



Technology Brief...

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J.Gold Associates LLC, Northborough, MA 01532, USA
www.jgoldassociates.com +1-508-393-5294
Research, Analysis, Strategy, Insight

BlackBerry IVY: A Growth Opportunity in Automotive

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"...Platforms like BlackBerry IVY present a new marketplace for services and features available not only to vehicle makers, but also to a vast array of developers and third party service providers... vehicle makers have every incentive to include capabilities like IVY in their new models to enhance revenue opportunities. Over the next 2-3 years, we expect to see a significant penetration of IVY in new vehicles, giving BlackBerry a new and ultimately large scale business opportunity..."

BlackBerry has been known for its security for decades. It's why its original phones did so well. And its current market strength lies in its device and infrastructure security capabilities built on its Cylance AI strengths. But often little noticed about its product direction is an innovation that will propel it into an emerging market that could ultimately dwarf its current security products business.

BlackBerry has been working on its IVY platform for several years. It evolved from the work it's done with its QNX RTOS product that is embedded in the majority of vehicles in production. While it's been a leader in the digital cockpit, QNX is now being extended to other sections of the emerging digital vehicle platforms. Indeed, QNX is a leader in developing the "software defined vehicle", offering support for virtualization, microservices and containerization. What BlackBerry is now focused on is bringing the OS, tools and hypervisor to the cloud to enable chip to cloud deployments.

Moving beyond simply operating the smart vehicle requires a platform to generate insights from all of the sensors embedded at the vehicle edge and control it at the cloud level. IVY is positioned as both an integration platform (e.g., with ability to interface with a broad array of sensor data), as well as a single control point for data retrieval, analysis, and ultimately deployment of services to edge computing components. This allows car makers and 3rd party players to not only work with what is available for the vehicle as it rolls off the production line, but also enables changes and updates in a software defined fashion throughout the life of the vehicle and/or across models by using an over the air update mechanism. It also includes the ability to have one vehicle platform that can be programmed to turn on features that a customer orders, even after they purchase the vehicle.

IVY gets integrated into the vehicle in areas like the digital cockpit, ADAS, etc, and can run on a variety of OSes, like QNX, Linux and Android. Once integrated into the vehicle, it creates microservices that provide ML or analytics and which can be tested and deployed in-vehicle through APIs. It can generate insights from the vehicle by obtaining normalized sensor data. To promote maximum security and privacy, it only sends data to the cloud after localized processing, which also keeps the amount of data transmitted at a minimum to preserve needed connection bandwidth.

Platforms like BlackBerry IVY present a new marketplace for services and features available to not only the vehicle makers which can lower production costs, but also to a vast array of developers and third party service providers. While it does require

that the auto maker integrate the core services like IoT sensors and cloud/edge enablement, the kinds of value-add that could potentially take place is a major growth opportunity and will open new markets for services.

Bottom Line: BlackBerry IVY is a continuing work in progress and it is currently enabled through a close working relationship on the AWS cloud infrastructure. Because it is cloud based, we expect it to be extended to include other services not currently available in the initial product (e.g., infotainment, maintenance, emergency services, travel services, etc.). Finally, while it does require that car makers build IVY into the vehicles, and therefore will take time to obtain an installed base, the close working relationship that BlackBerry already has with the majority of car makers should give IVY a market advantage over any new challengers. And vehicle makers have every incentive to include capabilities like IVY in their new models to enhance revenue opportunities. Over the next 2-3 years, we expect to see a significant penetration of IVY in new vehicles, giving BlackBerry a new and ultimately large scale business opportunity.

Citrix Simplifies the Path to DaaS

Citrix has been in the endpoint enablement market for decades. Well known for its VDI products, in recent years it's expanded to become a more holistic workspace provider, with an emphasis on its Desktop as a Service (DaaS) offering. While making strides in its DaaS product vision, including through acquisitions of important technology (e.g., Wrike, Sapho), it remained largely a component provider to IT for VDI and SDWAN technology. It's now moving to change to a more streamlined focus and to include line of business messaging as the market moves to more of an LOB buying influence.

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Citrix's move to a simplified "solutions sell" should be well received.

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Citrix had a very complicated product strategy including the need to service a long-time legacy installed base that was mostly IT and were used to an ala carte purchasing option. But while successful in this space, the strategy also limited the ability of Citrix to become a full solutions provider rather than a component supplier. It needs to move to a more comprehensive capability including monitoring, intelligence/analytics and importantly an emphasis on security to differentiate itself.

Citrix is now in the process of moving to a simplified approach that packages a number of products into solutions rather than components or point products. Further, it is heavily emphasizing its move to becoming a cloud-first provider of services. This should make it more appealing to the LOB buyers, particularly as those buyers look to a more cloud-centric approach. Of course, Citrix needs to be careful not to overlook its existing base of IT purchasers, especially for VDI and SDWAN, but the solutions centric approach can offer it some upsell opportunities it didn't have previously. And this approach can help it with its channel partners as well, who are a key component of Citrix sales. Finally, by leveraging the hyperscalers, it can add value on top of their products while also leveraging the large installed base and marketing capabilities they offer.

Its primary workspace competition has changed over the past few years. It used to be a battle between Citrix and VMware. However, it's now becoming much more complex, as the cloud players are pushing on the edges of what Citrix and VMware enabled with their workspace products and especially a focus for Google and Microsoft, with AWS making moves but having a less comprehensive solution. As a result, Citrix now needs to compete with Azure Desktop and Google Cloud Workspace while also not becoming a direct competitor.

Citrix is moving to 3 primary offerings to make purchasing more streamlined and simplified although each will offer some sub-options. It will continue to sell its traditional legacy On-Prem VDI solutions which remain an important user base for Citrix. It will also offer a more complete workspace capability through a hybrid DaaS solution that can be deployed either On-prem or via a cloud enablement. And it will offer a Simplified DaaS that can appeal to many organizations that require minimal IT support, and especially in the SMB marketplace. It is deployed on top of Microsoft Azure and offers a one-stop deployment that includes billing for Microsoft Azure in a pay as you go or fixed cost model. This offers Citrix a way to differentiate from the Microsoft offerings so as not to be a direct competitor.

Changing its market approach is a major undertaking and often not done well by companies, and especially public companies that must continue to meet sales and cost goals. Citrix recently announced a planned change from a public to a private company. Going private will help give it the breathing room it needs to make the required product changes. While there is still some question around the proposed merger of the Tibco product line and what that means for the future of Citrix, at this point that should not be a major concern for potential customers. Further, there is now some concern about Citrix's major competitor, VMware. The uncertainty around the proposed VMware acquisition by Broadcom and what that means in the long term for VMware products adds a twist to the marketplace that Citrix could potentially take advantage of.

Bottom Line: Citrix's move to a simplified "solutions sell" should be well received. There will be different levels of DaaS offered depending on the feature set that customers want. But it will be more like Good, Better, Best than the build your own of the past. Citrix is also making a major push to move customers to cloud based solutions rather than on prem. This plays into the simplification message well, as it's much easier to combine service components with a cloud subscription than needing to install each component to on-prem servers. It further provides organizations with the ability move scarce IT resources away from patching and server management to more important tasks. This could save IT from 10%-20% of their resources. Overall we believe that these moves by Citrix will put it in good shape to grow its installed base and find new customers, while also being more competitive in the marketplace.

"...Cisco is introducing its Security Cloud offering... a complete cloud native and cloud delivered security platform that can manage any cloud or on-prem installation... Cisco has a window of opportunity with its Security Cloud offering. A truly unified and highly effective cross-cloud and on prem data center security platform is something that is sorely needed..."

Cisco's Security for Multi-Cloud

Most organizations have adopted a multi-cloud strategy that creates a "mix and match" approach to security. Unlike legacy on-prem solutions that were managed with a common security management solution that was often cobbled together by IT from multiple vendors, the security posture for public clouds varies significantly from one provider to another and is not within the organization's control. And while many cloud providers claim to be able to manage competitors' offerings, they provide a mixed bag of capabilities, with the best security being reserved for the cloud vendor's own platform. Cisco sees this complex environment as an opportunity to extend its own networking and endpoint security solutions to become a central point for multi-cloud security.

Cisco see's its approach as Security resilience. To Cisco's way of thinking it begins in the network and moves out from there. Cisco has identified 5 key components of resilience, which includes; See more to monitor and act upon billions of signals, Anticipate what's next through shared intelligence, Take the right action through prioritization, Close gaps with pervasive defense, and Get stronger through improving efficacy. This is a global vision and one that Cisco continues to pursue

with its tools sets and previous acquisitions.

Moving to the Multi-Cloud

Cisco sees an opportunity to build a “one pane of glass” security approach for organizations that are increasingly moving to a multi-cloud environment. Already playing a major role with its on-prem customers who use many of Cisco’s security tools, it wants to expand its role and also enhance its “as a service” offerings. Many cloud providers offer a suite of security tools and services for their own platform, and claim they can support security on other cloud provider’s products as well. But the truth is there is wide variability between native cloud security tools and those theoretically managing a competitor’s system.

With a wide array of often non-compatible APIs and interfaces, it’s very difficult to be a complete true cross-cloud security solution. Cisco sees its opportunity as being the “Switzerland” of security with equalized support across all cloud and on-prem instances. It also touts its solution as a way around vendor lock in when using a public cloud solution. And with Cisco’s heavy concentration on network visibility, manageability and security, it sees an advantage as cloud installations rely heavily on network traffic. Further, with a major move towards more edge based instances, Cisco believes its capabilities will become even more impactful.

To this end, Cisco is introducing its Security Cloud offering. It intends to offer a complete cloud native and cloud delivered security platform that can manage any cloud or on-prem installation. It includes a unified policy and management capability, AI/ML driven automation, an extensible platform, and flexible billing. It leverages a number of key components in the Cisco stable of products, but most companies have a myriad of non-Cisco security products already installed. Cisco claims an impressive number of integrations with non-Cisco products with over 400 tools from 200 security vendors, and growing. As a result Cisco envisions the Security Cloud as the central management console for overall operations. Security Cloud also builds on Cisco’s SecureX threat detection and response capability that Cisco has assembled to be a central environment for disparate XDR tools and that it has been promoting and enhancing for a couple of years.

Bottom Line: With the rapid growth of Multi-cloud, Cisco has a window of opportunity with its Security Cloud offering. A truly unified and highly effective cross-cloud and on prem data center security platform is something that is sorely needed. Coupled with an effective device security capability, such a unified solution would be attractive. But a question remains whether or not this platform will be attractive to companies outside of Cisco’s installed base, especially since it relies heavily on Cisco components (e.g., Talos, Meraki, SASE, etc.). But if an enterprise is already a Cisco customer, moving to the Security Cloud as a way to secure their multi-cloud environment should be an easy choice.

About J.Gold Associates, LLC.

J.Gold Associates provides advisory services, syndicated research, strategic consulting and in-context analysis to help its clients make important technology choices and to enable improved product deployment decisions and go to market strategies. We work with our clients to produce successful new product strategies and deployments through workshops and reviews, business and strategic plan coaching and reviews, assistance in product selection and vendor evaluations, needs analysis, competitive analysis, and ongoing expertise transfer.

J.Gold Associates provides its clients with insightful, meaningful and actionable analysis of trends in the computer and technology industries. We have acquired a broad based knowledge of the technology landscape and business deployment requirements, and bring that expertise to bear in our work. We cover the needs of business users in enterprise and SMB markets, plus focus on emerging consumer technologies that will quickly be re-purposed to business use.

We can provide your company with a trusted and expert resource to maximize your investments and minimize your risk. Please contact us to see how we can help you.



J.Gold Associates, LLC
Northborough, MA 01532 USA

Phone:
+1-508-393-5294

Web:
www.jgoldassociates.com

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