IDC VENDOR SPOTLIGHT

Staying on the Leading Edge of Customer Centricity with Better Business Intelligence

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In a world of customer-centric competition, delivering the best customer experience and engagement has become a key competitive differentiator for organizations across the Asia/Pacific region. Companies looking to succeed and stay on the leading edge of business need to equip themselves with the right digital tools to make faster and smarter decisions. Analytical tools are emerging as a game changer, enabling executives across the enterprise to make more effective business decisions so as to capture new business opportunities, retain customers, and improve brand recognition. This IDC Vendor Spotlight highlights the latest trends driving the adoption of business intelligence tools and how Japanese software vendor WingArc1st is helping businesses journey toward greater customer centricity. We take a closer look at its MotionBoard business intelligence software and Dr.Sum EA, a multidimensional aggregation analysis engine, which makes real-time and high-speed analysis easy and available for all users, even those without programming skills.

The Quest for Data-driven Decision Making

The pace of digital transformation (DX) is accelerating, and big data and analytics (BDA) is ranked as one the most important technologies for organizations to enhance their competitive positioning in 2017. With the digitalization of everything driving an increase in the variety and volume of external and internal data, what is becoming crucial for organizations, regardless of size, is the ability to convert structured and unstructured data into meaningful insights, and to make data-driven decisions for better customer engagement and to build customer loyalty. The challenge lies in bridging the gap between intent and execution.

Top Business Drivers

- Data as a strategic asset

Customer centricity remains the central theme in BDA investments, with customer engagement and loyalty the desired outcome. The exploding growth of mobiles, connected devices, and related applications, is creating a constant stream of multisource and multiformat data. DX leaders, especially in consumer-facing industries such as public sector, financial services, communications, media, and retailers, are accumulating mountains of high-value customer data every passing day. A large portion of which are unstructured, including social interactions, audio, and video. IDC predicts that by 2020, the high-value data — part of the Digital Universe — that is worth analyzing to achieve actionable intelligence will double. This presents an unprecedented opportunity to unlock the hidden value in the massive amount of data and fuel an organization's digital transformation. According to IDC's C-Suite Barometer Survey 2016, 75% of respondent organizations across the Asia/Pacific excluding Japan (APeJ) region consider information transformation as the most critical part of their strategy. And when asked to look at 2017 and beyond, 67% of CXOs recognize data as a strategic asset.

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With data as the new currency in the digital era, organizations have to treat data and information the way they would treat any valuable asset. As they mature in their analytics adoption, exploring new data monetization opportunities and new ways to turn customer data into actionable information will benefit the business in several ways, including improving customer service, predicting customer behavioral trends, and having the ability to deal proactively with issues.

- Actionable insights to drive productivity gains

BDA has been gaining momentum, and today, more organizations see immense value in enabling executives, managers, and front-line employees to make data-driven decisions to derive differentiated insights from the growing variety and volume of internal and external data available. Nearly half of organizations surveyed have prioritized real-time decision support in 2016-2017, according to an IDC APeJ Software Study. IDC strongly believes that data-driven enterprises are twice as likely to be in the top quartile of financial performers within their industry, three times more likely to execute decisions as intended, and five times more likely to make decisions faster. IDC predicts that by 2020, APeJ organizations able to analyze all relevant data and deliver actionable information will achieve an extra US$65 billion in productivity benefits over their less analytically-oriented peers.

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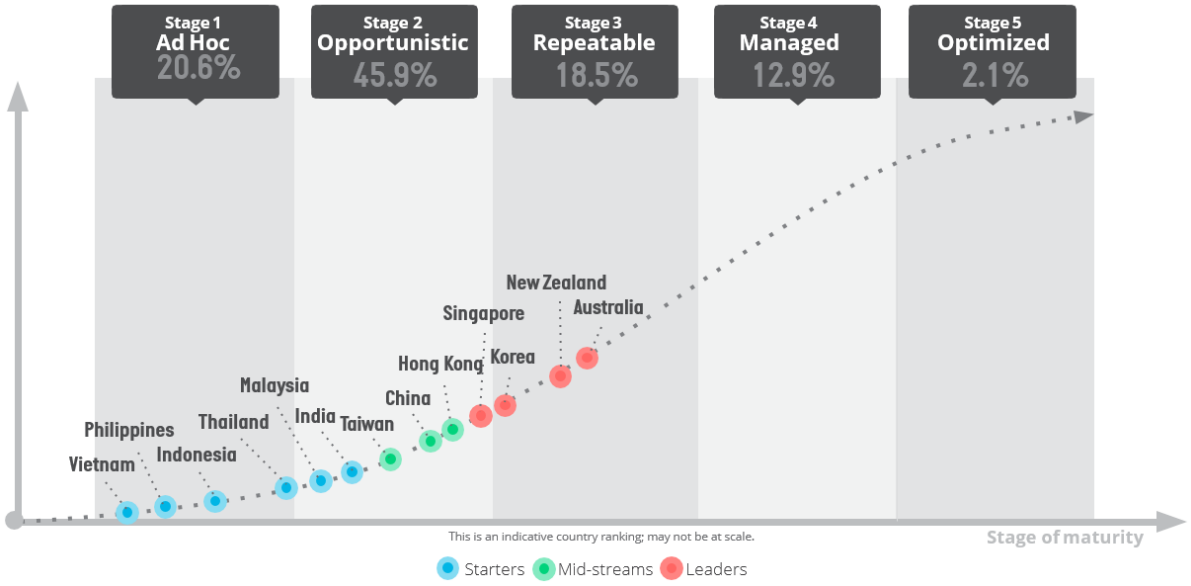
Effective and collaborative BI drives productivity gains, as reflected in IDC's C-Suite Barometer research. Forty-four percent of enterprises surveyed cited improved business agility, staff productivity and lower operating costs as key desired outcomes. Thirty-three percent of businesses saw greater business flexibility in adapting to market changes due to improvements in service and application provisioning, better resource utilization, and increased innovation delivery.

Regional Readiness for Business Analytics

Despite the availability of rich media analytics and the benefits of BDA, the majority of APeJ organizations are still not leveraging unstructured data to the full extent to generate actionable and prescriptive insights. According to IDC's Big Data and Analytics MaturityScape Benchmark Study, the APeJ region has made good progress in terms of BDA adoption, but the majority of companies are still in the early stages of maturity (see Figure 1).

Figure 1

BDA Maturity by Country Across APeJ



Source: IDC APeJ Big Data and Analytics MaturityScape Benchmark, 2015

From a country perspective, Australia, New Zealand, Korea and Singapore are the leaders; Hong Kong, China, Taiwan and India are in the mid-stream phrase, followed by Malaysia, Thailand, Indonesia, Philippines and Vietnam. The emerging markets have a good traction of BDA deployments, but they are largely still at the earliest stages of the BDA maturity curve.

Governments across **Australia** and **New Zealand** recognize the emerging data-driven economy as a key to their nation's prosperity. While the Australian government launched a new research unit called Data61, the Data Future Partnership was created in New Zealand to help drive change across New Zealand's data-use ecosystem. Both countries invest in technology, policies, resources and analytical workforce enhancements to promote data-driven innovations. ANZ organizations will be able to benefit from the more than 2,000 data sets that are opened for exploration.

In the last few years, **Korea** has witnessed the fastest-growing rates in BDA adoption. Big data initiatives are mainly driven by the Korean government agencies which have a charter to increase employment. The Gangwon Creative Economy Innovation Center, which focuses on big data, was opened in 2015 to operate a portal which makes data from 50 local public and private institutions available to entrepreneurs.

The **Singapore** government is promoting data-driven innovations across the country in order to build a Smart Nation and open more public data to drive co-innovation between public and private sectors. Local players from various industries are investing in analytics to enhance customer experience, generate new revenue streams, and explore new operating models.

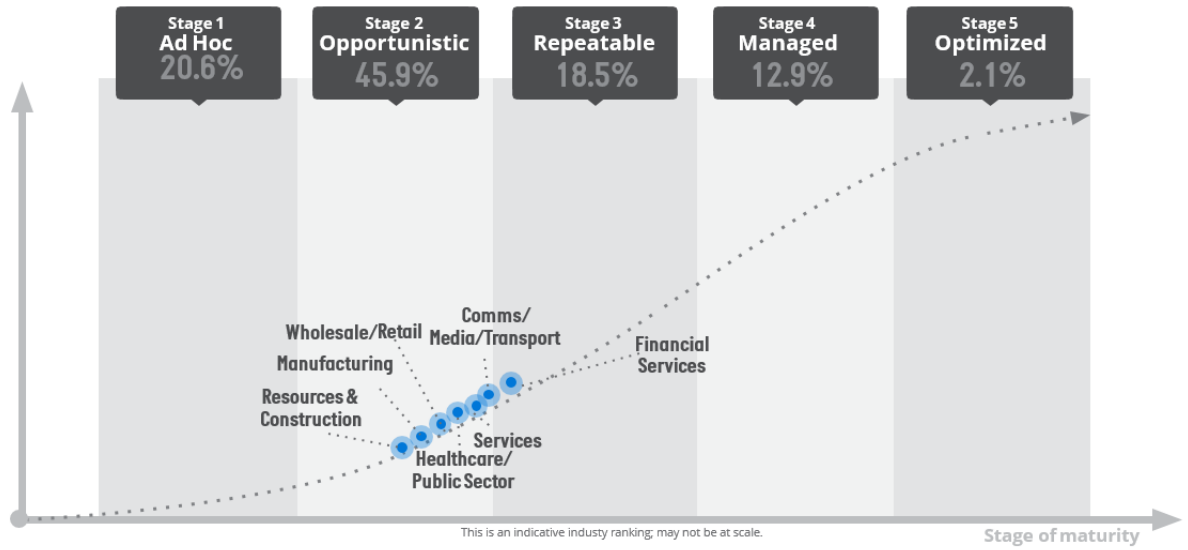
Putting BDA to Work in Industries

Financial services, particularly banking, is leading the APeJ market in terms of BDA adoption (see Figure 2). For the majority of banks, BDA deployment is the most critical component of their competitive strategy, providing valuable insights to reduce customer risk and improve customer experience. Elsewhere, opportunities for competitive gains exist across all verticals, including **telecommunications, retail, manufacturing**, and **healthcare**.

Like all consumer-facing industries, retail lends itself well to BDA because of the treasure trove of high-value customer data. Rich with data from customer interactions, transactions and other sources, leading retailers are using BDA tools to make key decisions to increase customer engagement and wallet share. The fast-evolving ecommerce market brings change and challenges to APeJ retailers, demanding new fulfillment capabilities for both in-store and online purchases. With proactive analytics, retailers can move from reactive BI to take the proactive approach of forecasting and anticipating customer behavior, preferences, and buying trends. Predictive analytics helps to reduce "out-of-shelf" scenarios, prevent losses, potentially improve queue management and, as a result, significantly improve customer satisfaction and drive competitive differentiation.

Figure 2

BDA Maturity by Industry Across APeJ



Source: IDC APeJ Big Data and Analytics MaturityScape Benchmark, 2015

Confronting the Skills and Mindset Challenge

As organizations adopt new analytical tools and solutions, among the roadblocks that they may face is the lack of skilled staff to take advantage of the technology. Most tools today require qualified analytics and technical professionals, and the organizational structure may not be ready to embrace a data-driven agile culture required to broaden the use of analytics over time and achieve greater quantifiable benefits. Indeed, in current market conditions, top data professionals are in short supply or expensive to hire. In such situations, organizations will need to create competency centers with a mix of cross-functional and domain-specific skills representation to support a data-driven culture or to outsource business analytics capabilities.

IDC predicts that by 2020, big data–related professional services in APeJ will register a 29% compound annual growth rate (CAGR). Despite the demand for skilled BDA experts and in order to keep pace with fast-changing business requirements, organizations do not necessarily need to hire highly qualified data scientists or data architects to be able to implement BDA solutions. In fact, it might be a better move to consider developing BDA capabilities internally by selecting and training employees with various programming, analytical and technical skill sets and encouraging knowledge, experience and resource sharing to establish a data-driven culture.

Fast Intelligence Discovery for All

New tools that do not require specialist expertise or programming experience have emerged to help organizations get their heads around the technology and gain quicker return on their BDA investment. Due to the shortage of relevant BDA skills, organizations are investing in self-service visual analytics/discovery and data preparation tools that provide on-demand access to real-time data with easy-to-use tools or applications. IDC predicts that spending on self-service visual discovery and data preparation tools will grow 2.5 times faster than traditional IT-controlled tools for similar functionality by 2020. Visualization and self-service data discovery continues to be a hot topic across the APeJ market, and has the potential to impact all business processes. The functionality helps to support business analytics workflow, gives immediate access to readily consumable analytics, and enables non-technical staff to analyze, visualize, share, and review data. Not requiring highly technical specialists is a huge plus for organizations, regardless of their size.

As new releases of visual analytics tools are ready to use for all employees, with or without specific IT knowledge, some organizations have started to use interactive and guided analytics instead of static dashboards across departments. Organizations that have limited the use of such visual data discovery tools to one or only selected departments, say, finance, should broaden the usage across all departments, including sales, operations, and human resources, as well as the supply chain, to reap greater value for the overall business.

WingArc1st Pivots Analytics Across the Lines of Business

WingArc1st provides BI and analytics software solutions to its customers for the effective use of information assets. Established in 2004, WingArc1st has more than 24,000 customers for its BI and document management solutions, and 270 partners, primarily in the Asia/Pacific region. With headquarters in Tokyo, Japan, the company has subsidiaries in ANZ, China, and Singapore, as well as alliances in Great Britain, Philippines, Thailand, Vietnam and Indonesia.

WingArc1st has been helping decision makers, data analysts and line of business (LOB) managers to gain immediate and secure access to corporate databases, quickly turning data into data-driven insights and intelligence with its flagship BI and analytics platform Dr.Sum EA, and MotionBoard, touted as a next-generation BI dashboard. While MotionBoard is available on-premises and in the cloud, Dr.Sum EA is purely an infrastructure-as-a-service (IaaS) solution.

WingArc1st's philosophy behind its products is to deliver a solution geared towards user-friendliness while providing functional flexibility. In short, the entry barrier is low and users can quickly start leveraging the tools for actionable insights.

- Dr.Sum EA

Dr.Sum EA works as a database engine by integrating and aggregating data sets from various sources, and also operates as a data warehouse. As organizations move towards information-led enterprises, there is growing interest from C-level executives in implementing adaptive, efficient, integrated and secure BI solutions, enabling companies to leverage all strategic data assets to sustain their competitive advantage, increase productivity, and enhance customer experience.

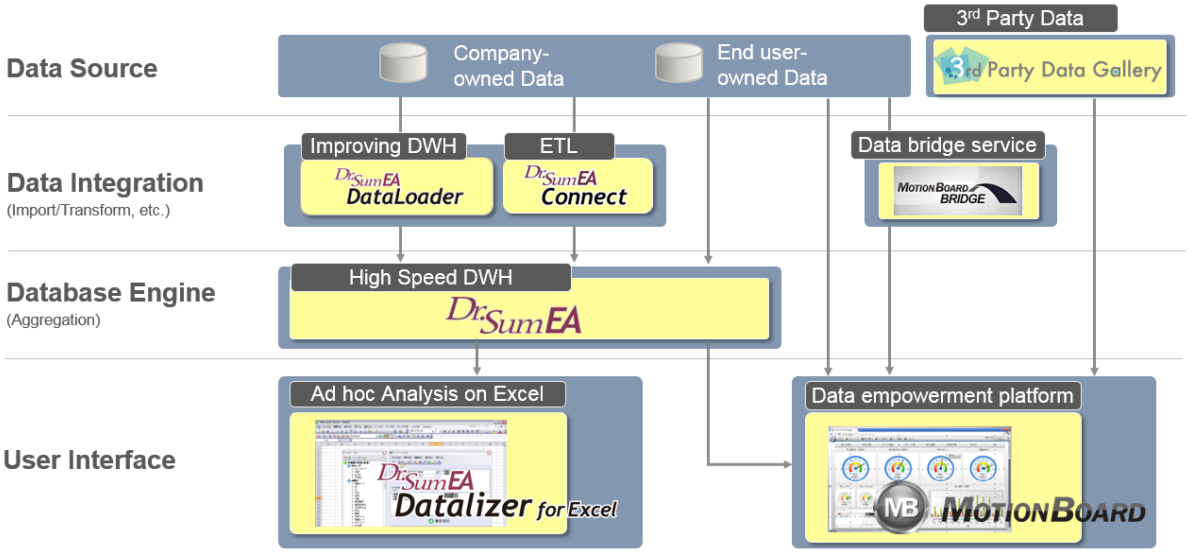
Although the market is flooded with BI tools, the fact is that enterprises of all sizes and across all verticals and segments still face challenges in finding a BI solution that meets their needs. The most common roadblocks are the lack of internal IT and analytical skills, high technology acquisition costs, data integration complexities, and data quality issues.

The Dr.Sum EA relational data integration platform enables all departments across the organization to import and aggregate data from various data sources, including enterprise resource planning (ERP) systems) and information systems at high speed to make multidimensional analysis processes easily and quickly. The entire process can be quick as users are not encumbered by having to create

predefined data cubes or dimension settings. Although data dimensions or end-user requirements may change, this feature allows all users, even those with no specific BI or IT skills, to independently build insightful reports easily, without the support of the business analytics or IT team. Dr.Sum's user interface is familiar as it resembles MS Access, and there is an add-on for ad hoc analysis with an interface similar to Microsoft Excel. Dr.Sum's graphical user interface (GUI) provides seamless user experience and reduces training time significantly, while Dr.Sum Datalizer connects Dr.Sum EA and MS Excel, making it easy to execute large data volume analysis using company-owned data (from various databases and data warehouses) and user-owned data (in CSV and Excel format) with minimum effort (see Figure 3). The GUI in combination with a flexible aggregation engine makes Dr.Sum EA a powerful data warehouse for both business and IT.

Figure 3

WingArc BI Portfolio



Source: WingArc1st, 2017

It was precisely the user-friendly interface and speed of data aggregation that won the hearts of one customer. A major global electronics company in ASEAN was looking for a way to minimize the time-consuming task of generating and analyzing logistics costs generated from different import, export and warehouse data. The company chose Dr.Sum EA for its familiar interface and speed of analysis. Selecting Dr.Sum EA was a no-brainer as all company reports were in Excel, and it was looking for a BI tool that could help staff easily and quickly make key decisions. Dr.Sum EA's automated reporting environment reduced the documentation time and helped users to get their answers and detailed information by customer as well as drill down into specific granularity.

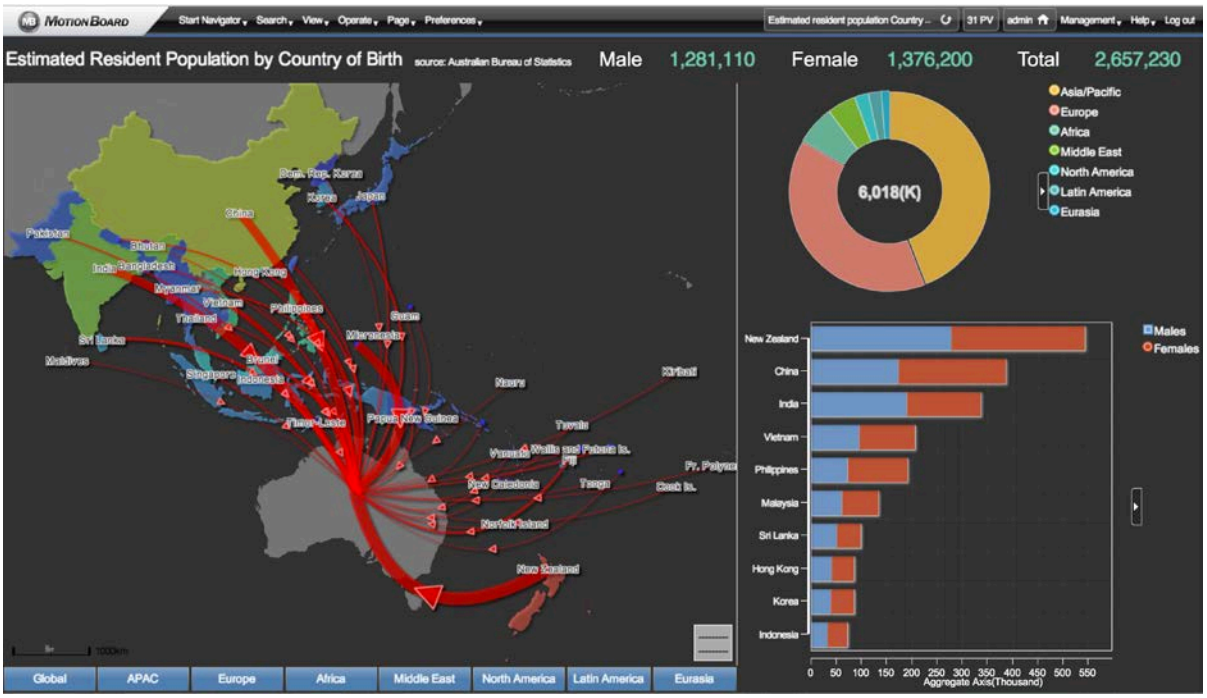
- MotionBoard

When it comes to data visualization and turning information into actionable insights, MotionBoard provides rich, flexible dashboards with high-speed in-memory processing. MotionBoard is a data empowerment platform designed for every business user across all enterprises to handle small and big data at high performance, leveraging and accessing data from various sources and in a secure environment on their own, whenever and wherever required. Furthermore, MotionBoard is capable of resolving the most common real-time analytics issue — integration. MotionBoard users can conduct instant and intelligent analysis of a current business situation by combining in real time their own data

(e.g., sales and customer information) with third-party data (e.g., weather, tourist distribution, and consumer spending), or Internet of Things (IoT) data (e.g., device sensor and mobile location) and have out-of-the-box, easily visualized insights presented as one dashboard (see Figure 4).

Figure 4

Screen Shot of MotionBoard



Source: WingArc1st, 2017

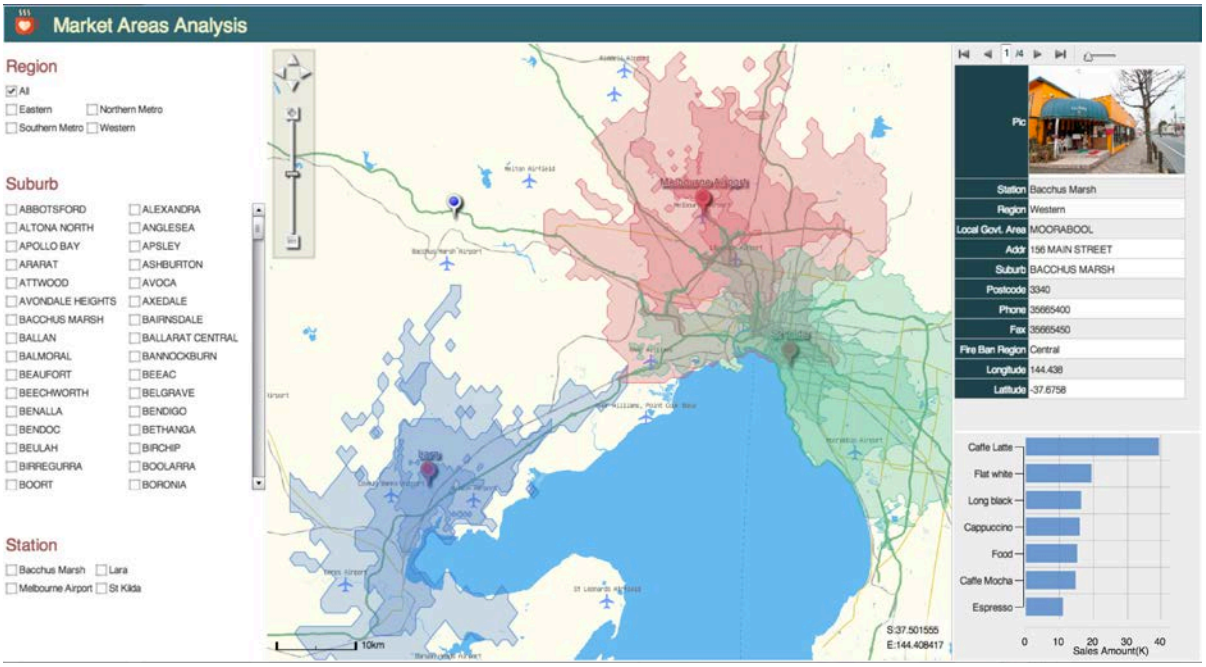
While data scientists are still in high demand and short supply, an intuitive interface enables knowledge workers with no specific technical skills to use MotionBoard functionality at its full capacity — to slice, dice, aggregate and even monitor data in real time to gain a deeper understanding of sales data, customer behavior, and spending trends, in order to take immediate action if necessary or to make predictions.

Having the ability to update dashboards automatically on the fly on multiple devices, and features that make it easy to generate reports automatically (using its task scheduler) and in different formats (PDF, PowerPoint, Excel) makes MotionBoard an essential data analysis tool to support an organization's daily operations.

MotionBoard is a Web-based application which offers a highly secure environment and enables specific access rules to databases, tables, columns or record levels for each user to be established. The application is designed to meet the emerging needs of industries, such as manufacturing and retail, through its support for next-generation applications including IoT data integration, IoT analytics and BI. Organizations from retail, logistics and distribution industries can benefit from MotionBoard's geo-location functionality, by leveraging geospatial data to identify customer location and determine the most optimal delivery route (see Figure 5).

Figure 5

Screen Shot of MotionBoard's Geo-Location Functionality



Source: WingArc1st, 2017

MotionBoard's capabilities include, but are not limited to, monitoring equipment usage or availability, production, security cameras, and sensors. MotionBoard's out-of-the-box, real time, rich analytical capabilities have found acknowledgement among its customers.

Quantum Information Technology (QuantumIT) in Australia was looking for a modern BI/data analytics platform that could deliver a suite of standard reports and dashboards as well as integrate third-party data with customer data. After testing several BI products, QuantumIT chose WingArc MotionBorad due to the depth of functionality of the product, its sufficiently intuitive user interface, and sophisticated and flexible standard outputs. What QuantumIT valued was the ease in creating reports and dashboards, gaining insightful views of its customers' business activity, and the flexibility for customers to add their own requirements.

When asked about the key criteria in the selection process for a BI tool, Guthrie White, QuantumIT's Chief Executive Officer, said, "QuantumIT has more than 20 years' experience in development of business intelligence and data analytics solutions, working with some of Australia's largest corporate and government organizations. When we decided to build analytics products for commercial release we needed a partner with a highly functional and robust graphical visualization platform and the willingness to work with us to develop the product to meet demanding requirements of cloud hosting, real-time analytics and end-user development. WingArc has been an ideal partner for us in this venture and their MotionBoard software product is a key element in the success of our project."

Staying Ahead of the Curve

Like all BI vendors, WingArc1st faces strong market competition in so far as ensuring it stays ahead of the technology curve and meet the needs of its customers. However, the future prospects for WingArc1st bode well for the Japanese vendor as it continues to expand its regional footprint. There are plans to set up an office in Australia in 2017 to better serve its ANZ customers. Further investment plans are also expected in the area of customer support for its regional clientele which span retail, real estate, tourism, hospitality, financial services, transport and government.

Essential Guidance

The adoption of self-service and visual discovery analytics tools is no longer an option, but rather a competitive necessity in the digital era. Every sector of every industry will be driven to extend the reach of BI across the broader organization, enabling lines of business and senior executives to leverage existing data assets for data-driven decision making, to increase business competitiveness, efficiency and productivity.

Businesses that recognize the importance of becoming a data-driven organization and are ready to invest in BI solutions are well advised to take into account these key considerations:

- Explore self-service analytics tools which are applicable for all organizations, be they starters, mid-streams, or leaders in BDA adoption
- Maximize your investment by ensuring the tool can be used across the organization and not just selected departments
- Ask your BDA solution provider for references and use cases in your industry
- Work closely with the vendor capable of supporting your company throughout an entire data-driven transformation process to achieve your organization's goals and objectives
- Build a business case to demonstrate value of investment in data analytics

Conclusion

Today, companies around the globe accumulate tremendous amounts of data every day, making data a crucial component of an organization's development, process optimization capabilities, and ability to innovate and stay on the leading edge of competitiveness. Having effective, mature BDA capabilities is a precursor for creating innovative and data-driven organizations, but the process of becoming one remains a challenge due to the lack of skills and resources or insufficient technology and solutions. In order to stay ahead of the competition and deliver the best customer experience, organizations will need to increase their use of analytics. The good news is the availability of high-speed self-service data-discovery analytics tools, which sport an intuitive interface that do not require specialist expertise or programming experience to use. With BDA within reach of all users within an enterprise, organizations can now leverage their data assets more efficiently, by turning information into actionable insights, and in turn generating more value, increasing productivity, and becoming an information-led organization.

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