

The Power of Autonomy

Contents

Introduction



CERN



Rangsit University

of tomorrow

Kingold







14

OPI 28

Conclusion

31



Federal Bank

for Federal Bank



6

0





National Pharmacies



UNIOR

intive



Forth Smart 22





Introduction

The database that drives itself, so your people can drive the business

In a world where data is everywhere, old ways of storing it, managing it and organising it are no longer fit for purpose. Identifying what's relevant in the data and what it can tell you is hard. And it's challenging to find insights to make good decision and achieve better business outcomes. Oracle Autonomous Database removes complexity, makes light work of previously labour-intensive and error-prone tasks, and makes time for your people to focus on more strategic activities and drive success. Read on to discover what that success looks like for these eleven companies.



Kingold

Looking for real transformation? It's all in your data

As few as 10 years ago, most property developers would have found it hard to believe that anything would come close to location as the top consideration for home buyers. Who knew that soon they would be demanding whole new, digitally-enabled lifestyles?





For Guangzhou-based luxury property developer Kingold, the ability to compete effectively requires the company to capture insights that will help them design and deliver the kind of services today's customer demands. What started with the transformation of Kingold's physical infrastructure and data using Oracle Cloud has led to a secondary, mission-critical transformation based on the adoption of Oracle Analytics Cloud and Oracle's Autonomous Data Warehouse technology.

As Kingold CIO Steven Chang put it, "how do you meet customers' ever-changing demands when you are spending 80% of your time just keeping the lights on?" Oracle Autonomous Data Warehouse helped them change that.

In fact, one of the most significant benefits afforded by Oracle Autonomous Data Warehouse has been the speed it has brought to previously time-consuming processes. A typical data warehouse project has been cut from 3-6 months to just a few weeks, and financial analysis reports that used to take 12 minutes to complete now takes just a staggering 41 seconds.

With faster access to better quality data, the IT team has more time to focus on data analytics and modelling rather than maintenance tasks. Now, by analysing workforce and facilities insights alongside behavioural data from their customer app, Kingold can not only pinpoint potential land purchase or With Oracle's Autonomous Database, we're making data work for us and empowering our people. Now we can quickly and easily identify where to buy land or where to develop for our next project. We can get insights within hours rather than months, and do it ourselves without buying expensive reports.

Steven Chang CIO, Kingold

property development opportunities, but can identify and create the services their buyers want. "We can predict and automate maintenance, and see and provide the services that matter," says Chang, "like real time travel information, helping residents make their lives more efficient, giving them time back to live their life to the full."

With Oracle Autonomous Data Warehouse, Kingold has not only improved the way they do business, they've made a real and positive impact on the lives of their customers. As Steven Chang puts it, "real transformation can't start until you start working the data to make changes."





Insight is the new currency for Federal Bank

Knowledge may be power, but understanding and insight are the keys to unlocking it. By understanding how customers used its ATMs across India, Federal Bank was able to make the right decisions and take action fast.

FEDERAL BANK YOUR PERFECT BANKING PARTNER

Understanding customer behaviour to uncover the way forward

Federal bank is the largest traditional private sector Bank in India, with more than 1,200 branches and 1,600 ATMs across the country. Among the first banks in India to computerise all its branches, Federal Bank has long been a pioneer in its use of technology to leverage operations and better serve its customers.

However, growth can bring its own challenges. With so many ATMs, Federal Bank had reached a point where it needed a better understanding of how customers were using them. To do this, it needed a unified, single view of the performance of all its cash machines across India. The solution lay in the powerful combination of Oracle Autonomous Data Warehouse, bundled with Oracle Analytics cloud service, which was fast to implement, easy to use and quick to show results.

With deeper, more meaningful insights, the bank was not only able to discover which ATMs had more walk-ins, but also for example, the reasons customers in a particular locality opted to use a competitor's ATM. It meant that the bank's leaders could make more informed decisions and take confident steps to address issues. Insights gained are also being put to constructive use in terms of new initiatives going forward. Shalini Warrier explains: "we're now looking to enhance the scope with social media content for better sentiment analysis and a more holistic understanding of our customers".

Oracle Autonomous Data Warehouse allows Federal Bank and other organisations to put their data capital to better use, strengthen their core competencies–and free up resources and key personnel to focus on growth initiatives and innovation.

In just under four weeks, we had an intuitive, user-friendly solution with full drill-down and roll-up capabilities. this empowered our senior leaders with actionable intelligence for faster decision making.

Shalini Warrier COO, Federal Bank



intive

Innovating by example

When a company's prime services are about accelerating digital transformation for its customers, then by definition it has to be constantly at the top of its own game. There's little margin for human error or any slow-down in pace.



intive

Inside the engine of a digital powerhouse

Digital transformation is not just about harnessing the benefits and efficiencies of technology to deliver superior customer experience, it's about changing how a company thinks, operates, predicts, and ensures non-stop forward momentum.

intive radiates a global influence and is instrumental in reaching new heights in customer experience solutions, enterprise transformation, mobility and Al solutions, for many of the biggest companies in the world. Supporting digital prowess for automotive, financial services, consumer services, high-tech, industrial, media and communication industries. intive is likely to have somehow touched your life, made things easier, and improved the way you use and interact with products. intive practices what it preaches, with unceasing focus on the efficiency of its own systems, infrastructures and resources. With more than 1600 engineers globally, this is a big task. Inevitably it involves Big Data, and lots of it, from internal and external sources. It involves confident and fast integration of that data to form the clearest possible picture of how consumers interact with brands and services.

For robust and reliable management of the data, along with the ability to interpret it through reporting and real-time data visualisation, intive uses the Oracle Autonomous Data Warehouse.

10X

Improved system performance by using Oracle Autonomous Data Warehouse.

3X

Better team performance and more speed; combined with 4x fewer test incidents. intive also wanted to improve ways of estimating profitability of potential projects; harnessing data to create a preliminary working version of proposed solutions quickly and reliably.

The management was accustomed to the old system implementation model associated with the completion of equipment, installation and configuration of software and the search for professionals with appropriate competences. Oracle Autonomous Data Warehouse does away with physical set up. Configuration is reduced to an absolute minimum; no need for IT administration resources and thus a notable reduction in costs and time. In addition, scaling allows economical project management (e.g. shutting down the system outside defined business hours). With over 1,000 innovative projects to its credit, intive is set to up the pace even further, with Oracle Autonomous Data Warehouse.



to be the fastest and most efficient possible. What makes fast? Machine Learning and Al. What makes them possible? Oracle's solution.

Artur Kowalski Line Manager, intive

Unior

Driving smarter manufacturing through faster data insights

Leading Slovenian manufacturer, Unior couldn't see the wood for the trees when it came to finding actionable insight in the vast swathes of data across its production processes and supply chain. Here's how they got the visibility they needed and got firmly back in control.





Oracle puts Unior back in the driving seat

In an online, always on, Industry 4.0 world, manufacturing processes are becoming increasingly connected, with vast amounts of insight-rich data being generated all across the supply chain. And insight is good, right? Well that depends. It's good when it's relevant. And if you know how to recognise, and get to it.

In the course of supplying automotive equipment, hand tools and special machines for customers across the globe, Slovenian metal process manufacturer Unior, produces around 325,000 parts every single day. When this translates into 85 million data records, it's easy to see why they were finding it difficult to see where to focus their business objectives. As the saying goes, it was hard to see the wood for the trees.

Unior knew they needed a way of managing and querying the masses of information from their machines and processes, and to find it, they turned to Oracle Autonomous Data Warehouse. Once implemented, the new technology enabled rapid loading of data and gave Unior the ability to interrogate and analyse performance insights from several workloads at a time. It meant that development projects could be set up quicker than ever before, reporting went real-time, and business decisions were better informed, faster and more confident, in response to both internal and external signals.

Highlights

Improved visibility of 85 million data records

Better informed, more empowered teams

"Back in control of our production and our future"

Rok Planinsec CIO, Unior





From the moment we started using Oracle Autonomous Data Warehouse, we were back in control of our production and of our future. With dashboards updating every day, we have the insights to make the right decisions: we can see what stock we have, how we compare with the competition, and where to focus our spend and sales team.

Rok Planinsec CIO, Unior

There has been a significant impact on efficiency and productivity for the manufacturer, not least because the new system removes the need in many cases, for intervention by database administrators. The effect is that IT time is freed up to focus on initiatives that are aligned with business and customer service objectives.

In short Oracle Autonomous Data Warehouse has put Unior leaders back in control and focused firmly on the future. "It's been a radical change", concludes Planinsec, "but with Oracle, we are not just keeping up, we are firmly in the driving seat."



scientific discovery

When it comes to dealing with large quantities and complex data, CERN has to deal with one of the most complex IoT system in world. IoT control data for the Large Hadron Collider generates about 2.5TB every single day....

e cern openlab

Hidden secrets of the universe, revealed in the data

At the European Laboratory for Particle Physics, CERN, control engineers are using the world's largest and most complex scientific instruments particle accelerators and detectors—to probe the fundamental structure of the universe. The control systems for the particle accelerators at CERN need to monitor in real-time—and persist—more than 2 million signals, generating 2.5 TB per day. Each signal has its own data sources, and these are brought together for operational analysis. Failures in the control systems could lead to significant downtime.

Tests carried out at CERN have demonstrated that the Oracle Autonomous Data Warehouse could potentially reduce storage requirements for this controls data by a factor of ten. Built-in optimisation features ensure that no manual tuning is required, while—based on our experience—operations require little or no database admin expertise. These technologies offer an interesting new way for engineers to explore the data and generate insights that were not previously possible. Oracle Autonomous Data Warehouse significantly reduces the database operation time and expertise required, while its built-in optimisation features ensure performance without manual tuning. This creates a scenario that enables engineers and experts to focus on data exploration, generating insights that were not previously possible.

Manuel Martin Marquez Senior Project Leader, CERN

Such insights include enabling the CERN team to correlate fault conditions related to electricity consumption, power conversion, water usage, and cryogenics. Testing work carried out at CERN has shown the potential for Oracle Autonomous Data Warehouse to free up time, by eliminating many of

2.5TB

Volume of IoT controls data generated by more than 2 million signals per day; analysed in real time.

90%

Tests demonstrated reduction in data storage requirements for controls data at CERN.



the manual tasks involved in managing a database. This means scientists at the laboratory—working to unlock the secrets of our universe—can concentrate their resources in other areas.

It also suggests that if Oracle Autonomous Data Warehouse is fit for purpose for a project of this stature—often with more than five million data requests per second—it's more than capable of addressing data management challenges in the enterprise and other organisations.

The scale of data management challenges in most businesses may rarely be as voluminous as they are at CERN, but event processing projects are on the increase everywhere. Fast, secure and automated data processing defines operational efficiency, and the competitive advantage, as much as it may help define the universe.

11880.com

'Doing more with less': Redefined

It's becoming something of a business mantra that nobody is prepared to wait for anything anymore. Consumers demand instant responses, so do businesses. The internet delivers them. Every time it does, it raises expectations a little more; the key to success is anticipating them.





When the data takes care of itself, you can take care of business

Few would deny that the success of any business model in today's age of technology depends more than ever on the flow of information between a diversity of stakeholders as well as among a matrix of departments within any organisation. Few would deny also that the increasing volume, accelerating velocity, ever-burgeoning variety, and essential need for veracity of data create a daunting matrix of challenges to the business.

11880 Solutions, Germany's second largest telephone directory service, has been expanding its offerings over the last four years to include internet services such as online search, job search, reviews and search engine optimisation to support SMEs' online marketing. 11880 is Google's and Bing's big premium partner in Germany. The company operates in an online environment where speed is of the essence. Its ability to manage data–easily, confidently, knowledgably, and without deploying enormous resource to do so–has quickly become mission-critical. Allocating resource to the intricacies of data management and running the associated systems would simply detract from 11880's core focus.

To enable database administrators to contribute more to business growth, they needed to be given the freedom to perform more valuable architecture and application optimisation tasks instead. Oracle Autonomous Data Warehouse provides them with high-speed queries at in-memory speed, with automation, removing administration requirements. It also provides the flexibility to scale up in just minutes for peak month-end reporting and then scale down again to minimise costs.

Our legacy systems were pretty limited in scalability and performance. Oracle Autonomous Database Warehouse gives us both at the same time, and to a considerable extent. Costs are also very important. We've seen that cloud technology helps us meet the lean budget we've set ourselves. Oracle was the provider with the best balance of cost and speed in our tests. In its tests, 11880 found that Oracle Autonomous Database Warehouse offered comparable performance to data warehouse databases built into memory, but that it also worked without any problems with the Informatica platform and BI tools already in use in the enterprise. "The Autonomous Data Warehouse is the optimal solution for a mid-sized enterprise such as 11880.com–fast, flexible, cloudbased and with no administration overhead," says Christian.







Applied Precision Medicine

Extreme data. Welcome to precision medicine

Modern precision medicine means that it's now possible to begin tailoring treatments for serious diseases like cancer, heart disease, MS and more by analysing what it is that makes some patients respond better than others. But what do you do when data volumes are extreme?

In medicine, one size does not fit all

Highlights

APM can generate 1 terabyte of data per person

Need technology that's robust, reliable, fast and secure

Less DBA, more improving patients' lives

Why are some medical treatments more effective on some patients than others? Can we identify the elements of an individual's make-up that cause them to react differently? And can we tailor make treatments based on what we find?

The answer is yes. It's known as precision medicine and it's right at the heart of what Australian firm Applied Precision Medicine (APM) is enabling every day. APM works with companies that develop genetic algorithms, helping them analyse DNA data and create tests to determine the effectiveness of new treatments. But the sheer complexity of the human genome means the data volumes and processing power required are extreme.

DNA data is enormous - we have the potential of generating almost a terabyte per person from their DNA. Data sets can run into a petabyte for just 1200 patients."

Richard Rendell Managing Director, APM The solution lay in Oracle Autonomous Data Warehouse. Not only can it handle these almost inconceivable amounts of data, but Oracle's long term experience in both healthcare and business means its technology more closely maps to what is needed to grow a business, including regulatory compliance and commercialisation of treatments. According to Rendell, "this technology gives us the ability to build something that is robust, enterprisegrade, clinically-acceptable, and HIPAA compliant, and be able to do that very, very quickly." APM can now spin up a server, create the data warehouse, and begin ingesting data in a matter of minutes.

Previously, the same exercise would take a significant amount of time, be more costly and tie up more personnel, particularly when it came to DevOps or DBA work. APM staff are now able to spend their time on higher value tasks and be confident the system is reliable, fast and totally secure.

Critically, all of this means that the right treatments are available to patients faster, and with a higher degree of confidence, and for Richard Rendell this is key. Critically, all of this means that the right treatments are available to patients faster, and with a higher degree of confidence, and for Richard Rendell this is key.

It means the patient will find increased quality of life at least, and in many cases we can actually save lives as a result of getting more accurate treatment to the people who'll respond to it.

Richard Rendell Managing Director, APM





NATIONAL

PHARMACIES



The holy grail in health: The single patient view

To achieve the best possible health outcomes for patients, National Pharmacies wanted a single view of the transactions and health records of each of its 350,000 patient customers across over 80 stores. The solution empowered staff, improved patient experience and future-proofed the organisation.

lt's not about transactions. lt's about patient wellbeing.

Throughout our lifetime we may see hundreds of different healthcare providers and personnel whether for the same or different reasons. That means hundreds, maybe thousands of different records exist about our health on different systems in different locations, many with limited capabilities for sharing that information when and with whom it's needed.

Highlights

350,000 customers 80+ stores 1 data repository

Empowered staff with realtime record & inventory views

80% of IT budget now spent on innovation projects

As owner and operator of over 80 pharmacies and optical stores across southern Australia, National Pharmacies was determined this would not be their model. For them, being over 100 years old does not mean patient care should take an old-fashioned, ageing approach. Quite the contrary. The patient experience, according to Executive General Manager, Ryan Close should be in line with their experience at any modern retailer, so that "when a patient goes to see a healthcare professional at any time, that doctor or specialist or whoever, subject to authorisations, has all of the data at their fingertips and can make an informed decision".

But getting a single real-time view of patient data has its challenges. Apart from the number and speed of transactions across their own stores-one every two minutes-many patient records are on outdated, legacy or manual systems and therefore difficult to integrate..





So the company introduced Oracle's Autonomous Warehousing to deliver data quickly and securely from its many different stores and different healthcare systems, into one single repository. It meant that National Pharmacies could now form a complete picture of every patient at any moment in time. Staff on the floor now have real-time views of both patients and inventory, meaning they can make better recommendations on treatments, which in turn leads to better health outcomes.

And because the autonomous technology is so easy to use, and much of the work takes place with minimal human intervention, it is also freeing up the time of the company's technology professionals to work on highervalue tasks. Klose explains, "our DBAs or data people are often caught up working on platform technologies. For us to lift them to the frontline, where they can use that expertise and skills to work on intelligence and knowledge distribution, is going to be key for us and allow us to futureproof our organisation". Now, 80% of the IT budget is spent on innovation for better patient outcomes.

Now, 80% of the IT budget is spent on innovation for better patient outcomes. Ultimately it's about people.

For us it's not just about each transaction, it's about life experiences and the long term partnership we have with each patient. To be healthy allows us to enjoy the luxuries of life, and that is our ambition at National Pharmacies.

Ryan Close Executive General Manager, National Pharmacies

Forth Smart

The Fin Tech that's transforming rural lives in Thailand

For the many, many people across rural Thailand with no access to the financial services most of us take for granted, Forth Smart has been a literal life changer. But not content to stop there, the company is leveraging Oracle Autonomous Data Warehouse to be sure the experience gets better and better.



ะบุณเติม

Connecting millions of people with a payment gateway

Headquartered in Bangkok, 11-year old Fin Tech Forth Smart is a payment services provider that enables top-up services for prepaid mobile phones, online games and e-wallets via vending-machine style kiosks across the country, using cash. The kiosks are also a means of transferring money between individuals.

For people in rural areas, who often have no access to financial services, no means to transfer money to their families and no facility to buy goods online, the company has been a life changer. To date, Forth Smart has installed over 120,000 machines across Thailand, over 90% of which are in rural areas. The machines act as a payment gateway, allowing anyone to make digital payments using cash.

But for a relatively young company, Forth Smart has undergone an enormous amount of change. "From starting out with 1,000 kiosks across Thailand, to operating over 120,000 kiosks we have today, we had to make bold moves in order to be the leading payment services provider in Thailand" says the company's Business Development Analyst, Pawarit Ruengsuksilp.

One such change has been the adoption of cloud.

Highlights

120,000 kiosks, 2 million+ daily transactions

Outperformed existing system by up to 200x

Easy-to-access real-time data removes need for DBA

Forth Smart is one of the early adopters of Oracle Autonomous Data Warehouse. It has given us a head start in the industry by enabling the simplification of processes, including providing us with the ability to make better sense of the massive amounts of data we receive on a daily basis.

Pawarit Ruengsuksilp Business Development Analyst, Forth Smart



Those "massive amounts" translate into 2 million+ transactions a day, many of which used to be reported via Excel pivot tables. Now, with automated real-time dashboards, and queries running up to 200x faster than with First Generation Cloud, the employees' time is freed up to focus on driving business value, and meeting customers' changing needs and behaviours. This is where Oracle technology has been invaluable. The combination of automation and Machine Learning built into its autonomous data warehouse unlocks information about new customers, points exchanges, kiosks used and more. And by helping Forth Smart understand the impact of their various campaigns in real time, it means they can make faster, more informed decisions, and be more targeted and effective going forward.

And speaking of the future?

There will be more opportunities and competition coming along almost on an almost weekly basis. As needs continue to change, I hope that we are able to leverage data to provide deeper customer analysis and deliver more to our potential customers and business partners.

Pawarit Ruengsuksilp Business Development Analyst, Forth Smart







Rangsit University

Creating the Thai entrepreneurs of tomorrow

In response to the Thai government's Thailand 4.0 initiative and to ensure students are prepared for a tech-centric, entrepreneurial future, Rangsit University knew it meant moving from talking about technology to creating hands-on opportunities for students to bring their start-up ideas to life.

The hands-on, holistic syllabus enabling a whole new future

The Thai government's Thailand 4.0 initiative is aiming to transform the country away from an economy reliant on manufacturing, toward a tech-centric one driven by innovation, research and development. With innovation and research at its core, Rangsit University is determined to play its part in the initiative's delivery.

It's the university's philosophy that everyone who graduates does so with the potential to become an entrepreneur. In 2016 it launched the RSU Startup community to give students the opportunity to explore entrepreneurship initiatives and realise their startup dreams. Three years later it is the only private university accepted within the Startup Thailand League.

The university's College of Digital Innovation and Information Technology has long recognised that change is the fundamental core of the technology narrative, and since this is set to continue, it believes in preparing the workforce of tomorrow with the right skills.

Dr Karn Yongsiriwit, Assoc Dean, Institute for Data Analytics explains: "In the past, students would learn a specific topic appropriate to their future jobs. However, at Rangsit we believe in providing a holistic educational experience."



Highlights

8 student start-up firms legally registered

Design & development time down from 1 year to 1 term

"Through the cloud, we are consistently on pulse with technological change"

Dr Chetneti Srisaan Dean, College of Digital Innovation & IT, Rangsit University RSU will continue to look ahead to the next wave of change on the horizon" he says, "with cloud in our toolbox, we are confident that our students will continue to benefit from cloud deployments, and we hope to work with Oracle to continually get the most out of our implementations.

> Dr Chetneti Srisaan Dean, College of Digital Innovation & IT

So, in order to provide the very best hands-on opportunities for their students, the University was determined to leverage the best in technology and work with the right service providers. To this end, it has incorporated Oracle Autonomous Database into the syllabus. Oracle provides students with a platform for efficient prototype creation and a facility for collaboration. As the technology takes care of itself, students can have complete focus on their business startup ideas, and since they are working in the cloud, they can work with incredible speed. Where design and development of new innovations used to take a whole school year to reach launch stage, students can now arrive at the same point in just one term. To the university, it's extremely important that students are able to realise their ideas and their philosophy has so far resulted in eight student firms becoming legally registered, and for Dr Chetneti Srisaan, Dean at the College of Digital Innovation & IT, this is just the beginning.

OPI

OPI delivers a learning experience every single time

We learn from the past. But we have to know where to look. The scientific and education sectors in Poland need constant and rapid access to the world of accumulated knowledge. It is almost a planet of its own. Knowing where to land is essential.





NATIONAL INFORMATION PROCESSING

Accelerating the pursuit of knowledge

The National Information Processing Institute (Ośrodek Przetwarzania Informacji - Państwowy Instytut Badawczy) is a research unit that develops IT systems for the science and higher education sector in Poland. It also conducts research on Al. Government institutions regularly place requests for certain historical data, so they needed a faster way to access this data, which was archived in an onpremises database.

It slows things up when the quest for knowledge triggers its own processes of preparation (deploying or redeploying dedicated hardware) and entails fresh and frequently large investment in infrastructure. If progress is about moving forward, then faster progress is about moving forward faster. If knowledge is power, more of one equates to more of the other. OPI, as a source of information to feed fresh thinking and ideas, sought to gain more power in its data management systems to serve multitudinous requests, from its customers, for all the thinking and research had gone before.

After moving data to Oracle Autonomous Data Warehouse, they achieved a 40 percent improvement in query execution performance and they can scale up or down with a few clicks, without the assistance of IT staff.

Highlights

+40%

Improvement in database query response time to requests from government institutions.

Instant flexibility

In just a few clicks, OPI can scale its operations up or down.

Speed of response is important. Requests frequently come in from government institutions for the retrieval of historical data status at a specified date. OPI used to store this data in archived copies on their on-premise database.

The main problem that OPI's Information Resources Department (IRD) faced was the impossibility of working simultaneously with numerous copies of the database. The IRD lacked a high performing and easily accessible system for recording the history of the changes. When they needed to consult one single topic from the past, the systems needed to perform a large number of operations to reach the requested state of data. In addition, when they received such orders prior to working with Oracle Autonomous Data Warehouse, they had to allocate appropriate sizes of hardware and request to restore from backup systems–both a time and labour intensive process.

It has all changed. Now, they are backing up to cloud and retrieving information from backups through the Oracle Autonomous Data Warehouse whenever orders come in.



Conclusion

Power to you

For all these companies, the common denominator in their success has been empowerment. Oracle Autonomous Database technology has put them firmly in control of their journey by enabling deep, rapid, previously unseen business insights that pinpoint the way forward. Combined with the confidence of a reliable, secure and agile environment, it means their key people are free to be strategists and not fire fighters.

Discover how Autonomous means power to your business.

Start for free:

Contact:

Phone: +44 207 5626 827 Email: uksales_ie@oracle.com

Connect with us

Call +1.800.ORACLE1 or visit oracle.com.

Outside North America, find your local office at oracle.com/contact.

twitter.com/oracle facebook.com/oracle

Copyright © 2019, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.