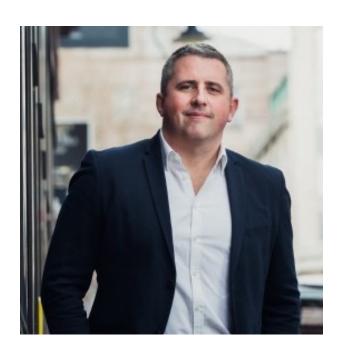


Our nexo Standards Journey – Value Realised and Lessons Learned

Andrew Considine Vice President – Product EMEA

October 18, 2023

Fiserv Introductions



VP, Product Management POS and Clover Fiserv



VP, Engineering POS Fiserv Director, Clover Global Payments Clover



Director, Solutions Architecture Fisery



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A Global Commerce Leader

Strength in numbers

- **Global** issuer processor
- **Global** merchant acquirer
- U.S. core account processing provider
- U.S. ACH, bill payment and presentment provider

200+ billion

Global transactions annually

6+ million

Of businesses reached around the world

As industry leaders, we continue to evolve our commerce ecosystem and enhance our technology to keep our client partners one step ahead.

We offer flexibility to support your global operations around the world, with a robust suite of adaptable solutions.

With Fiserv, a merchant's global operation benefits from

Global Merchant Acquiring: Provide a consistent and frictionless experience to customers around the world.

Payment Optimisation: Lower the cost of acceptance and increase approval rates:

- Debit Routing: Leverage the debit networks, including STAR, Accel and MoneyPass, to optimise how transactions are routed, without the need to become a debit expert
- Authorisation Optimisation: Maximise your approval rates and recoup on declines for recurring payments, on credit and debit cards
- Enhanced Data: Enable the sharing of relevant data between the merchant and issuers to provide a lift in the authorisation rates, reduction in fraud and chargebacks

200+ Clients in hospitality and food services	9/10 Fiserv works with nine of the top ten eCommerce retailers	Global Merchant Acquiring	Local and Alternative Payment Methods	Gift Solutions	Omnichannel Solutions
10 Years in a row		Fraud Mitigation	Payment	Least-Cost	Data-as-a-
as a FORTUNE World's Most Admired Company®			Optimisation	Debit Routing	Service

Our Global Reach and Local Presence Is the Best in Our Sector

150+

Countries supported

50+

Countries with local acquiring

70+

Alternative payment methods



North America

Canada United States



Latin America and Caribbean

Argentina Brazil Colombia Dominican Republic Mexico Panama Uruguay



Europe, the Middle East and Africa

Austria Hungary Belgium Iceland Bulgaria Ireland Croatia Italv Cyprus Latvia Czech Republic Liechtenstein Denmark Lithuania Estonia Luxemburg Malta Finland France Monaco Germany Netherlands Greece Norway

Portugal Romania Slovakia Slovenia South Africa Spain Sweden Switzerland United Arab Emirates United Kingdom

Poland



Asia-Pacific

Australia China Hong Kong India Japan Malaysia Philippines Singapore South Korea

Segmented Value Proposition Highly Segment Stack of Solutions and Businesses

Product Strategy	Omnichannel Android POS Clover and standard SME solutions Business Management		Vertical Solutions		Enterprise Solutions	
Target	Micro and Small		Medium and Large		Large and Enterprise	
Sales Channels	 Digital (STP or assisted) Remote (CTC, outbound) ISOs 	 Digital Web Direct Sale Force – Field/Inside 	 Direct Sale Force – Field ISVs/ISOs 		 Direct Sale Force – Institutional ISVs/PayFac/PSPs/ISOs 	
Proposition	Simplified Pricing and terminal product, narrow product spec, automated self-board, digital first lifecycle and SOFTPOS	Standardised prop with variation at feature and product level. Standardised integrations, App Market for self-customisation, tailored pricing constructs	Deeper Integrations for distribution partners. Multi-layer hierarchies, detailed data services and self-serve estate management. Vertical specific propositions		Specialised vertical solutions at regional level, optimised processing and customised solutions at client level. Full lifecycle data integrations	
Key	Verifone		fiserv.developer	ORACLE	ε ρριο	QlikQ
Technology Assets	NEXO ingenico		fiserv. _{OpenFX} ™	Carat	nexo	Diebold Nixdorf



A Step Back in Time



Multiple Payment Terminal Solutions

- Software specific for each market
- Software specific to each acquirer
- A new payment method means:
 - Changes in each market
 - Changes for each acquirer
- No standard user interface



Many Countries Have Local Protocols

- Acquirer message standards such as C-TAP, ZVT, APACS, CB2A, SPDH, HPDH, EP2 and so on
- Retailer integration standards by both country and vendor
- Some domestic standards also include payment application specifications



Multi-Vendor = Multi-TMS

- Parameters/device configuration in a vendor specific format
- Vendor specific remote key injection (RKI) solutions
- Vendor specific software download methodology
- Vendor specific estate
 management/maintenance solutions



Why Standardise?

One payment app across all terminal types and devices

Build once – deploy everywhere

Drastically reduce development, deployment and support costs

Build an ecosystem fit for all segments

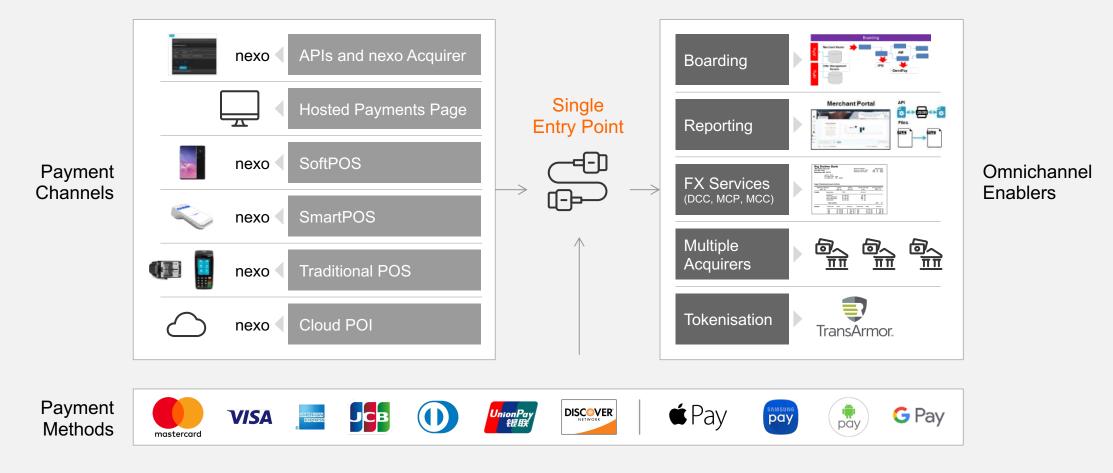
Reach new markets – in Europe and beyond





Address All Channels and Provide Single Access to All Services

Our Omnichannel capability enables merchants to offer a seamless customer payment experience irrespective of the channel or combination of channels chosen maximizing the merchant potential from each interaction



What Elements of nexo Standards Did We Adopt and Why?

nexo Fast

- Common nexo FAST payment application across
 PAX portfolio of Android terminals
 - A920, A920Pro, A80, A50, IM30
- Common nexo FAST payment application across Clover Flex and Clover Mini Gen 2 and Gen 3

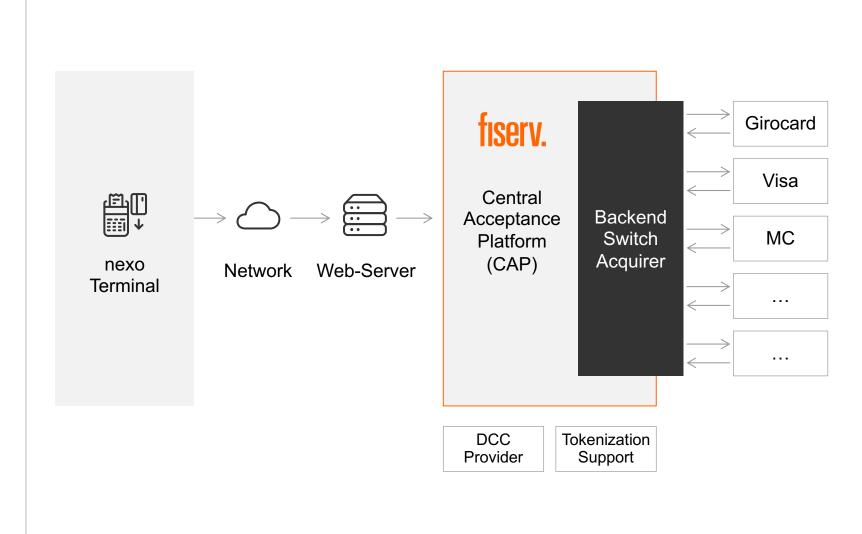
Facts and Figures:

- 10 terminal types supported
- 95,000 Fiserv nexo Fast terminals deployed
- Live in 20 countries in EMEA



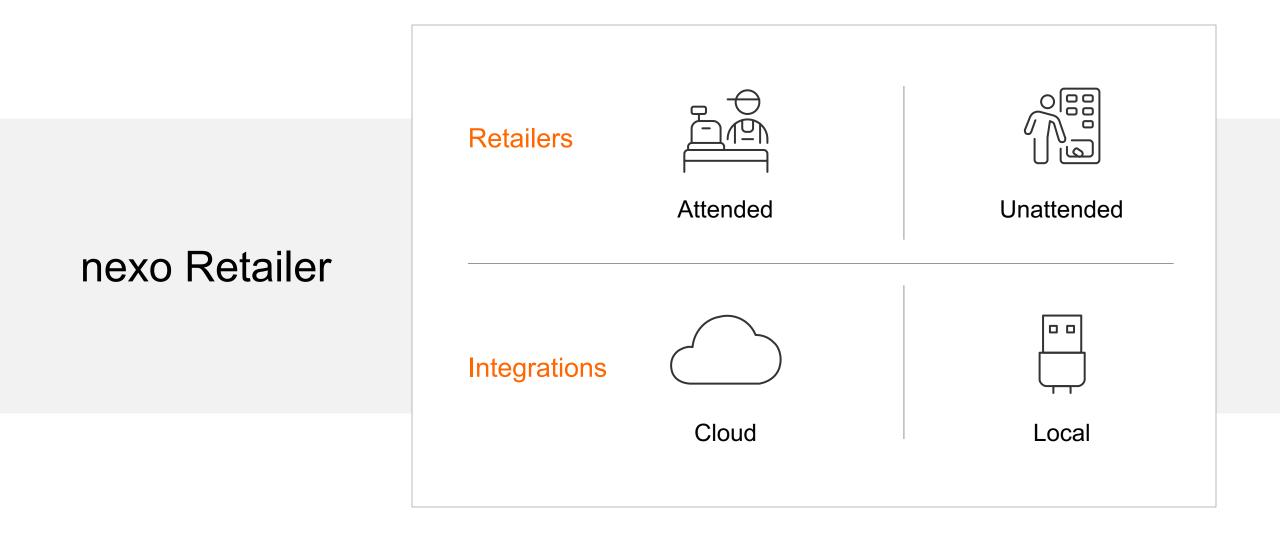


nexo Acquirer



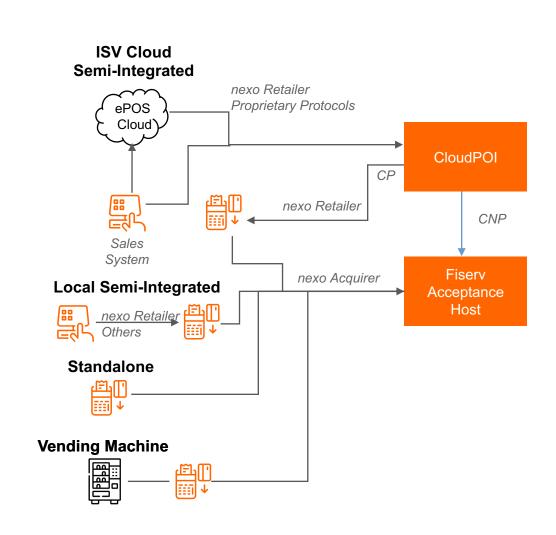
- nexo Acquirer interface available on Fiserv acceptance host since 2016
- Fiserv nexo FAST payment
 applications integrated to acceptance
 host through nexo acquirer
- Third-party terminals also integrated to our acceptance host using the same interface
- · Facts and figures
 - Our Central Acceptance Platform is currently processing ~26 million Sale transactions/month through the nexo Acquirer interface
 - 350 million transactions annually
 - 16 different payment methods supported including international schemes, local schemes and APMs
 - Domestic protocols take up to 12 months to develop and deliver – nexo Acquirer is simply configuration (minimal time to market)







nexo Retailer Integrations



ISV Cloud Solutions

- Interface supports nexo Retailer and 3rd party proprietary protocols (e.g. Oracle OPI)
- Translation layer from proprietary to nexo Retailer supporting request/response messages
- Card present/card not present supported via a single interface

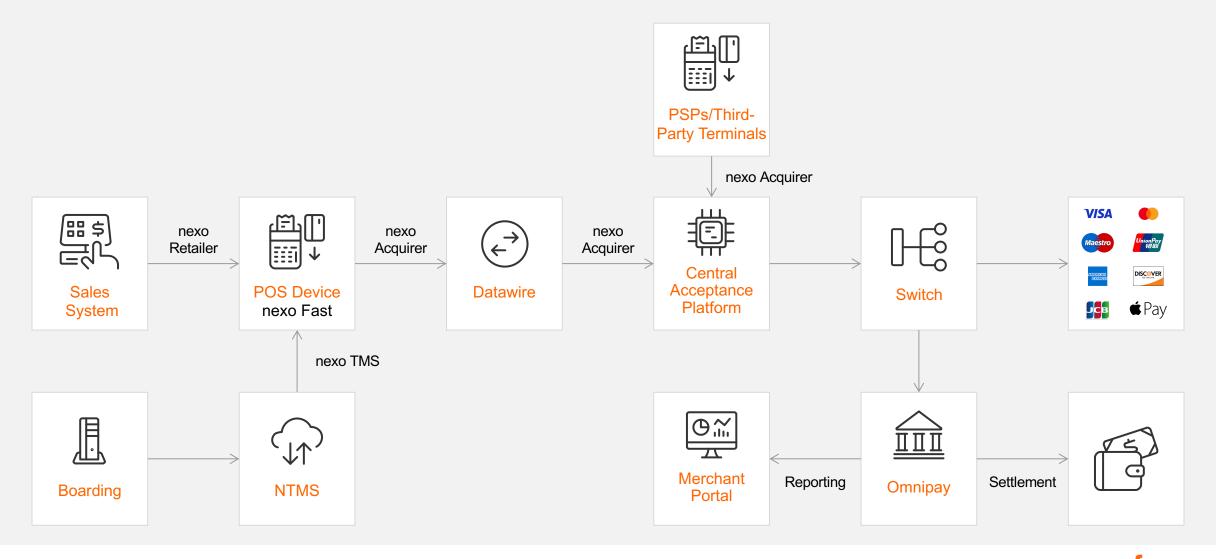
Direct Connectivity

- nexo Retailer direct integration
- MDB (unattended)

Internally translate request/response messages between MDB and nexo Retailer



Current nexo Ecosystem



Recognized by *Fortune*® Magazine World's Most Admired Companies™ 2023

Journey With nexo

Joined nexo (EPASOrg)		Novelpay Partnership Ingenico nex nexo Retaile		Clover Flex Mini Gen 2 Fast Certifi	nexo	PAX IM30/A Certified	4920
2013		2017		2020		2022	
•	2016		2018		2021	· • • •	2023
	nexo Acquirer Live	e	nexo TMS Live		PAX nexo Fas	st	PAX A50/A80 Certified – Clover Gen 3 In Progress

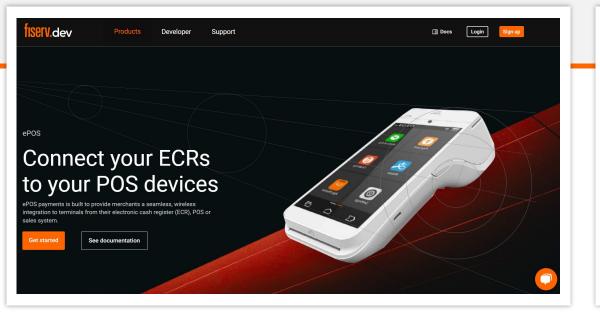
A Measure of Success

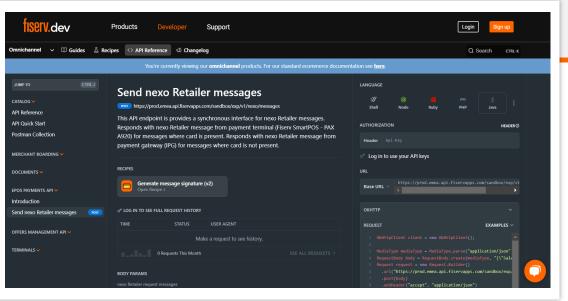


nexo Retailer

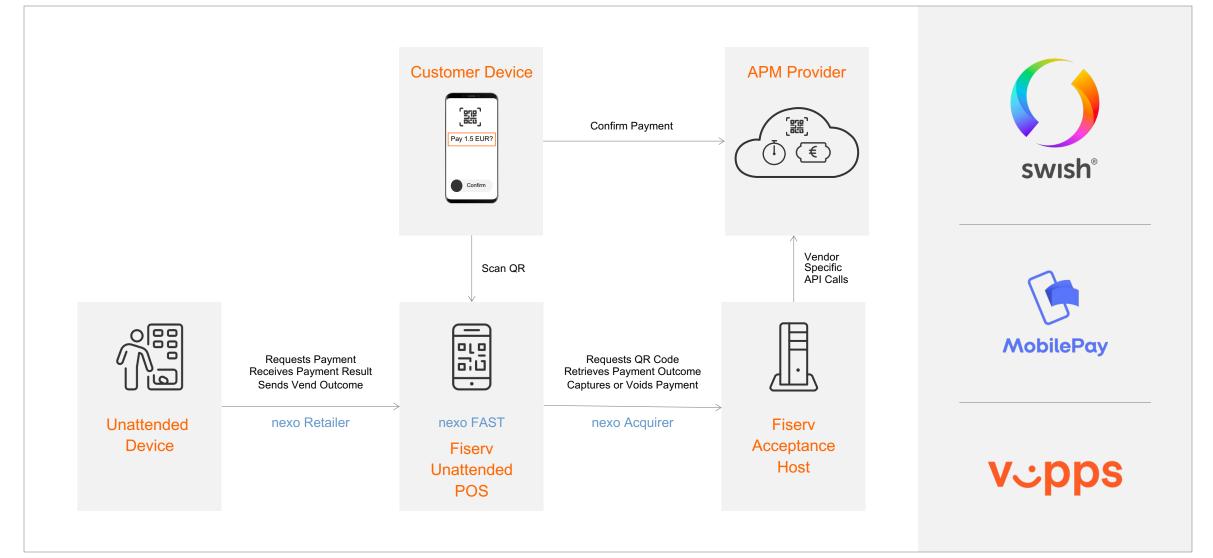
- Developer Experience for Sales System
 integrators at fiserv.dev
- Integration guide, specifications, recipes, request/response examples and *Try It* features
- Significantly simplifies integration effort providing tools and documentation at developers fingertips

- New nexo Retailer integration delivered in 2 months at half of the ISVs typical integration cost
- Support required by Fiserv counted in hours and not weeks or months





APMs on nexo Terminals





95K

Live Terminals

16

Payment Methods

350M

Annual Txns

20+

Brands



Lessons Learned

01 Leverage the extensibility available within the standards

02 Collaborate with nexo working groups to address gaps in standards

03 Invest in the Developer Experience – Not enough to just share the specifications

04 Build the nexo test cases into your standard regression testing

05 The journey for local debit scheme certifications in addition to nexo



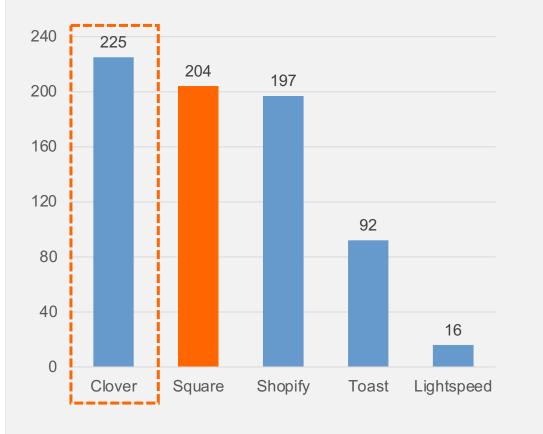


Case Studies - Clover



Clover Is the World's Fastest Growing Payments and Business Management System Provider for SMBs With Unrivalled Scale and Investment

GPV of Major Software Platforms With Embedded Payments 2022 \$B



Clover Serves the Needs of Small Businesses

From robust POS devices and flexible online payments solutions to inventory management and customer engagement, Clover helps restaurants, retailers, and service businesses thrive



\$225B

Annualised processing volume

2B

Annual consumer interactions

900+ Engineering and product staff 2M+ Devices shipped worldwide

500+ third-party apps in Clover App Market

>\$100M Annual technology budget



Other platforms: Shopify: Specialist in bringing SMB merchants online (limited in-store traction). | Square: Merchant acceptance in-store and online. | Toast: A leading restaurant management software and point-of-sale system. Lightspeed: A leading point-of-sale system for retail, hospitality and golf merchants.

Clover Helps Small Businesses Thrive

All-in-one. Tailored. Scalable.

Accept Payments Easily

- Accept payments securely with or without a Clover device
- Integrate with your shopping cart or hosted check-out
- Enable contactless payments

Run your Business

88 \$

加

- Manage all business operations
 through a single dashboard
- Understand the business
 with intuitive reports
- Manage cash flow
- Integrate with the most popular third-party apps
- Access 24/7/365 live support and contextual online help

Grow your Business

- Engage customers through feedback, rewards, promos and announcements
- Drive additional revenue through physical and digital gift cards
- Access working capital
- Identify new opportunities with insightful reports

Where Did We Start and Why?



- End 2015 it was decided to move Clover solution into Germany which needed implementation of local German standards DCPOS2.5 and TA7.1 which was launched in Germany in 2017
- Downside of the approach was that this solution was only useable in German market
- Due to requirement of deploying Clover solution in EMEA Fiserv was looking for an approach to use one payment application for whole EMEA
- In 2017 Fiserv decided to support nexo and started to implement nexo IS 4.0 as early adopter and worked together with FIS (nexo test tool provider) from 2018 on in various sessions in Vienna and Brussels to get a certification tool setup
- After accreditation of the tool in May 2021 Clover Flex2 and Mini2 where worldwide the first two
 integrated terminal solutions to get certified by CFCF in September and October 2020

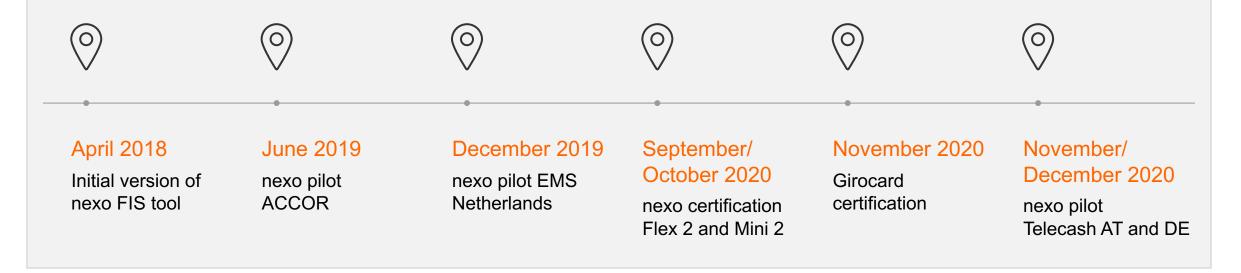


Clover nexo Timelines



Based on nexo also Girocard was certified on Clover Flex 2 and Mini 2 in Germany

And on top we have also the first two nexo devices that have passed the complete GIROCARD certification tests. This is a significant milestone and moves us forward in Germany with Clover as a market leader for both nexo and Girocard.

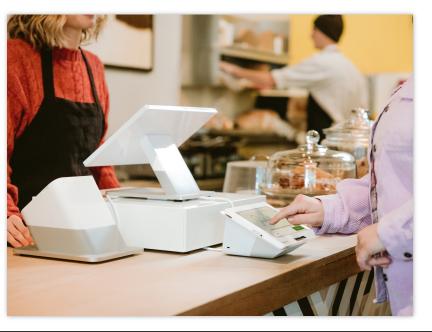


Clover Gen 3











Case Studies – New Market Entry



Case Study – UAE

Regional Acquirer

Five different terminal providers

Four moved to nexo standard

nexo now a recognised standard in the UAE market

Fiserv is also launching nexo terminals in market in 2023 with another acquirer





Where to next?



Where to next ...

- CFCF Certification (nexo IS 4.0) for Clover Gen 3 Suite
- nexo Acquirer Developer Experience on fiserv.dev
- nexo IS 5.0 Implementation and Certification
- Launching in new markets Europe and beyond

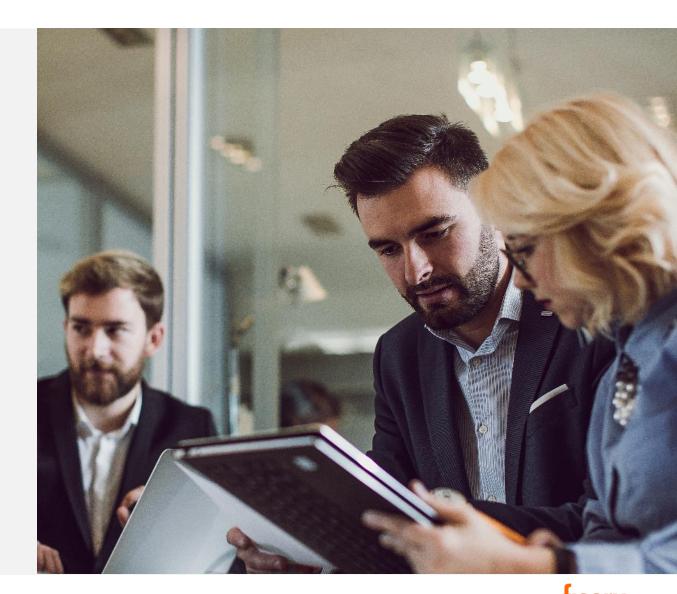


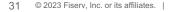
Key Takeaways



Benefits of nexo – Value Realised

- Time to market for new features
- Interoperability and ease to integrate
- Reduced complexity through consolidation
- Lower cost of ownership
- European and Global market expansion
- Growth footprint and revenue





Thank You!