

Empowering Decision on the Go

The Power of Mobile Business Intelligence

A SCALABLE AI WHITE PAPER



SCALABLE

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EXECUTIVE SUMMARY

The evolution of computing has ushered in unparalleled economic growth, efficiency, and capabilities, fundamentally transforming both personal and business operations. We are now embarking on the fifth wave of mobile computing, poised to redefine connectivity, transcend traditional office limitations, and empower businesses to operate in unprecedented ways. This new era promises the delivery of information and resources to everyone, anywhere, anytime, independent of device and architecture. The emergence of powerful smartphones and tablets, comparable to today's laptops and desktops, yet boasting unique features such as multi-touch gestures and mobile data capturing, will revolutionize how business is conducted. Early adopters of mobile computing will soon find it indispensable.

Business Intelligence (BI) has become integral to any business, and mobile computing is set to extend and enhance its benefits. Although Mobile BI has been around, its full potential remains untapped as features like application integration, sensor-based queries, mobile capture, multi-touch gestures, and integrated mapping are still evolving. Mobile BI will ensure real-time information delivery throughout the corporate hierarchy, enabling decision-makers to access critical data, employees to stay informed 24/7, and operations to run smoothly with custom dashboards and enterprise resource access.

Visionary organizations gain significant competitive advantages by adopting Mobile BI early. Implementing Mobile BI can lead to increased productivity, better decision-making, higher profits, and a robust operational edge. Companies that fail to adapt swiftly may face dire consequences, much like Blockbuster did against Netflix. Netflix's early adoption of streaming technology not only outpaced competitors but also established it as a leader in its field. Similarly, Mobile BI will provide decision-makers with unparalleled access to real-time information, enhancing their ability to respond swiftly to market demands. Research firm Gartner predicts a substantial increase in mobile BI usage, with a growing number of mobile device users relying on it for decision-making.

Scalable Systems offers unmatched expertise in business intelligence and performance management services, providing the best solutions for enterprise-wide OLAP and custom reporting. By focusing on delivering business intelligence anywhere, Scalable Systems ensures that organizations can harness the full potential of Mobile BI to stay ahead of the competition and thrive in an increasingly dynamic market.



New Research shows that Mobile BI access can reduce “time to information” and shorter “time to Decisions resulting in increased Profitability and agility.

INTRODUCTION

Business Intelligence (BI) involves executing data analytics to study the impacts of historical and current events on business operations. By utilizing heuristics and predictive scenarios, BI enables businesses to identify future trends and capitalize on them using intelligent information. In a highly interconnected world, events in one region can significantly influence businesses elsewhere. As information spreads rapidly, businesses must adapt to maintain agility. Despite BI's significant advancements, its delivery remains rooted in outdated methods like paper reports and desktop dashboards. Mobile BI is crucial for any business intelligence strategy, ensuring that quality analysis is available when and where decision-makers need it.

BI applications are breaking free from traditional enterprise devices, becoming accessible "here and now." Decision-makers gain immense power when analytics are available regardless of location. For instance, a CIO traveling globally can make informed decisions and direct team efforts from anywhere, whether in Switzerland or Tokyo. The agility with which a business responds to events can greatly impact operations and future earnings. With the advent of the fifth wave of computing devices, new information delivery channels have emerged, making data accessible anytime, anywhere. Mobile BI eliminates the desk-bound constraint, reducing lag time and providing critical information on the go.

THE FIFTH WAVE OF COMPUTING

Computing history has evolved through four major waves—mainframes, minicomputers, workstations, and personal computers—each more economically impactful than the last. The fifth wave, mobile computing, marks the next paradigm shift. Unlike previous waves driven by hardware advancements, the fifth wave arises from affordable devices, high-speed wireless, and open-source standards. This era creates an ecosystem of pervasive connectivity, where information is available anytime, anywhere, to everyone.

Mobile devices empower decision-makers by providing real-time information at their fingertips. A salesperson, for instance, can access vital client data on the go, leading to better decision-making. Managers benefit from portable, interactive information essential for efficient operations. Intelligent information needs to be accessible in real-time, when and where it's required. Deploying fifth-wave mobile devices establishes a network for real-time data and decisions supported by enterprise resources. Push capabilities of mobile devices ensure information is automatically delivered, including custom dashboards, charts, reports, alerts, and predictive analysis, guiding decision-making with accurate, actionable insights.

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46% have a process in place to automatically push BI reports to mobile devices on a pre-determined schedule. This capability can serve basic management information to business management without additional workload being placed on IT staff.

-- The Aberdeen Group



THE EARLY MOVER

The rapid expansion of mobile technology has revolutionized the way businesses operate and employees collaborate. Today, a significant portion of the workforce is mobile, leveraging smartphones and tablets for work-related tasks. This shift has been fueled by advancements in mobile computing, the increasing availability of high-speed internet, and a changing workforce demographic.

The implications of this mobile transformation are profound. Businesses that embrace mobility and leverage data-driven insights are better positioned to enhance productivity, improve decision-making, and gain a competitive edge. As the mobile workforce continues to grow, we can expect further innovations in mobile technologies and their integration into business operations.



HOW MOBILE BI WILL KEEP YOU AHEAD

In today's business landscape, where data is abundant and the pace is fast, having real-time access to data is crucial for making informed decisions anytime and anywhere. Mobile Business Intelligence (BI) is increasingly becoming a critical tool for organizations, enabling them to stay competitive and efficient in a dynamic environment.



Advantages of Mobile BI

- **Accessibility**

The primary advantage of mobile BI is its accessibility. With critical company insights at your fingertips, you are not confined to a single computer or location. Instead, you can access essential data on your mobile device at any time and from any place. This constant availability of real-time data insights enhances the overall productivity of your daily operations, enabling you to respond swiftly to emerging challenges and opportunities.

- **Improved Decision-Making**

Mobile BI apps accelerate the decision-making process. When immediate decisions or actions are required, mobile BI provides up-to-the-minute insights based on the latest data. This capability ensures that you have the necessary information when you need it the most, leading to more accurate and timely decisions.

- **Staying Ahead of Competitors**

Having access to real-time data allows you to identify business opportunities earlier, respond to market conditions promptly, and enhance your ability to upsell and cross-sell. Implementing a mobile BI solution increases your flexibility and adaptability to business shifts, giving you a competitive edge in the market.

BEST-IN-CLASS STRATEGIES

Successful implementation of Mobile BI requires meticulous preparation and strategic planning. Here are some best-in-class strategies:



Define Clear Objectives

Establish precise goals and objectives before diving into mobile BI solutions. Determine what specific insights or key performance indicators (KPIs) you want to track and improve. Whether it's optimizing sales, reducing operational costs, or enhancing customer satisfaction, having clear objectives is the first step toward effective mobile BI utilization.



Ensure Data Quality

The integrity of your data is the foundation of effective BI. Implement data quality measures, including data cleansing and validation, to ensure your information is accurate and reliable. Address issues like duplicate records, missing values, and inconsistencies, which can lead to erroneous conclusions.



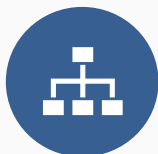
Role-Driven Interface

Adopting a role-based approach to mobile BI deployment offers significant benefits. Designing role-specific BI reports, dashboards, and alerts streamlines operations, enhances security, and optimizes resource use. Delivering precisely what each user needs reduces information overload, improves efficiency, and secures sensitive data by limiting access to only those who need it.



Managerial Involvement

Projects often fail without the right stakeholders involved. Operational managers, who interact directly with front-line employees, are critical for mobile BI success. They provide valuable feedback, historical insights, and help ensure the BI implementation aligns with operational needs. Their involvement in development and deployment phases is essential for effective mobile BI adoption.



Mobile Device Management (MDM) Software

Utilizing MDM software supports best practices by managing mobile devices, applications, security, and functionality. MDM reduces deployment costs, minimizes downtime, and enables remote updates, configuration, and troubleshooting. It ensures scalability, supports multiple devices, and provides a centralized management system, enhancing the overall mobile BI experience.



Provide User Training and Support

Offer comprehensive training programs to familiarize users with the mobile BI tools and their features. Create a support system to address questions, troubleshoot issues, and provide guidance. Well-trained and supported users are more likely to use mobile BI effectively.



Embrace Data Security

Mobile BI often involves handling sensitive business data. Implement stringent data security measures to protect against unauthorized access, data breaches, and cyber threats. Regular security audits, encryption, and access controls are essential components of a robust security strategy.



Optimize for Mobile

Design your reports, dashboards, and data visualizations with mobile viewing in mind. Mobile screens have limited space, so prioritize displaying critical information succinctly. Use responsive design techniques to ensure a seamless and user-friendly experience across various devices and screen sizes.



Maintain and Update Regularly

Mobile BI tools continually evolve, with updates and new features released regularly. Stay informed about these updates and incorporate them into your BI strategy. Regularly maintain and fine-tune your BI system to ensure optimal performance, data accuracy, and alignment with your evolving business needs.



Establish a Data Governance Framework

Define roles, responsibilities, and data ownership within your organization. Clear governance ensures that data is managed consistently, adheres to regulatory compliance, and maintains data quality standards.



Foster a Data-Driven Culture

Leadership is crucial to creating a data-driven culture. Executives and managers should lead by example, using data insights to inform decisions. Encourage employees at all levels to leverage data for their tasks and recognize and reward those who embrace data-driven practices.



Monitor and Analyze Usage

Regularly monitor the usage of your mobile BI solutions. Track user engagement, report adoption rates, and the most accessed insights. Analyze these patterns and trends to identify areas for further training or optimization.



Regularly Review and Refine

Mobile BI is an ongoing process. Regularly revisit your objectives and assess how well your mobile BI aligns with your evolving business goals. Reevaluate your data sources, metrics, and tools to ensure they stay effective and relevant as your organization grows and changes.

BEST PRACTICES

- **Quality vs. Quantity of Data**

Data quality is paramount in business intelligence. Delivering accurate, relevant, and up-to-date information tailored to specific roles is crucial. Overloading users with excessive data hampers efficiency. Ensuring data integrity at its source and providing role-specific information enhances decision-making and operational effectiveness.

- **Performance Monitoring**

Continually assessing and monitoring BI strategy impact through KPIs and performance reviews helps fine-tune the approach. Training end-users on applications and interfaces maximizes the benefits of mobile BI solutions. A dedicated help desk team supports end-users, ensuring they fully utilize mobile BI features and resolve issues promptly.

- **Technology-Agnostic Architecture**

Flexibility in BI strategy development is vital. Avoiding product-specific or device-specific restrictions allows for adaptability in a constantly evolving technological landscape. Open data structures facilitate information flow and enable swift responses to changing business environments.

“ 52% of best in class enterprises dedicate IT staff to mobile BI initiatives.

-- The Aberdeen Group

- **Security**

Ensuring information security and access control is crucial in mobile BI deployment. Applying standard security policies and IT maintenance practices, such as VPN tunnels, remote lock and wipe, and encryption, safeguards sensitive data. Role-specific information access, antivirus protection, and user education on security risks enhance overall security.

- **Push vs. Pull**

Understanding how information will be used on mobile devices is essential. Optimizing computation and analytics through enterprise resources, rather than on mobile devices, conserves battery and processing power. Automated or user-directed report schedules, alert messages, and role-based dashboards streamline information delivery and enhance user efficiency.

- **Interface Design**

The graphical user interface of mobile devices determines usability, clarity, and speed. Designing interfaces based on user feedback and testing improves overall usability. Considering ergonomics and device capabilities ensures an intuitive and efficient user experience.

- **Policy**

Effective mobile BI strategy integration with existing equipment and practices is vital. Establishing policies for information push and pull, application delivery, security, and remote management maximizes investment and ensures seamless deployment. Selecting devices that meet performance requirements and align with company policies facilitates smooth implementation.



USE CASES OF MOBILE BI FOR DIFFERENT INDUSTRIES



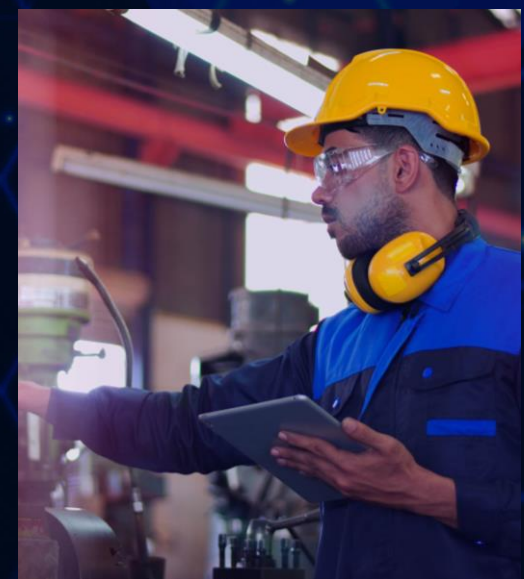
Retail and E-commerce

Mobile BI enables retailers to monitor real-time sales trends, inventory levels, and customer behavior. Store managers can access performance dashboards on their smartphones, optimizing inventory management and ensuring products are readily available to meet customer demands.



Healthcare

Mobile BI solutions enhance patient care and operational efficiency in the healthcare sector. Physicians and healthcare administrators can access patient data, track treatment outcomes, and manage resources on mobile devices. Mobile BI also aids in analyzing clinical data for research and treatment improvements.



Manufacturing

Manufacturers rely on mobile BI to monitor production lines, supply chain logistics, and equipment performance. Production managers can identify bottlenecks and make quick adjustments to optimize production processes by accessing real-time data on mobile devices.

USE CASES OF MOBILE BI FOR DIFFERENT INDUSTRIES



Finance and Banking

Financial institutions use mobile BI to track market trends, manage portfolios, and provide clients with up-to-date financial insights. Mobile access to financial data allows bankers and investors to make informed decisions regardless of location.



Education

In the education sector, mobile BI helps educators and administrators track student performance, monitor attendance, and analyze educational outcomes. Teachers can access student progress data, enabling timely interventions to support individual learning needs.



Hospitality and Tourism

Mobile BI assists hotel managers in optimizing room occupancy, pricing strategies, and guest satisfaction. Real-time data on mobile devices helps hotels adapt quickly to changing demand and improve the guest experience.

USE CASES OF MOBILE BI FOR DIFFERENT INDUSTRIES



Agriculture

Mobile BI solutions are valuable for farmers and agribusinesses. They can access weather data, market trends, and crop performance analytics on mobile devices. This empowers them to make data-driven decisions about planting, harvesting, and resource allocation.



Energy and Utilities

Mobile BI aids energy companies in monitoring grid performance, energy consumption patterns, and equipment maintenance. Field engineers and technicians can access critical data on mobile devices, enabling faster response to outages and maintenance needs.



Government and Public Sector

Governments use mobile BI to analyze public services, infrastructure, and citizen feedback data. This data-driven approach helps policymakers make informed decisions to improve service delivery and allocate resources efficiently.



Transportation and Logistics

Mobile BI solutions provide real-time tracking of shipments, route optimization, and vehicle performance monitoring. This ensures efficient delivery processes and cost-effective logistics management.

CONCLUSION

- Core Insights from Mobile BI

This whitepaper has explored the transformative potential of mobile BI in addressing key business challenges. From enhancing workflow efficiency and data management to ensuring regulatory compliance and improving decision-making, mobile BI offers comprehensive solutions. Leveraging these advanced tools, businesses can gain actionable insights, streamline operations, and achieve higher productivity and profitability.

- Future Prospects

The future of mobile BI is promising, with continued advancements in AI, machine learning, and integration technologies. These developments will enable more precise predictive analytics, real-time data analysis, and personalized insights. Enhanced interoperability and secure data sharing will further improve decision-making and operational efficiency. As mobile device adoption grows, businesses will increasingly rely on mobile BI for strategic advantages.

- Impact on Business Success

Adopting mobile BI represents a significant leap forward, offering businesses the agility to respond swiftly to market demands and make informed decisions on the go. By embracing mobile BI, organizations can overcome current operational challenges, enhance decision-making, and ultimately drive higher efficiencies and increased revenues. This evolution will not only streamline business operations but also foster innovation, positioning businesses as leaders in their respective industries.



About Scalable AI

We deliver actionable insights and predictive analytics that organizations can use to identify opportunities, manage risks, achieve operational excellence, and to gain an innovative edge.

www.scalableai.com

About Scalable Systems

Scalable Systems is a Data, Analytics & Digital Transformation Company focused on vertical specific innovative solutions. By providing next generation technology solutions & services, we help organizations to identify risks & opportunities, achieve sales & operational excellence to gain an innovative edge.

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