For instance, in supply chain management, AI can predict disruptions caused by natural disasters, political instability, or supplier issues.

With this foresight, businesses can create contingency plans, ensuring they continue to operate smoothly despite disruptions.

Another area where AI shines is predictive maintenance. By analyzing data from machinery and equipment, AI can predict when a breakdown is likely to occur.

This allows businesses to perform maintenance proactively, reducing downtime and maintenance costs. Instead of dealing with unexpected failures, companies can turn this risk into an opportunity to increase efficiency and save money.

#### **Enhancing Decision-Making**

Making well-informed decisions is crucial in today's complex business environment. All enhances decision-making by providing data-driven insights and recommendations. Machine learning algorithms process and analyze large datasets, offering the best options for a given situation.

In marketing, for example, AI can analyze consumer behavior and preferences, helping businesses tailor personalized campaigns.

This not only reduces the risk of ineffective marketing efforts but also creates opportunities for higher customer engagement and conversion rates. Similarly, in finance, AI can optimize investment portfolios by analyzing market trends and predicting asset performance, helping businesses make smarter investment decisions and maximize returns.

#### **Facilitating Innovation**

Al's ability to analyze and interpret data also drives innovation, turning the risk of stagnation into opportunities for growth.

By leveraging AI, businesses can uncover hidden insights and trends that lead to the development of new products and services.

In healthcare, for instance, AI is used to analyze patient data, leading to new treatment methods and drug discoveries.

This not only addresses the risk of falling behind in medical advancements but also opens doors to pioneering breakthroughs that can revolutionize patient care.

#### **Enhancing Cybersecurity**

Cybersecurity is a major concern for businesses today, with threats constantly evolving. Traditional security measures often struggle to keep up, but AI offers a robust solution.

Al-powered security systems can detect and respond to threats in real-time, learning from each incident to improve future defenses.

For example, AI can identify phishing attempts by analyzing email patterns and flagging suspicious messages.

By proactively identifying and mitigating cyber threats, businesses can protect their valuable data and maintain customer trust.

Turning the risk of cyber-attacks into an opportunity to enhance security measures bolsters a company's reputation for safety and reliability.

The rise of Artificial Intelligence signals a new era in business risk management. With AI, companies can not only identify and mitigate risks more effectively but also transform these risks into opportunities for innovation, efficiency, and growth.

As AI technology continues to advance, its potential to revolutionize risk management and create new avenues for business success will only grow. Embracing AI is no longer just about keeping up with the competition—it's about thriving in an increasingly complex and unpredictable world.

#### **Royex Technologies: Enabling AI Transformation**

Royex Technologies, artificial intelligence service company in Dubai, delivers cutting edge services to help organizations embrace AI technology. Our skilled team equips companies with the tools needed to utilize AI, fostering innovation and giving them an edge over competitors.

The AI transformation services at Royex Technologies include:

Data Preparation and Transformation: Our data engineers use sophisticated methods to clean, modify, and ready data for AI and machine learning models. This process guarantees that the data used is of high quality for generating precise insights.

Al Model Development and Deployment: The specialists at Royex create and implement custom Al models that serve specific business needs. These can range from predictive analytics and natural language processing to computer vision among other applications.

Al Powered Analytics and Visualization: With our Al driven analytics solutions, businesses can delve into their data for meaningful insights and visualize complex patterns in an understandable way.

Al Consulting and Strategy: At Royex, our Al experts actively collaborate with businesses to build detailed Al strategies. They find the best uses for Al and make sure it fits well into the company's current processes and systems.

Working with Royex Technologies allows companies to speed up their integration of AI. This adoption utilizes advanced AI technologies which helps companies grow, improve how customers experience their services, and maintain a lasting competitive edge.



## CAN ARTIFICIAL INTELLIGENCE TRANSFORM YOUR COMPANY INTO A PROFIT-MAKING MACHINE?



You may have heard a lot about artificial intelligence (AI) recently and its potential to transform various aspects.

Al involves computer systems that learn autonomously, reason, and make choices independently. But how this technology could actually boost business profits is an interesting discussion we should have.

Essentially, AI enables machines to perform tasks intelligently, mimicking human cognition and learning processes.

Advanced AI systems leverage vast datasets to train algorithms that can predict outcomes and make decisions effectively without needing explicit programming for every possible situation much like how children learn from experiences rather than just following given instructions.

So how could this smart technology help a company make more money? There are several key ways:

Advanced Al systems leverage vast datasets to train algorithms that can predict outcomes and make decisions effectively

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#### **Making Operations More Efficient**

All excels at processing and analyzing enormous datasets that would be impossible for humans to make sense of manually.

By ingesting all the intricate data around manufacturing processes, supply chain logistics, energy consumption patterns, and more, AI systems can pinpoint inefficiencies, wasteful spending, production bottlenecks, and areas for optimization with precision.

Al models can determine the ideal factory machine settings to minimize defects, map out the most fuel-efficient transportation routes, identify energy hogs ripe for upgrades, and endlessly more.

With Al's powerful pattern recognition and machine learning capabilities, it can uncover opportunities to streamline operations that would likely go unnoticed by human employees.

This granular operational intelligence allows companies to squash costs, reduce downtime, maximize output and drive up profit margins. Key areas where Al drives operational efficiency include:

- Predictive maintenance to avoid costly equipment failures
- Demand forecasting to optimize inventory and production planning
- Anomaly detection to quickly resolve process issues
- Optimization of resource allocation and scheduling
- Automation of repetitive tasks and quality control
- Minimizing supply chain delays and shortages
- Energy use optimization across facilities
- Improving manufacturing yield and reducing defects

By leveraging AI to make data-driven operational improvements across the board, companies can significantly cut costs while increasing productivity and consistency - a direct boost to the bottom line.



#### **Revenue Growth Through Intelligent Decisioning**

In addition to reducing operational costs, companies can leverage AI to drive more revenue through smarter decisioning backed by data.

All is extremely adept at analyzing large datasets to make accurate predictions that humans can't. This unlocks a plethora of revenue-boosting opportunities:

**Demand Forecasting:** Al models can precisely forecast product demand by studying historical sales data, market trends, pricing data, and more variables. This allows companies to optimize production, inventory management, and dynamic pricing/promotion strategies.

**Personalized Customer Experiences**: By understanding each customer's preferences and behaviors through data, AI personalized product recommendations, marketing content/offers, customer support experiences and more to increase engagement and conversions.

**Sales Optimization**: Al can prioritize the hottest sales leads to pursue, forecast sales pipeline, and guide reps to take the ideal next actions to close deals faster based on predictive intelligence.

**Targeted Marketing**: All automates audience segmentation, multichannel campaign deployment, A/B test optimization and budget allocation across channels for more cost-effective marketing that maximizes returns.

Streamlining these types of data-driven decisions through AI enables companies to work smarter and be more tactical in their revenue-generating efforts. AI's consistent, scalable decisioning avoids the biases and missed opportunities that come with gut-based human decision making.

#### **Accelerating Innovation Cycles**

Beyond cost savings and smarter revenue strategies, Al is also a powerful catalyst for accelerating innovation cycles to develop superior, disruptive products/services faster than competitors.

Al and machine learning techniques like generative adversarial networks, reinforcement learning, and automated modeling can spark novel ideas, designs and formulas that human researchers likely wouldn't think of.

For example, an AI system ingesting massive datasets on customer preferences, researching existing solutions, and simulating performance trade-offs could potentially generate thousands of innovative new product designs in a fraction of the time it would take human designers.

All could then rapidly prototype, test and optimize the most promising concepts through techniques like generative design and computational creativity.

On the research front, AI frees data scientists from repetitive data wrangling and analysis tasks through automation.

This allows them to focus more on the higher-level insight generation, hypothesizing, and experimentation to drive innovation faster. At also helps bridge expertise gaps by curating institutional knowledge to augment human skills and workflows.

#### Improving Products & Customer Experience

All opens up a world of possibilities for creating better, more tailored products and elevated customer experiences. On the product development side, Al allows companies to rapidly prototype, test, and iterate on new offerings by analyzing reams of voice-of-customer data, market research, demographic info and more.

Al and machine learning techniques like generative design, computational creativity, and reinforcement learning can actually spark novel product ideas and designs rather than just optimizing existing ones.



For customers, AI powers hyper-personalized product recommendations, predicts needs and issues, and enables seamless automated support through chatbots and virtual assistants.

Al can even automate customer outreach and dynamic pricing based on demand sensing. By analyzing each individual's preferences, behavior, and sentiment, Al crafts unique end-to-end experiences that boost satisfaction and brand loyalty. Key ways Al enhances products and CX include:

- Automated product design and rapid prototyping
- Customer preference and demand prediction modeling
- Generative AI for sparking creative new product ideas
- Hyper-personalized product recommendations
- Al-powered customer service chatbots and assistants
- Dynamic personalized pricing and discount optimization
- Product quality control and defect prevention
- Proactive issue detection and preventative support
- Voice/sentiment analysis to gauge customer emotions
- Automated, adaptive user experience personalization

Companies can use AI to delight customers with smooth, customized experiences and speed up innovation through agile product development. This empowers them to enhance their offerings and excel over their competitors.

#### **Boosting Sales & Marketing Efforts**

All enables companies to take a sophisticated, data-driven approach to every aspect of sales and marketing.

By leveraging machine learning to analyze huge data sets around customer demographics, market trends, competitor intel, historical sales data and more, Al can make accurate predictions that allow businesses to precisely target their efforts for maximum impact.



Al lead scoring models can identify the hottest, most qualified sales prospects to prioritize. Demand forecasting Al analyzes past patterns to optimally stock inventory and set pricing.

Al also powers real-time personalized marketing across channels like email, social media, the web and even direct mail by automatically generating creative content and offers tailored to each potential customer's preferences and behaviors.

Behind the scenes, AI handles tasks like audience segmentation, A/B test optimization, and budget allocation across campaigns. The result? Smarter sales processes, tailored customer experiences, reduced marketing costs and bigger revenue gains.

Key areas where AI drives sales and marketing impact:

- Predictive lead scoring and prioritization
- Customer data mining and segmentation
- Conversion rate optimization through A/B testing
- Churn risk modeling to retain customers
- Content personalization and dynamic creative optimization
- Multichannel campaign orchestration and audience targeting
- Demand forecasting and dynamic pricing/promotion strategies
- Sales process optimization and next-best-action recommendations
- Customer sentiment analysis from voice/text across channels
- Sales forecasting and pipeline management

By infusing AI across the entire sales and marketing funnel, companies can efficiently identify prospective buyers, personalize engagements, predict demand fluctuations, and ultimately boost conversions and long-term customer value.



#### **Cutting Costs Across the Board**

One of Al's most tangible value propositions is utilizing it to analyze operational data and streamline processes for peak efficiency.

Al excels at ingesting vast datasets around manufacturing, logistics, energy management, and more to pinpoint costly inefficiencies that humans likely can't detect.

For example, an AI system could study a factory's production data to determine the optimal machine settings and sequencing to minimize defects and downtime. Or it could ingest years of fuel logistics data to plan the most efficient, cost-effective shipping routes.

Al's machine learning capabilities can also predict when equipment and assets will require maintenance before they break down, avoiding unplanned downtimes and emergency repair costs.

This predictive maintenance is a huge cost-saver for asset-intensive businesses. At can further cut labor expenses by automating repetitive tasks like data entry, transaction processing, monitoring systems, and more.

The potential cost savings are substantial when systematically applying AI to make data-driven process improvements.

Key Al implementation challenges include:

- Data quality, completeness and bias issues
- Legacy process/system integration complexities
- Employee resistance and lack of Al literacy
- Al ethics risks like privacy violations and bias
- Shortage of internal AI talent and upskilling needs
- Regulations and governance overhead
- Challenges achieving return on AI investments



While the potential is unquestionably transformative, responsibly and successfully operationalizing AI at scale requires a proactive, multi-faceted strategy carefully tailored to each organization's unique situation. Those that take shortcuts are likely to see implementation struggles, disillusionment, and waste rather than profits.

#### **Clearing the Implementation Hurdles**

While the revenue growth and cost savings potential is undeniably exciting, companies can't simply plug in an AI system and print money. There are significant organizational hurdles that must be cleared thoughtfully:

Data Readiness: AI models are only as effective as the training data used. This requires robust strategies for collecting, cleaning, labeling and managing high-quality data across business functions. Incomplete, disorganized or biased data will lead to bad AI outputs.

Change Management: Deploying new AI systems in production requires comprehensive change management efforts to redesign workflows, reskill employees, secure executive buy-in, and manage cultural resistance.

Al Ethics: As Al takes on more autonomous decision-making responsibilities, companies must have strong governance programs to ensure privacy, security, fairness, transparency, and accountability in how Al operates.

Talent/Skills Gaps: There is a significant shortage of AI talent and experience at most companies. Hiring new expertise and upskilling existing staff through training programs is crucial.

Measuring ROI: Al implementation requires patient, long-term investments that show gradual returns as models improve over time. Defining the right Al KPIs and realistic ROI timelines is key.

The most successful companies taking a holistic approach - bridging data silos, instilling AI literacy across the organization, cultivating AI talents, and implementing robust governance and processes. Those that take shortcuts or view AI as a plug-and-play silver bullet inevitably struggle.

## 10 WAYS ARTIFICIAL INTELLIGENCE CAN TRANSFORM SOCIAL MEDIA MARKETING STRATEGIES FOR BUSINESSES



Today, social media plays a major role in marketing for businesses of all sizes. With billions participating on various platforms, companies continuously find new ways to reach potential customers, boost their brand recognition, and increase sales. Thus, Artificial Intelligence (AI), a technology with enormous capacity to help in alter how businesses handle social media marketing.

Although Al's use in social media may seem recent, its origins date back to the early internet days. ARPANET, an early version of our current internet, included original features like online chat rooms and file sharing protocols that laid the groundwork for modern social media.

Over time, AI has developed further with its uses in social media becoming more advanced.

Starting with Apple's Siri in 2011 which signaled a new period of voice enabled service, to Google's Al-aided Smart Bidding for ads in 2016, it is clear that Al has had a significant impact on social media.

Artificial Intelligence
(AI), a technology with
enormous capacity to
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social media
marketing

Social media sites such as TikTok now use Al-driven algorithms to provide accurate suggestions and offer users an endless supply of intriguing content that keeps them engaged for hours.

This is just demonstrating a fraction of Al's capabilities for transforming social media marketing tactics.

To stay competitive and optimize their social media visibility, businesses now see it as essential to adopt Al rather than considering it just an optional extra.

By putting AI to work, companies can take advantage of opportunities to improve their social media marketing efforts.

From creating personalized engaging experiences and making choices based on solid data, to gaining efficiency and results within their online marketing activities.

In this article, we will explore 10 ways in which AI can transform social media marketing strategies for businesses, shedding light on cutting-edge techniques, real-world examples, and the boundless potential of this rapidly evolving technology.

From personalized content creation and predictive analytics to sentiment analysis and targeted advertising, we will delve into the game-changing capabilities of AI that are poised to redefine the social media marketing landscape.

#### **Personalized Content Recommendations**

One of the most significant challenges businesses face on social media is creating high-quality, engaging content consistently.

All can help solve this issue by examining vast amounts of data on user preferences, trending topics, and successful content patterns.

Advanced algorithms can then suggest compelling content ideas, optimize headlines and copy for maximum impact, and even generate draft images, videos, or graphics tailored to specific audiences.

This not only saves businesses time and resources but also ensures that their social media content resonates with their target audience, leading to higher engagement and conversions.

Moreover, AI can adjust the content instantly based on results gathered from previous posts like changes in language format or timing to extend reach and effect. This level of customization and flexibility is essential in the high-speed setting of social media where trends and user likes can change quickly.

#### **Advanced Social Media Monitoring and Sentiment Analysis**

Effective social media marketing requires a deep understanding of customer sentiment and conversations surrounding a brand.

Al-driven social media listening and sentiment analysis instruments can keep track of mentions, hashtags, and chats on several platforms in real-time, providing businesses with invaluable insights into customer preferences, pain points, and perceptions.

Sentiment analysis algorithms can check the emotional tone of conversations. This allows companies to rapidly spot and react to customer feedback, worries, or possible crises before they get worse.

With this active method of social media, companies can take care of their online reputation with increased efficiency, tackle problems quickly and build stronger relationships with customers and brand dedication.

#### **Precise Targeted Advertising and Audience Segmentation**

In social media marketing, AI provides a significant benefit by accurately identifying and separating target audiences.

Using machine learning algorithms and examining a lot of user data like demography, interests, activities, and previous interactions AI can produce detailed audience segments.



This accuracy allows firms to serve highly specific ad campaigns. In turn, this boosts the chances of interacting with the right audience with relevant content and offers.

Furthermore, AI can continually fine tune targeting tactics based on upto-the-minute performance data. This ensures that campaigns touch base with the most responsive audiences while maximizing return on investment (ROI).

#### **Predictive Analytics and Trend Forecasting**

The predictive power of AI can drastically shift how we approach social media marketing tactics.

By examining the past data and detecting patterns, AI can predict what's going to happen next such as trends, user activities, and how well content will perform on social media sites.

This lets businesses update their strategies in advance, schedule their content in advance, and use their resources more wisely. This way they can keep up with changes and seize new possibilities as they arise.

For instance, AI can spot approaching events or cultural shifts that could influence customer behavior.

It enables organizations to modify their social media promotions to match these changes. Seeing into the future like this can give businesses an upper hand over competitors and allow them to maintain relevance in a constantly evolving social media environment.

#### **Chatbots and Conversational Al**

The use of Al-driven chatbots and virtual assistants is changing how companies connect with their customers on social media. These advanced Al tools can give quick responses, answer common questions, and even manage basic tasks or customer service needs. By providing efficient and customized interactions, chatbots can improve customer experience and boost brand, while also taking pressure off customer service staff.



Chatbots can be added to different social media platforms, allowing companies to talk with customers instantly, respond to their concerns, and give customized advice or deals. This type of promptness and accessibility can greatly increase customer happiness and create stronger bonds with the brand.

#### Influencer Identification and Management

In the realm of influencer marketing, AI can be a powerful ally for businesses. AI algorithms can analyze social media data to identify influential individuals or accounts within a brand's niche or target audience based on various factors such as reach, engagement rates, content relevance, and audience demographics.

This data can support companies build effective influencer marketing strategies and manage influencer connections with more ease.

Al can aid businesses in finding the right influencers for their brand, manage partnerships, monitor campaign results, and boost influencer collaborations for greatest influence and ROI.

#### **Content Optimization and Personalization**

All boosts the personalization of content by exploring user data, likes, and interaction trends to propose customized content suggestions.

By recognizing specific tastes, AI systems can recommend related blogs, articles, films, or items relevant to each user. This results in a more appealing and captivating social media encounter.

This level of personalization not only enhances user satisfaction but also increases the likelihood of conversion, as users are presented with content and offers that align with their unique needs and preferences.

#### **Social Media Automation**

All has the ability to handle several social media tasks, like arranging and planning content, answering to comments or texts based on preset guidelines or chat flows, and also improving the time of posts for increased attention and participation.

This automation can help companies save a lot of time and resources while keeping an active and appealing social media profile.

But, it is essential to find the perfect balance between automation and human supervision to keep interactions genuine and valuable.

#### **Advanced Social Media Analytics and Reporting**

Tools backed by AI can offer detailed, useful data that shows how a business's social media is performing.

They can study various aspects, like engagement, the reach of posts, data about the audience such as their demographics, efficacy of marketing campaigns, emotion based analysis and even keeping tabs on competitors.

This rich information allows businesses to make decisions based on data. It helps them finetune strategies and put resources where they're most needed for great returns from social media marketing.

Besides, AI can spot recurring patterns and trends that might not be clear. This helps businesses stay updated and adjust their strategies in time.

#### **Image and Video Recognition**

Al's computer vision capabilities can be leveraged to analyze images and videos shared on social media platforms. Businesses can use highend image and video identification algorithms to spot brand mentions, product placements, and even feelings shown in visual content.





# ROYEX TECHNOLOGIES Landing E-commerce Website Designing and Development COMPANY IN DUBAI



## **MOBILE APPS**

Mobile app development, guides, cost breakdowns



Dubai's online business marketplace is thriving, and app development is a major driving force behind this growth.

Apps put businesses directly in customers' pockets. This allows for easy browsing, quick purchases, and on-demand services – anytime, anywhere.

Dubai has a high smartphone penetration rate, making mobile commerce a dominant force.

Apps cater perfectly to this trend, offering a seamless shopping experience directly on mobile devices. This convenience fuels the growth of e-commerce in Dubai.

Our first article deep dives into the impact of app development on online business marketplace in Dubai

In the second article, we will cover the major announcements made at Apple's WWDC 2024.

In the final article, we explore the role of AI in custom app development. Artificial intelligence (AI) is rapidly transforming the world of custom app development, offering a powerful toolkit for businesses to create intelligent and user-centric applications.



# THE IMPACT OF APP DEVELOPMENT ON ONLINE BUSINESS MARKETPLACE IN DUBAI

From e-commerce to real estate, the rise of mobile applications has reshaped the way businesses operate, interact with customers, and generate revenue.

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### THE ROLE OF AI IN CUSTOM APP DEVELOPMENT

In this article, we explore the role of AI in custom app development, exploring its benefits, applications, and future potential.

## 35 APPLE WWDC 2024: ERA OF APPLE INTELLIGENCE

The keynote address by Apple at the Worldwide Developers Conference 2024 has concluded, with many major announcements made. The most important announcements from the keynote are listed in this article.

#### **MOBILE** APPS

#### THE IMPACT OF APP DEVELOPMENT ON ONLINE BUSINESS MARKETPLACE IN DUBAI



Living in Dubai, I've had a front-row seat to witness the digital revolution transforming the city's business landscape.

As a tech enthusiast and someone deeply involved in the business community, I can say with confidence that app development has been a game-changer for the online business marketplace in Dubai.

Dubai, known for its forward-thinking approach and quick adoption of new technologies, has embraced mobile apps with open arms, revolutionizing the way businesses operate and interact with their customers.

From e-commerce to real estate, the rise of mobile applications has reshaped the way businesses operate, interact with customers, and generate revenue.

From e-commerce to real estate, the rise of mobile applications has reshaped the way businesses operate, interact with customers, and generate revenue 77

#### The Digital Transformation in Dubai

Dubai has always been a city of innovation and progress.

With the government's push towards a smart city, the adoption of mobile applications has been significant. This drive has been fueled by several factors:

#### **Government Initiatives**

Smart Dubai: This is a program intended to turn Dubai into the world's happiest city. It uses technology and clever services to boost both efficiency and living standards.

Dubai Internet City: This is a tech park offering top-notch infrastructure and a helpful community for both new and established tech businesses. It promotes creativity and teamwork.

Vision 2021: This is the government's bold strategy to Dubai into a top-line smart city change incorporating cutting edge technologies into daily life and civic services.

#### **High Smartphone Penetration**

Global Leader: Dubai stands out as a worldwide leader due to its exceptionally high smartphone usage. Almost everyone living here has a mobile.

Market Opportunities: The extensive smartphone use creates ample opportunities for businesses.



#### Did You Know?

- Al market will reach \$1.84 trillion by 2030
- 92% of companies use Al personalization for growth
- Al will create 97 million new jobs by 2025
- 97% of mobile users are already engaging with voice assistants powered by
- Users of apps with Al chatbot automation have positive satisfaction rates of 80%.

It is an effective way to engage with the large and technologically adept user base through mobile apps.

Consumer Expectations: The high rate of smartphone usage also increases demand from users for outstanding mobile app services. This demands constant innovation from businesses.

#### **Economic Growth**

Business Hub: Dubai is a premier business centre that lures businesspeople and investors globally, leading to a vibrant and competitive market.

Investment Magnet: The city's thriving economy and ideal place amplify its allure for investment, which in turn accelerates technology progress and app creation.

Customer Engagement: Businesses leverage mobile apps to differentiate themselves, offering unique features and enhanced customer engagement to stay ahead in a competitive environment.

These factors collectively drive the significant adoption and development of mobile applications in Dubai, transforming its business landscape and positioning it as a global leader in innovation and technology.

#### **Sector-Specific Impacts**

#### E-Commerce

The e-commerce sector in Dubai has seen explosive growth, thanks largely to mobile apps. Smartphone usage and growing internet access have turned more people towards mobile apps for their shopping needs.

The Dubai Chamber of Commerce and Industry states that the country's e-commerce market could hit \$27 billion by 2025, thanks substantially to mobile commerce. The report further suggests that by 2025, almost 73% of all UAE e-commerce transactions will happen via mobile devices.

Dubai's boom in e-commerce apps has been remarkable. Local platforms like Noon and Namshi have rapidly gained traction, providing users an easy and swift shopping experience.

These applications have not only simplified the browsing and buying process but also created new opportunities for companies to reach potential customers and increase their sales.

Take Noon as an example, one of the top e-commerce platforms in the Middle East. It uses its mobile app to provide a shopper-friendly experience.

Features like Al-driven product suggestions and instant sale alerts have appreciably improved customer loyalty and sales growth.

#### **Food Industry**

Another industry that has greatly benefited from app development in Dubai is the food and beverage sector.

Food delivery apps such as Zomato, Talabat, and Deliveroo allow people to order their preferred food easily from their smartphones.

This ease of use and choice provided by these apps has raised the frequency of online food orders.

Ken Research reported that the Dubai food delivery market could hit \$1.1 billion by 2025, showing the huge scope of appcentered food delivery services.

#### **Hospitality and Tourism**

Dubai's tourism industry is yet another a major contributor to its economy, and mobile apps have played a crucial role in enhancing the visitor experience. Apps such as Visit Dubai offer city guides, details about events, and reservation options. This functionality allows tourists better understand and enjoy what Dubai provides.

Let say for example, for Expo 2020, the Visit Dubai app was vital. It assisted visitors in finding their way around the, locating pavilions, and obtaining tickets. As a result, it enhanced visitor satisfaction and boosted local companies and attractions.

#### **Real Estate**

Apps such as Bayut and Property Finder have simplified property search and transactions. Users are able to explore listings, see highquality photos, and experience virtual tours using their smartphones.

This convenience has drawn both local and global investors, boosting growth in the real estate industry.

Take Bayut's app as an example. It makes available comprehensive information about properties, pricing trends, and neighborhood details helping users make informed choices.

The addition of augmented reality (AR) for virtual tours enriched the user experience even more.

#### **Finance and Banking**

The financial sector in Dubai has embraced app development to provide better services to its customers. Banks such as Emirates NBD and Dubai Islamic Bank have all-inclusive mobile banking apps.

These apps let users control their accounts, send money, and settle bills easily. The apps have boosted both client contentment and bank operational efficiency.

For instance, the Emirates NBD app comes with options for personal finance control, investment monitoring, and even digital assistants. This makes banking easier and reachable for its users.

#### **Future Statistics and Projections**

Looking ahead, the impact of app development on Dubai's online business marketplace is expected to grow even further. According to recent studies, the Middle East and North Africa (MENA) region's mobile app market is projected to grow at a CAGR of 24.1% from 2021 to 2026.

Dubai, being a central player in this region, is poised to benefit significantly from this growth. In addition, as per a report by the Dubai Future Foundation, the UAE's app economy is expected to generate \$4.1 billion in revenue by 2025, creating over 22,000 jobs in the process.

This growth will be fueled by the increasing adoption of emerging technologies such as artificial intelligence, blockchain, and the Internet of Things, which will enable the development of more sophisticated and innovative apps.

- E-commerce Market Growth: Dubai's e-commerce market is expected to reach a value of \$27 billion by 2026, primarily driven by the use of mobile apps. These applications will continually improve the buying experience for customers through personalized and interactive functions. shopping
- Tourism and Hospitality: With Expo 2020 setting a precedent, Dubai aims to attract 25 million tourists by 2025. Mobile applications will be very useful in handling this increased of people, with constantly updated and easily accessible features.
- Real Estate Market: The real estate sector is anticipated to see continued growth, with the market size reaching \$132 billion by 2027. Apps will further simplify property transactions and management, attracting more investors.

#### **Real-World Examples**

Careem: Founded in Dubai, Careem is a prime example of successful app development. It started as a ride-hailing service and has since expanded to include food delivery, digital payments, and courier services. Acquired by Uber for \$3.1 billion, Careem exemplifies how a homegrown app can achieve global recognition.

DubaiNow: This government app consolidates over 70 services from various departments into a single platform. Residents can pay bills, renew vehicle registrations, and access health services, among other things. DubaiNow showcases how app development can streamline and enhance public services.

Fetchr: This delivery app uses GPS coordinates to deliver packages, addressing the issue of unclear addresses in the region. Fetchr has significantly improved logistics and delivery services, benefiting numerous online businesses.

#### **Challenges and Opportunities**

While the growth of app development in Dubai presents numerous opportunities, it also comes with challenges:

Competition: The competitive landscape means businesses must continuously innovate to stay relevant. With many companies vying for consumer attention, differentiating through unique app features and superior functionality is essential to maintaining a competitive edge.

Cybersecurity: With increased reliance on apps, ensuring data security and privacy is paramount. Businesses must invest in robust cybersecurity measures to protect sensitive user data from breaches and cyber attacks, building trust and compliance with regulations.

User Experience: Providing a seamless and intuitive user experience is crucial for app success. Apps need to be user-friendly, fast, and responsive to meet the high expectations of Dubai's tech-savvy population, ensuring customer satisfaction and retention.

Despite these challenges, the future of app development in Dubai looks promising. Businesses that harness the power of mobile applications will undoubtedly thrive in this dynamic marketplace.

In summary, app development has transformed the online business marketplace in Dubai. From retail to real estate, how businesses operate and engage customers have been disrupted by mobile apps.

The future is indeed bright for people who manage to ride its wave one after another while keeping up with constant evolutions that are happening in the industry as it grows and innovates enormously.

In Dubai's transformation into a smart city, the significance of app development will continue to increase. It will be a major force for driving economic growth and improving residents' standards of living as well as those of visitors who come here.

#### APPLE WWDC 2024: ERA OF APPLE INTELLIGENCE



The keynote address by Apple at the Worldwide Developers Conference 2024 has concluded, with many major announcements made. We saw some significant changes to Apple's operating systems as well as our first glimpse of the AI technologies that will be included in its devices.

The most important announcements from the keynote are listed in this article in case you were not able to catch it live.

#### **Apple Intelligence**

It should come as no surprise that Apple is releasing its own AI system given that practically every major tech company is cashing in on the AI boom.

Apple Intelligence is a new personal intelligence system from the firm that "places potent generative models directly at the heart of your iPad, Mac, and iPhone."

The keynote address by Apple at the Worldwide Developers Conference 2024 has concluded, with many major announcements made

Apple Intelligence has a strong focus on security because it will automatically determine whether to handle your request on-device or by contacting Apple's private cloud computing service. The system will be free to use on the iPhone 15 Pro, iPads, and Macs in the future.

In addition, Apple Intelligence has what is perhaps the largest update for Siri since its announcement over ten years ago.

The function is "more deeply integrated," according to the business, into its operating systems. For iOS users, this entails switching from the well-known Siri icon to a blue, luminous border that encircles the desktop when in use.

On the other hand, App Intents allows for a more direct integration of the assistant into other programs. First-party apps will be the first to benefit from this, but the business will also grant access to outside parties. The range of direct tasks that Siri is capable of will be significantly enhanced by this innovation.

Additionally, the product will greatly expand multitasking capabilities, enabling a form of cross-app interoperability.

#### Siri Gets an Al Makeover

One of Apple's major artificial intelligence (AI) projects this yaer is Siri. Now fully integrated into the iPhone, the enhanced voice assistant will show up as a pulsating light on the edge of your smartphone.

With increased control over your apps, you'll be able to ask the voice assistant to look up information in a certain email or even bring up a friend's photo. Apple uses LLMs in order to improve Siri's comprehension of your speech and manage inquiries and follow-up requests.

With a new style that includes a redesigned symbol, Siri is now more relevant, personal, and natural. The assistant appears as a glowing ring around the screen's edges on your device.

Siri can now adapt to voice errors and comprehend context more effectively thanks to Apple Intelligence. Now that you can type to Siri, it can also respond to queries on how to use your Mac, iPhone, and iPad.

With onscreen awareness, Siri will soon be even more powerful. Saying something like "add this address to contact card" to Siri will handle tasks like processing an address that a friend sends you, provided that the service functions as promised.

Additionally, Siri will be able to do actions both within and between apps. For example, you can ask Siri to "add this photo" to another app after telling it to "make this photo pop."

OpenAl's ChatGPT chatbot has also been integrated with Siri as part of its significant Al update.

With this new integration, Siri will figure out on its own whether a question is more appropriate for ChatGPT or not. Then, before submitting its request to ChatGPT, it will request your permission. ChatGPT via Siri will be available to you without requiring an account and at no cost.

## Al features in Mail, Messages, Photos, and more

With iOS 18, Apple is introducing a number of new AI features throughout its apps, one of which is the ability to compile emails and provide responses.

The business unveiled Image Playground, a new AI image creator, and Genmoji, a feature that lets you make bespoke emoji in response to text prompts.

Apple is also integrating artificial intelligence (AI) into the Photos app, enabling natural language photo searches.

Moreover, you can remove background items from your photos in a manner akin to Google Magic Eraser. Apple is also integrating Al-powered summaries and transcriptions into the Notes and Phone apps.

Another new feature is Image Playground, which lets users create photographs using concepts like themes, costumes, accessories, locations, and more.

It's also available as a stand-alone app and an API for developers. After you choose the times you wish to include, a preview of your photograph will be created by the Apple Intelligence-powered feature.

By choosing from a variety of techniques, such as sketch, animation, or illustration, you can swipe through the image previews and produce additional images, or you can go back.

Additionally, Apple Intelligence will make recommendations based on the topics discussed in your conversations; however, Apple claims that all of this happens on the device.

Apart from creating images, Apple Intelligence will function in several apps to enable other features like requesting it to retrieve files you have worked with recently or images of a particular individual.

Alternatively, you can wish to ask it to play the podcast that someone earlier suggested to you.

The feature will be more potent due to its comprehension of apps and actions since it will be able to comprehend facts like your Calendar appointments in addition to traffic data from Maps and other sources, giving your interactions a more intimate context.

## **Apple TV+ introduces InSight**

Apple announced InSight, a useful new feature for Apple TV+. Watchers will be able to learn song titles and actor names as they appear on screen thanks to this function.

The new option for Apple TV+ seems to be modeled after Amazon's X-Ray function, which provides users with an overview of actor biographies and behind-the-scenes information while they watch movies and TV series.

The feature that makes InSight unique is its Shazam-like ability to identify the music that is now playing in a TV show or movie and allow users to add it to an Apple Music playlist for later listening.

With "InSight," users of Apple TV+ may access a real-time display featuring character details and actor names via their remote.

Additionally, Apple revealed a number of upgrades for tvOS, the operating system for Apple TV.

Enhancing the dialogue on TV speakers, receivers, AirPods, and other Bluetooth devices is one way to improve the audio experience. Prior to this, only owners of HomePod speakers could access Enhance Dialogue.

With tvOS 18, Enhance Dialogue is also becoming more intelligent thanks to machine learning and computational audio. The business claims that Apple TV 4K will have improved vocal clarity over background noise, music, and action sequences.

An additional tvOS 18 feature that will be available on Apple TV is the automatic activation of subtitles in specific scenarios. These scenarios include muted volumes, language discrepancies in shows and movies, and the need to replay a scene.

## **New Passwords App**

Apple introduced a new Passwords app. It will be available with iOS 18, macOS Sequoia, and visionOS 2, the upcoming major editions of iOS, macOS, and visionOS.

A new column on the left makes it easier for you to navigate your password collection in addition to all the functions that are currently available in the Passwords menu.

You may view all of your passwords, simply your Wi-Fi passwords (a recent addition), passkeys, and codes that have nothing to do with a website or service, for example.

Remind yourself that iCloud Passwords already supports note fields for each password entry, shared passwords, and verification codes.

It will be simpler to get started with this new software and consider storing your private data on iCloud Passwords.

## macOS Sequoia

A couple significant macOS updates were revealed at Apple's WWDC 2024 in Cupertino. Sequoia is the latest version of macOS.

Mirroring on iPhones is one of the biggest upgrades this time. You can now mirror and control the screen of your iPhone directly from your Mac laptop or desktop thanks to macOS' Continuity feature.

The linked iPhone remains locked even while Mac notifications activate iPhone mirror mode and play iPhone audio.

In other areas, macOS Sequoia offers features like automatic window tiling and a videoconferencing presenter preview mode with an integrated background substitute.

#### **iOS 18**

Apple has revealed the first information about the next major update of iOS - the iOS 18. Apple announced that ChatGPT will be integrated with Siri and other system-wide features.

However, Apple made note of additional customization possibilities before diving into Al. You may now arrange icons on your home screen in any way you choose, without obscuring your background images.

There will also be an update for the Control Center. It extends beyond the buttons on the primary control center page.

To view media playback and home controls, scroll down. By tapping on the edit button located in a corner, you may also edit Control Center directly from Control Center.

Third-party developers will be able to create Control Center and lock screen shortcuts thanks to a new set of APIs for Control Center. Apple demonstrated, for example, how to swap out the lock screen camera button with a Snapchat button.

It is now possible to lock specific apps. In order to unlock this application, you must authenticate yourself using Face ID, Touch ID, or your passcode.

## **Surface Widgets in watchOS 11**

WatchOS 11 will also include a ton of new features, such as the ability to add widgets automatically based on your needs.

With the release of the new Vitals app, which allows you to "explore your most important health metrics with just a glance," Apple is also introducing new features for cycle tracking, Live Activities, and Check In support, which enables your loved ones to follow you while you work out.

### visionOS 2

Apple has released visionOS 2, the operating system's first significant update. A new feature of the Vision Pro is the ability to add depth to an existing shot using machine learning. Along with these additions, the upgrade will allow travel mode on trains, an ultrawide virtual Mac display, and more natural gestures.

Additionally, Apple intends to expand the Vision Pro's international reach to include China, Singapore, Australia, Canada, France, and the United Kingdom.

# THE ROLE OF AI IN CUSTOM APP DEVELOPMENT



When talking of future technologies, one can examine the optimistic outcomes of breakthroughs in fields such as artificial intelligence. We've long since moved on from a time of lowly technology and generic services to a highly automated world where customization is key.

These days, the core of any mobile application we deal with is artificial intelligence (AI), along with related fields like machine learning (ML) and deep learning. Al is not just a buzzword; it is a suite of technologies that can significantly enhance various stages of app development, from initial planning to post-launch maintenance.

In this article, we explore the role of AI in custom app development, exploring its benefits, applications, and future potential.

Artificial Intelligence encompasses a range of technologies including machine learning (ML), natural language processing (NLP), computer vision, and more.

" These days, the core of any mobile application we deal with is artificial intelligence (AI), along with related fields like machine learning (ML) and deep learning

In the context of app development, AI can be utilized to automate repetitive tasks, provide intelligent insights, enhance user experience, and improve overall efficiency.

## **Key Components of AI in App Development**

Machine Learning (ML): ML algorithms can learn from data and improve over time without being explicitly programmed. This is particularly useful for predictive analytics, personalization, and automating complex processes.

Natural Language Processing (NLP): NLP allows apps to understand and respond to human language, enabling functionalities such as chatbots, voice recognition, and sentiment analysis.

Computer Vision: This AI technology enables apps to interpret and process visual data from the world, facilitating features like image recognition and augmented reality (AR).

Robotic Process Automation (RPA): RPA uses AI to automate repetitive tasks, improving efficiency and reducing the potential for human error.

## **Applications of AI in Different Stages of App Development**

Al can be utilized throughout the app development lifecycle to enhance efficiency, improve quality, and deliver personalized user experiences. Here's how AI impacts each stage:

#### 1. Ideation and Planning

During the initial stages of app development, AI can analyze market trends and user needs to identify potential opportunities. Al-powered tools can perform competitive analysis and predict the success of various features, helping businesses make informed decisions about their app's direction.

#### 2. Design

Al-driven design tools can automate the creation of wireframes and prototypes. By understanding user preferences, these tools can suggest design elements that enhance usability and aesthetic appeal. For instance, tools like Adobe XD utilize AI to streamline the design process.

#### 3. Development

Al can assist developers by generating code snippets, detecting errors, and optimizing performance. Integrated development environments (IDEs) with AI capabilities, such as Visual Studio Code with IntelliCode, provide real-time code suggestions and improve development efficiency.

#### 4. Testing

All automates the generation of test cases and the execution of tests, significantly reducing the time required for manual testing. Al-driven testing tools can simulate user interactions, identify bugs, and ensure comprehensive coverage, improving the reliability of the final product.

#### 5. Deployment

During deployment, AI can predict the best times to release updates based on user activity patterns. It can also optimize the deployment process to ensure minimal downtime and smooth transitions.

#### 6. Maintenance and Support

Post-launch, Al-powered analytics can monitor app performance and user feedback in real-time. Al chatbots can provide instant support to users, handling common queries and issues, while more complex problems are escalated to human agents.

## **Benefits of AI in Custom App Development**

By integrating AI, developers can achieve greater efficiency, precision, and user satisfaction. Here are some key benefits of AI in custom app development:

#### 1. Enhanced User Experience

Al-powered apps can provide personalized experiences by analyzing user behavior and preferences. For example, recommendation engines in e-commerce apps suggest products based on past purchases and browsing history, enhancing user satisfaction and engagement.

#### 2. Improved Development Efficiency

Al can automate routine coding tasks, such as bug fixing and code optimization, freeing up developers to focus on more complex aspects of app creation. Tools like GitHub's Copilot use Al to suggest code snippets, reducing the time and effort required for manual coding.

#### 3. Intelligent Testing and Quality Assurance

Al can transform the testing phase of app development by automating test case generation and execution. Al-driven testing tools can identify patterns and predict potential issues, ensuring higher quality and more reliable applications.

#### 4. Predictive Analytics

By leveraging ML algorithms, developers can predict user behavior and app performance under different conditions. This enables proactive improvements and helps in making data-driven decisions during the development process.

#### 5. Enhanced Security

All can enhance app security by detecting and responding to threats in real-time. All algorithms can analyze patterns to identify unusual activities, providing an additional layer of protection against cyber attacks.



# LEADING MOBILE APPS DEVELOPMENT COMPANY IN DUBAI



# ABOUT-US A



#### **We Are Cost Effective**

At present we have five offices, our office for Sales & Support is in Dubai and Qatar, and two other offices in India and Bangladesh that oversee design and development. We employ over 50 people across these three locations.

By maintaining the minimum number of employees in Dubai, we are keeping our cost and price lower than other companies. Even so, because our support team is in Dubai, our customers can enjoy face to face meetings and explain their vision clearly. This is how we provide great service with a minimum cost.

Moreover, our online support system can provide our clients with trackable support. To further streamline our customer support and client comfort we provide our clients with warranty against bugs and errors.

#### Who Are We

Royex Technologies is a website and **mobile** app development company in Dubai that provides mobile app, web and design solutions for small, medium and large-scale companies. We have developed and successfully delivered more than 300 projects to date for our clients in Dubai, UAE and other Middle East countries.

#### We Are in Four Countries with Five Offices

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