The 2020 Vision: The Next Decade for Mobile Intelligence

The Imperative for Every Organization Is to Act Now

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By 2022, one-half of organizations will re-examine the use of mobile devices and conclude the technology being used does not adequately address the needs of their workers, leading them to examine a new generation of mobile applications.

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Mobile Computing

The Mobile Imperative

Mobile devices are part of nearly everything we do in life. Two-thirds of the world’s population is connected via one of these devices; in 2020 there will be 6.95 billion mobile users worldwide, according to a Statista forecast. Apple iOS and Google Android mobile devices provide on-the-go access to the vast array of applications and information that people have come to rely on.

The global 5G network currently under construction will enable the next generation of broadband connectivity. It will, among other things, make possible faster and far more detailed mobile access to analytics and real-time interactions as well as the mobile use of advanced technologies such as IoT and eXtended Reality (XR) that provide augmented and virtual environments to address business needs for more intelligent interactions with information.

In the next decade, the use of mobile devices to gain intelligence likely will significantly change how an organization does its work.

Takeaway: To keep your organization competitive, begin now to explore how to embrace the next generation of mobile technology.
Mobile devices have become an established technology platform for business, offering effective ways for work to be more productive and engaging and also to deliver a great customer experience. Business professionals today expect their work environment to be as user-friendly as their consumer life, offering a simple experience and readily available information. And management understands that the immediate access that mobile devices provide can improve the speed at which business works and the effectiveness of business decision-making, delivering insights that help make the entire workforce more intelligent.

It is not surprising that organizations have made mobile devices an integral part of the working toolkit for their employees. But just using analytics alone on mobile devices is insufficient, as information must be meaningful as well as insightful to provide intelligence to the professional.

Our research finds virtually every organization (96%) reporting that the use of mobile technology has improved access to and use of data and analytics in the cloud. To ensure competitive positioning, a commitment to the effective use of mobile technology should be an integral part of every enterprise strategy. Doing so will make it possible to deliver not only a great work experience but also the best possible customer experience.

**Takeaway:** Using mobile devices to provide information from analytics can be a key competitive enabler.
Mobile Technology Must be Simple

Since smartphones like the Apple iPhone were released, millions of applications for every conceivable purpose have been developed and are readily available. 5G technology will bring new simplicity and convenience to business users – promised relief from the clumsy, complicated and slow mobile versions of the applications employees use at their desktop. Everyone wants to be productive and efficient; instantaneous access to personalized information will make this a reality.

This will particularly be the case as businesses increasingly move both applications and data to the cloud, making it a source for analytics. Our research finds that **two-thirds** of organizations already **support mobile access to cloud-based analytics**. But access alone is not enough to empower individuals to act or make more precise decisions.

Mobile computing will re-emerge as one of the significant technology shifts of the early decades of this century. Ventana Research asserts that **by 2022, one-half** of organizations will re-examine their use of mobile devices and conclude that their technology does not adequately address the needs of their workers, leading them to examine a new generation of mobile applications that enable a better work experience and far more effective connectivity to the rest of the organization and to customers.

**Takeaway:** Assess whether your employees’ mobile experience can be simpler and smarter, particularly with respect to analytics that are immediate and insightful.
**Trend #1: A Conversational Approach**

The technology available on today’s mobile devices can dramatically simplify the interactions between individuals and systems. Rather than navigating a menu of options, business professionals now can use keyed-in or spoken natural language queries to request and retrieve information. Users thus can review or listen to results without having to decipher traditional visualizations or charts.

Artificial intelligence will be able to identify and present to the individual relevant information. We view this as a significant mobile-enabled step forward in gaining insight from information.

Ventana Research asserts that by 2021, one-third of organizations will require that their applications provide voice and chat accessibility. In the realm of mobility, this capability is already available. Using text and voice access and processing will help enable a simpler experience with business information such as analytics. Any employee should be able to talk to his or her device, get back instantaneous insights and then be guided to more refined and in-depth information.

**Takeaway:** Conversational computing can dramatically improve productivity by using voice to engage business systems.
Trend #2: Using the Intelligence in Our Devices

The ongoing innovation in mobile devices is changing how people live and work. In the view of some, these advances are enable the reinvention of work. At the very least, they’re making work tasks much simpler by enabling the device to interact much more effectively with the individual and work far better regardless of his or her surroundings. These six features are empowering the next generation of mobile device effectiveness and should lead to a smarter way to work in 2020 and beyond:

- **Device proximity features** like geolocation provide environmental context and suggest actions an individual might take based on his or her location.
- **Speech recognition capabilities** make it simpler and faster for users to access and interact with information.
- **Human gestures** and **camera-based input** simplify and speed engagement with applications.
- **Biometrics capabilities** including **facial recognition** and **fingerprint authentication** enable significantly better device, data and enterprise security.
- **High-quality device cameras** make it easier to capture, share and use photos and videos within business processes.
- **Augmented reality technology** enables workers to use the camera to digitally juxtapose virtual objects with their environment to enhance their work task experience and improve decision-making.

**Takeaway:** Take advantage of emerging mobile technology capabilities to provide improved context, security and interactions.
Trend #3: Enabling Mobile Intelligence

The quality of mobile software varies dramatically. Many mobile renditions of the analytics software used today in business merely transpose and miniaturize the desktop environment to fit it to the work area of the mobile device. This significantly flawed approach has over the last decade left many businesses reluctant to use analytics on mobile devices because it is clumsy and ineffective.

However, embracing **personalization** via an interrupt-driven approach using **notifications** can be effective in motivating a business professional to examine a situation. With personalization, real-time data and location-aware mobile technology as part of the package, the information being provided will have even more context and relevance.

Ideally, the technology should adapt based on history. For example, if a user responds to notifications about certain departments but ignores others, the system should stop sending the notifications that are ignored. And the technology should not require a user to page or click through the application to take action.

All of this requires a better understanding of how someone wants to get work done on a mobile device – a more intelligent and dynamic approach for 2020 and beyond.

**Takeaway:** Intelligence on mobile devices is delivered through effective personalization and presentation of information generated by analytics.
Best Practices to Adopt Mobile Intelligence

Seeking value from mobile devices used to access analytics is a process that involves examining how to enable every worker to reach his or her full potential. We advise considering these **five best practices** when defining your path for 2020 and beyond in mobile computing:

1. Examine how personalized mobile analytics can **increase the productivity and effectiveness** of your business in everyday use cases.

2. Seek out mobile technology that uses cutting-edge **technological advancements** and that **adapts to individual needs**.

3. **Evaluate if existing or planned investments** in less-than-stellar mobile technology from your existing software providers **could hold you back**.

4. In choosing analytics for mobile devices, opt for those that will **improve the working experience**.

5. Embrace modern-day mobile-enabled platforms that are designed to **meet the needs of the next decade**, not the last.

**Takeaway:** Embrace best practices that can ensure your organization derives the maximum value from analytics in mobile devices.
Navigate the Journey to Mobile Intelligence

Our research finds that many organizations continue to use inadequate technology, and as a result have not realized the full potential of mobile devices. For example, many rely on applications native to the mobile operating system that are complicated to use or on HTML pages that are not designed for mobile devices, both often requiring the user to do significant navigation to find needed information. These two approaches have created a poor mobile experience and have had a negative impact on the employee work experience.

We advise instead assessing the mobile experience you provide today to establish a baseline for what needs improvement. Examine what is possible with today’s technology and how you might personalize and dramatically improve the employee experience – without needing costly support staff to make it happen. Prioritize manageability and reliability, considering the entire organization’s needs.

Takeaway: Examine what you need to navigate the mobile analytics journey by evaluating what is possible using innovative technology.
Take Decisive Steps for Mobile Intelligence in 2020 and Beyond

Embrace technology that exploits the potential of mobile devices to enable simpler and smarter ways to work. Find analytics that are amplified rather than obstructed by mobile devices. Ensure that you use the intelligence of the devices to deliver personalized, direct and immediate information. Now is the time to move beyond the clumsy applications and complicated analytics of the past. Those organizations that have done this have optimized their worker efficiency and improved satisfaction across their organization.

We advise taking these steps forward to gain the most value from analytics:

1. Commit to a full **examination of the potential value** of mobile technology.
2. Identify the platform that can most reliably and effectively **optimize the presentation of information** from analytics on mobile devices.
3. Examine methods that can **dramatically improve access to information** and how individuals collaborate on analytics.

By understanding the digital innovations in the use of mobile devices that are now available, you will be able to build a path to success and satisfaction for your entire organization.

The Ventana Research *Data and Analytics in the Cloud* Benchmark Research can be found at [www.ventanaresearch.com](http://www.ventanaresearch.com).