Insight

Infosys IIP – Open Source Analytics on Steroids

Daphne Chung
Chris Morris

IDC OPINION

IDC expects that enterprises will invest significantly in information digital transformation (DX) as they strive to become information-based companies; in fact, IDC expects this to become the biggest investment area among the areas of DX. Even so, most enterprises will still be watching their budgets and looking for the "biggest bang for the buck" as they are expected to achieve a great deal more with little increase in budgets.

In this future scenario, IDC believes that the Infosys Information Platform (IIP) offering is a timely product with its positioning as a more cost-effective solution compared with proprietary software solutions, as it is based on open-sourced components. More importantly, it also addresses concerns about the management of open-source complexity, so it will resonate well with organizations in the region. But the crown jewel in this solution is most likely the Insights-as-a-Service component, for which Infosys touts the availability of over hundreds of data scientists and analysts for clients to tap into. Such skills in the region are scarce to say the least and expensive to employ in-house. By offering it "as a service" the Infosys solution makes these valuable skills more accessible to a broader range of customers, including small and medium-sized businesses (SMBs) and enterprise departments.

By leveraging and contributing to open source technologies, Infosys believes that it can bring innovations to their clients beyond cost optimization, such as rapid innovation, community expertise, and flexibility to change and cater to the unique needs of their customers. Infosys also collaborates widely, working closely with academia like the Institute of Computation and Mathematical Engineering (ICME) at Stanford to both leverage and contribute to Data Science and Machine Learning. It is a member and committer of Open Data Platform (ODP) to promote and advance the state of Apache Hadoop and other enterprise Big Data technologies. Infosys is one of the sponsors of OpenAI, the goal of which is to advance digital intelligence without being constrained by financial returns (Source: http://www.experienceinfosys.com/iip).

While the market heats up in this area, so too are the number of vendors vying in this space with their solutions. Being less well known in the Big Data sphere, Infosys will need to factor in the need to win mindshare and increasing market awareness as it seeks to gain traction in this space.

IN THIS INSIGHT

This IDC Insight looks at Infosys' data and analytics platform offering – the Infosys Information Platform or IIP – and provides an IDC view of the solution offerings and the potential benefits and associated challenges.
SITUATION OVERVIEW

In 2018, IDC estimated that 65% of large enterprises would have committed to become information-based companies, shifting their organizational focus to relationships, people, and the intangible capital that can be derived from analysis of their data. Based on our recent worldwide (WW) estimates of DX spending across the five dimensions, information DX will present the biggest investment jump from 2015 to 2020. We have also estimated that by 2020, the digital universe will reach 44ZB, or 44 trillion gigabytes, a tenfold increase over 2013. In the past year, we have noted a dramatic increase in the ability of key players like Google, Facebook, and Amazon to unlock value from information. With Asian IT giants like Alibaba, Tencent, and Baidu jumping into the fray as well, most of the rest of the "mortal" companies are often just at the beginning of their journey to extract value from information. And while information is gold, it is intelligence that is ultimately nirvana.

The rapid expansion of the digital universe poses an incredible challenge and an unprecedented opportunity. The challenge is to manage and retain usable data and then to exploit retained information to fuel the enterprise's digital transformation and unlock the value hidden in a massive amount of information and create new markets or generate new revenue streams. However, this is often a struggle, but one that organizations in the region know they must face, as information becomes the fastest growing asset that could translate to a competitive and increased business value.

Infosys' Solution

Infosys Information Platform takes aim at addressing both the speed to insight and cost to build Big Data systems for enterprises. This platform is part of Infosys' AiKiDo strategy that consists of suites of offerings that are positioned as Infosys' next-generation services in design thinking. AiKiDo leverages knowledge-based systems and platform assets to help customers renew innovation in their business and drive change in the organizational culture. "Ai" refers to the platform approach for operations modernization; "Ki" pertains to the mastery of leveraging information and knowledge-based systems to enhance the efficiency of the organization as a whole; and "Do" refers to the drive toward innovation through design thinking and design-led initiatives. IIP is part of the "Ai" in this whole picture, and it is representative of Infosys' approach to help customers leverage the concepts on design thinking and knowledge-based systems to bring together efficiencies via a platform-based mode with automation at the core.

IIP is a Hadoop-/Spark-based, open source Big Data platform that aims to provide a more cost effective yet scalable solution by leveraging open source and its growing ecosystem. With IIP, Infosys aims to help users address the complexity that is often associated with the use of open source by creating an abstraction layer on top of it in order to make it more consumable at the enterprise level.

The IIP solution is built on three layers: data management; development tools and analytics; and Insights as a Service. Data management is built from open source components and is able to ingest all types of data — structured, unstructured, documents, spreadsheets, blogs, portal content, logs, social media, audio, video, and so on. The data layer also manages, transforms, analyzes, and enables visualization of the data in this layer. The platform is also able to ingest data from diverse internal and external sources and connect to the visualization tool of a user's choice to enable ease of use. It can combine data sources and apply mathematical models on the data.

Tools, algorithms, and data extractors to address analytics and insight development are available in its second layer — the insights development and analytics layer. Configuration of systems and data is done through a graphical layer. Its Insights as a Service product is a services-based offering, with over
1,000 technical experts and over 200 data scientists to offer not just integration and implementation services but also the ability to customize application work, industry-specific developments, and advanced data science and analytics know-how that are scarce in the region. Ultimately, bringing real-time insights via data science and in-memory computing reduced total cost of ownership (TCO) by leveraging open source and offering enterprise security, governance, and high availability to top it off.

FIGURE 1

Overview of IIP

The solution is offered both on public cloud (Amazon Web Service [AWS]/Azure) and on a private cloud hosted by Infosys, and, of course, the on-premises option. Customers already include some big names such as Hershey, Ricoh Americas, and the ATP World Tour. Ricoh transformed its accounts receivable reports where it ported its existing code onto the IIP platform and was able to improve the accuracy of the reports and expand the report fields easily. The new system also allowed the company to visualize the data as Tableau reports while still being able to drill down to details. As a result of the project, Ricoh expanded the number of reports and users of data in the organization as well. At ATP World Tour, the deployment of the IIP solution has allowed the company to rapidly load data and provide analysts with huge volumes of tennis data in near real time. ATP World Tour is able to provide tennis match insights with visualization for players, coaches, and media as well as analyses for fans, transforming their experience of the matches. Infosys has over 200 IIP projects around the world with some 20% of these in the production environment, and a good 14% of projects are in the Asia/Pacific (APAC) region. To help feed the pipeline, Infosys offers a free test drive for potential clients for them to see how the platform can ingest and then analyze all the information based on their selection and provide user insights using a visualization tool in real time.
FUTURE OUTLOOK

In a digital economy, the focus shifts to relationships, people, and capital. The value of data, when consumed, does not deplete nor does it wear out. In fact, data when shared and/or transformed, has the potential to multiply in value. IDC expects enterprises to pivot their investment and resources as they seek to become information-based/-led companies through information digital transformation. This makes it an opportune time for Infosys to increase focus on the IIP solution in the region and capitalize on the growing market.

With information transformation, information itself becomes more "self-governing" through the application of advanced tools that can determine logical metadata constructs but must be supplemented with strong procedural competency in information management. Organizations are advised to look toward building a data ecosystem such as a data lake, in order to allow processes, particularly decision processes, to be defined by the data rather than the other way around.

Infosys’ offering to the market is on point on many fronts in terms of the broad scheme of delivering on information and Big Data. IIP addresses the velocity, volume, and variety, and its use of open source components while taking on the skills to support gaps to offer an enterprise-ready solution to the market addresses some of the usual open source concerns and lack of required skills that tend to plague open source adoption in the region. IIP’s Insight as a Service layer provides further skills option to enterprises that will be a welcome relief to organizations that could not afford or could not hire the required skills to build and architect their Big Data systems in-house. Coupled with this is Infosys’ complete suite of services from traditional business intelligence (BI), data warehousing, and data operations to Big Data, BI on cloud, advanced analytics, and data science. IIP will also be geared toward industry-specific use cases like those in the financial services institution (FSI), retail, manufacturing, energy, and life sciences.

In addition to the accepted notions of Big Data around velocity, volume, and variety, IT will also be expected to address a fourth "V," which stands for "value." Not all data is of equal value and IT is expected to be the arbiter and will address this issue. IDC estimates that while about 20-25% of all data were usable, only a fraction of that was analyzed; only about 1% of data was actually analyzed and some studies estimate that only a quarter of Big Data projects are thought to be successful. In line with the issue of data value is data integration. Integration tools can be costly, and while some vendors have offered their own tools in place of expensive standalone options, Infosys provides tools built on open source as part of its IIP solution to help address this high-cost area of Big Data by leveraging the cost-effective nature of open-source-based tools.

With most Big Data investments being questioned for their value, the free test drive that Infosys offers allows its customers to experience insights into their data in real time to prove value and enable them to build better business cases for further deployment. This is especially a good draw for SMBs in particular where cost and budget constraints are usually a larger issue. Although free trials are not unique in the world of Big Data offerings, allowing potential customers to try first for free with their own data is still a valuable part of the solution in order to encourage further deployment.

While not currently the leader in the Big Data sphere, Infosys’ offering is certainly moving the company toward the right direction to gain further traction in the market. It will need to leverage its presence and success in its traditional services sector to make further inroads into Big Data and analytics area and drive greater market awareness of its analytics practice. Customers have a widening number of choices in this area, and Infosys will need to show the differentiating value IIP brings to the Big Data mix to win over more of the market.
About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

IDC Asia/Pacific Headquarters (Singapore)

80 Anson Road, #38-00
Singapore 079907
65.6226.0330
Twitter: @IDC
idc-community.com
www.idc.com

Copyright Notice

This IDC research document was published as part of an IDC continuous intelligence service, providing written research, analyst interactions, telebriefings, and conferences. Visit www.idc.com to learn more about IDC subscription and consulting services. To view a list of IDC offices worldwide, visit www.idc.com/offices. Please contact the IDC Hotline at 800.343.4952, ext. 7988 (or +1.508.988.7988) or sales@idc.com for information on applying the price of this document toward the purchase of an IDC service or for information on additional copies or Web rights.

Copyright 2016 IDC. Reproduction is forbidden unless authorized. All rights reserved.