Redefining card payment acceptance

Why true standardization is key to harmonization.

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1. Introduction.

Payments, like most international digital sectors, are based on, and compliant with industry standards.

Standards themselves are nothing new, in fact, a lot has been achieved in the last few decades that have kept our increasingly digital payments secure.

But, we've still yet to realize true interoperability. In today's market, this is a challenge.

Globalization has meant we're all operating, transacting, and trading on a broadening international stage. Yet despite the existence of global legacy payment standards such as ISO 8583, domestic interpretations of these have resulted in market-specific deployments which, though compliant, aren't compatible across borders.

As a result, when moving to or expanding into new geographies, players are faced with a whole new set of compliance challenges.

Rapid digitalization and emergence of new payment types, form factors and omni-channel customer journeys have delivered greater security, convenience and flexibility to consumers, but the complexities for the payment acceptance ecosystem continue to stack up.

Fragmentation to interoperability.

Why we need global standardization.

The resulting payment acceptance market is deeply fragmented. Stakeholders are at a loss as to how best to work together, and proprietary infrastructure upgrade costs are at a high.

The need for a truly interoperable, international and cross-industry payments <mark>acceptance ecosystem</mark> has never been higher.

True standardization holds the key to harmonization, ensuring all stakeholders are singing from the same song sheet, and no player falls out of time.

But with several stakeholders, including merchants, card schemes, acquirers, payment service providers (PSPs) and vendors, establishing open and global standards for payment acceptance takes considerable time and effort. Not to mention the need for uniform implementation and deployments.
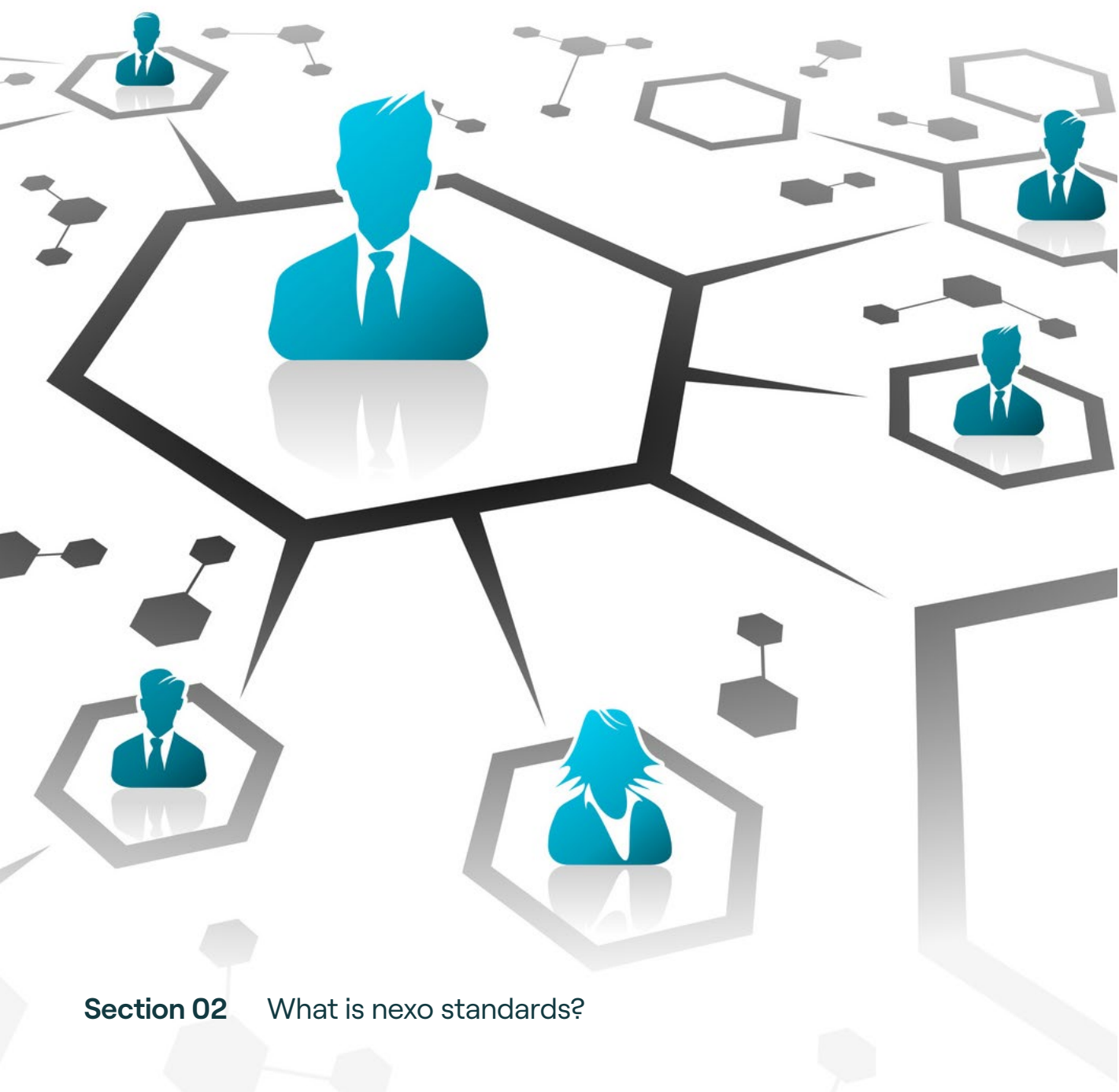
A lot of the hard work has already been done by industry association nexo standards, and momentum is gathering behind international deployments of its open card payment acceptance standards. But what are the standards?

And what needs to happen next to achieve true interoperability?

2. What is nexo standards?

nexo standards is a not-for-profit member association that was established in 2014 with the vision of creating a unified global card payments acceptance ecosystem that harnesses the efficiency and interoperability potential of the ISO 20022 standard.

Its mission? To support all card payment acceptance stakeholders by establishing a standardised and universally beneficial way to apply ISO 20022, manifested in a portfolio of implementation specifications and messaging protocols.
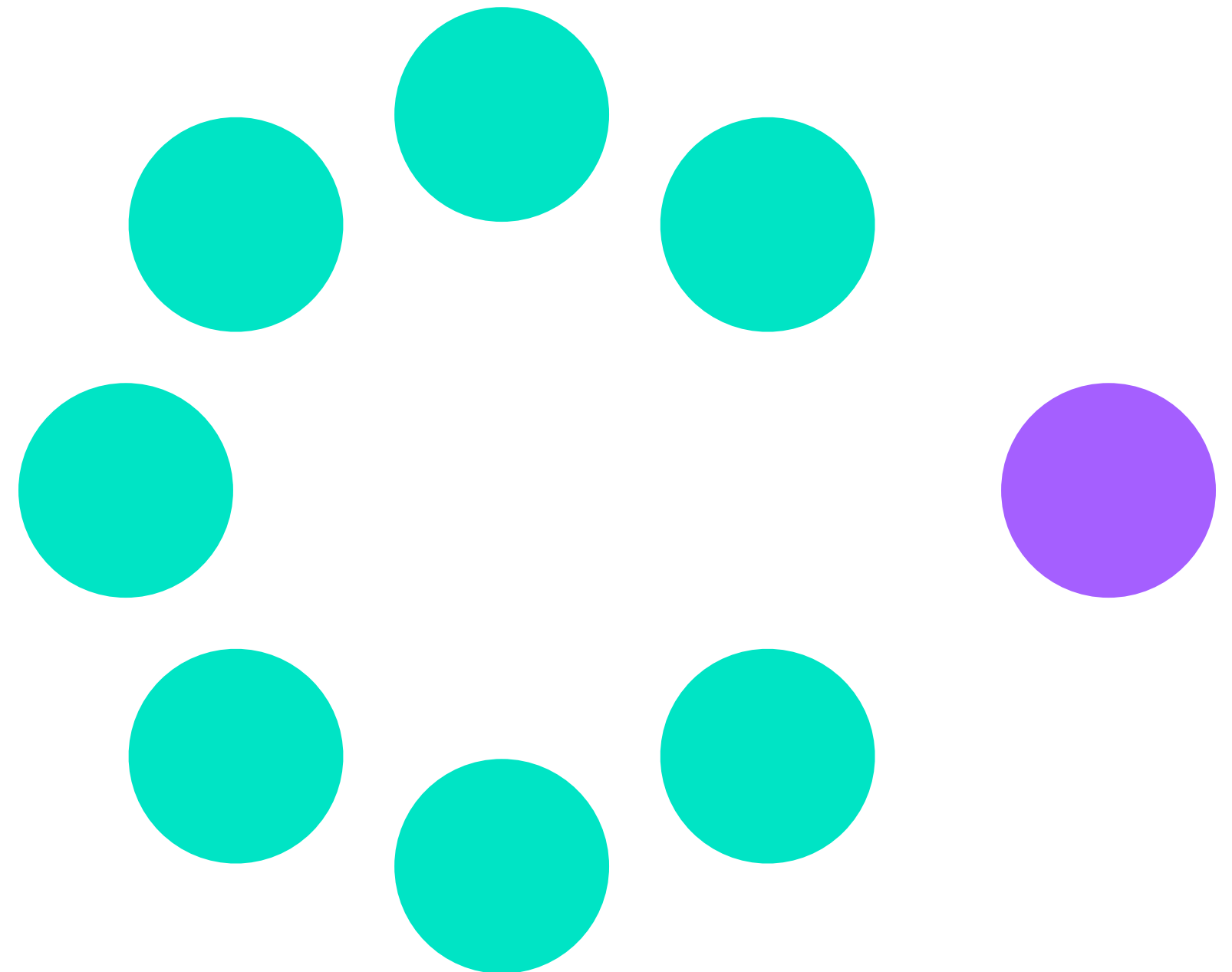
ISO 20022: the lingua franca of financial services

ISO 20022 is ISO's universal financial standard, defined as **"a new way to develop message standards within the financial industry – a standard to develop standards, so to speak"**.[1]

1   www.iso20022.org

Globally, the standard has made significant progress, realizing huge efficiencies across Europe's financial landscape. Now, its gathering momentum across North America as central to both Payments Canada's payments modernization strategy[2] and the U.S.'s Faster Payments program[3], together with initiatives across Australia, Finland, Russia and the UK.

2   https://modernization.payments.ca/
3   fasterpaymentstaskforce.org/

ISO 20022 can be thought of as the **'lingua franca'** of the whole financial ecosystem – a universal messaging language for all kinds of transactions with scope to form the basis of a number of future applications, including open banking APIs. nexo's specifications can be thought of as the card payments acceptance arm of this language.

Harnessing the efficiency and interoperability potential of ISO 20022 has enabled nexo to create a comprehensive portfolio of payment acceptance messaging specifications and protocols to standardize the exchange of data between stakeholders.

Crucially, these protocols are developed, maintained and advanced by an open forum comprised of acceptors, card schemes, PSP, processors and vendors. This is, in short, a pretty big deal, and a sign of a standardization effort intended to truly level the playing field and deliver rewards to all.

We can consider the use of ISO 20022 as a means to offer the "building blocks" for each stakeholder to build better services, unconstrained by technical dependency on their partners or domestic integration complexities.

But isn't this all just more to contend with? How can standards really benefit my offering?

3. Breaking down the benefits to the whole ecosystem.

Regardless of where a stakeholder sits in the payment value chain, each has 'customers' to serve.

Section 03   Breaking down the benefits to the whole ecosystem.

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True harmonization of the ecosystem enables each player to re-tune its focus from technical integration intricacies, to better serve its customers.

The benefits of global standards for payment acceptance can most easily be understood as promoting a 'customer centric' approach.

The benefits can be grouped and applied to each stakeholder from this idea. Let's consider some of these in more depth.

1. Pure interoperability & harmonization

2. Powered-up partnerships

3. Centralization, centralization, centralization

4. Go global

5. Speed up innovation & deployments

6. Levelling the playing field

1. Pure interoperability & harmonization.

Utilizing nexo standards can enable a 'plug and play' approach to payments acceptance, as all nexo-compliant systems speak the same language and interoperate seamlessly. This eradicates several complexities when expanding internationally, enabling the creation of truly universal offerings that can be tweaked and deployed cost-effectively and on a global scale.

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2. Powered-up partnerships.

Standards create trust. New partnerships can be formed confidently with other nexo-compliant stakeholders across the globe, safe in the knowledge integration will be dramatically simplified, future upgrades will be seamless and a high-level of security is pre-packed into each implementation.

Section 03 Breaking down the benefits to the whole ecosystem.

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Compliance with nexo standards can also offer a hallmark of quality and function as an attractive selling point - take, for example, ECR / POS vendors facilitating centralization for merchants to achieve a more customer-centric approach.
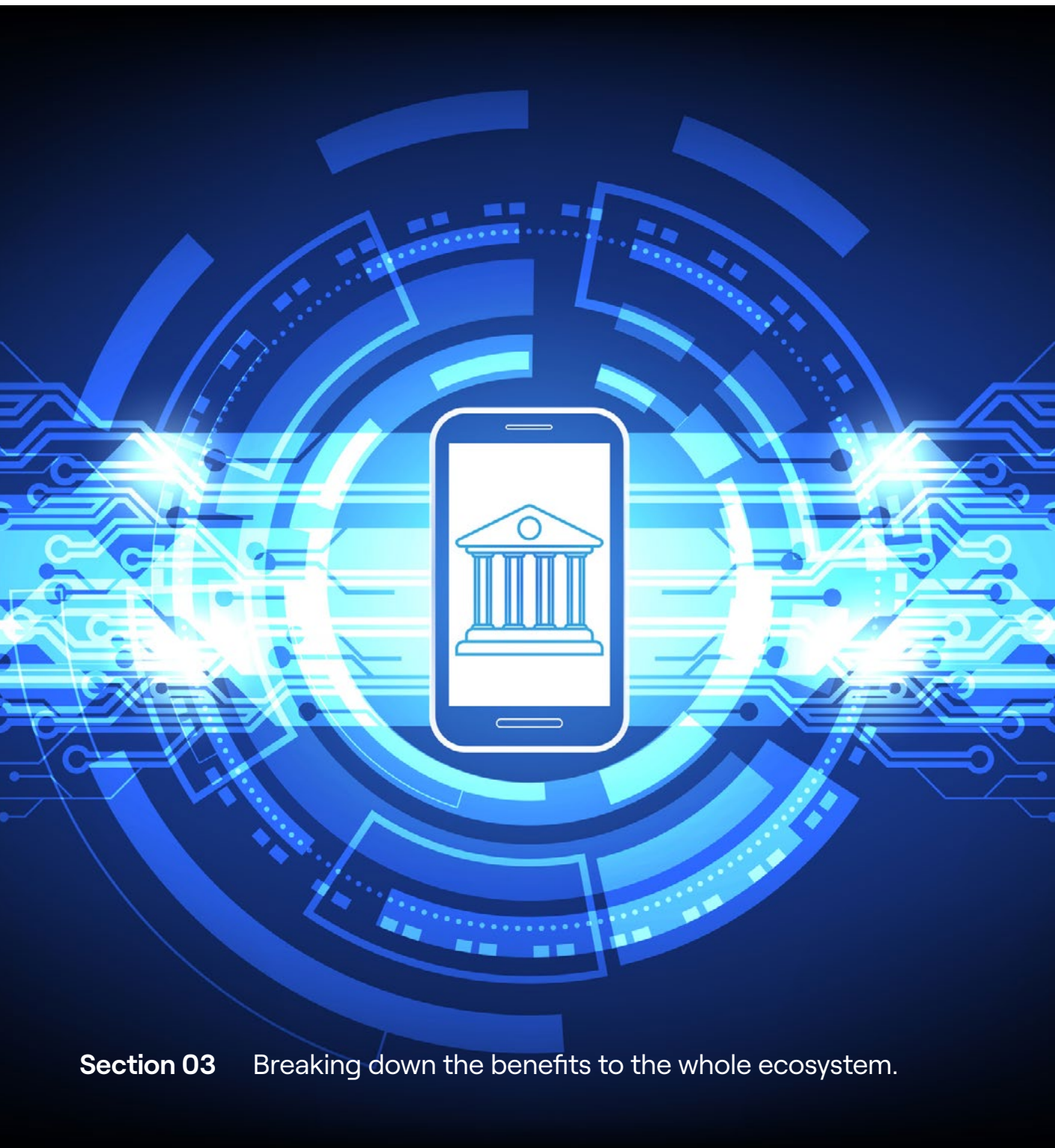
3. Centralization, centralization, centralization.

Whatever your organization, centralization can enable huge efficiencies. International retailers can consolidate payment requests from multiple locations globally, enabling acquiring banks to process transactions in more cost-efficient 'batches'. By migrating systems to standards such as nexo's multi-acquirer messaging protocols, retailers can then feel empowered to negotiate volume-based deals via a smaller number of acquirers.

4. Go global.

The incompatibility of proprietary systems, together with the varying domestic interpretations of past ISO standards (ISO 8583, for example), have resulted in acceptance infrastructures differing both within and between countries. So, despite being ISO compliant, many domestic ecosystems have generated barriers that have resulted in high integration costs and slow time to market.

nexo standards' messaging protocols and specifications aim to directly tackle this, enabling merchants, PSPs, acquirers and vendors to create a single and fully interoperable cross-border payment acceptance infrastructure.

5. Speed up innovation & deployments.

With internal resource freed from many of the historic challenges of payment integration, players can refocus on developing better services. As nexo's General Secretary, Arnaud Crouzet described: **"Currently, around 80% of time is spent on achieving various compliances on a country-by-country basis, and only 20% on innovation to develop new services. With nexo standards, there's real potential to flip these figures."**

**Section 03**   Breaking down the benefits to the whole ecosystem.

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With consumer demand rising for new, more creative and integrated services, time is the commodity needed to develop and deliver the latest and greatest tech. Plus, on a standardized platform, roll-out of new products and services is generally much quicker, more efficient and borderless.

6. Levelling the playing field.

Standards help to eradicate the age-old issue of 'vendor lock-in' – a significant and costly challenge that's especially harming retailers. But standards offer benefits for vendors too, empowering them to compete on equal terms, globally in a nexo-compliant industry. This in turn encourages more competitive pricing models and enhanced offerings.
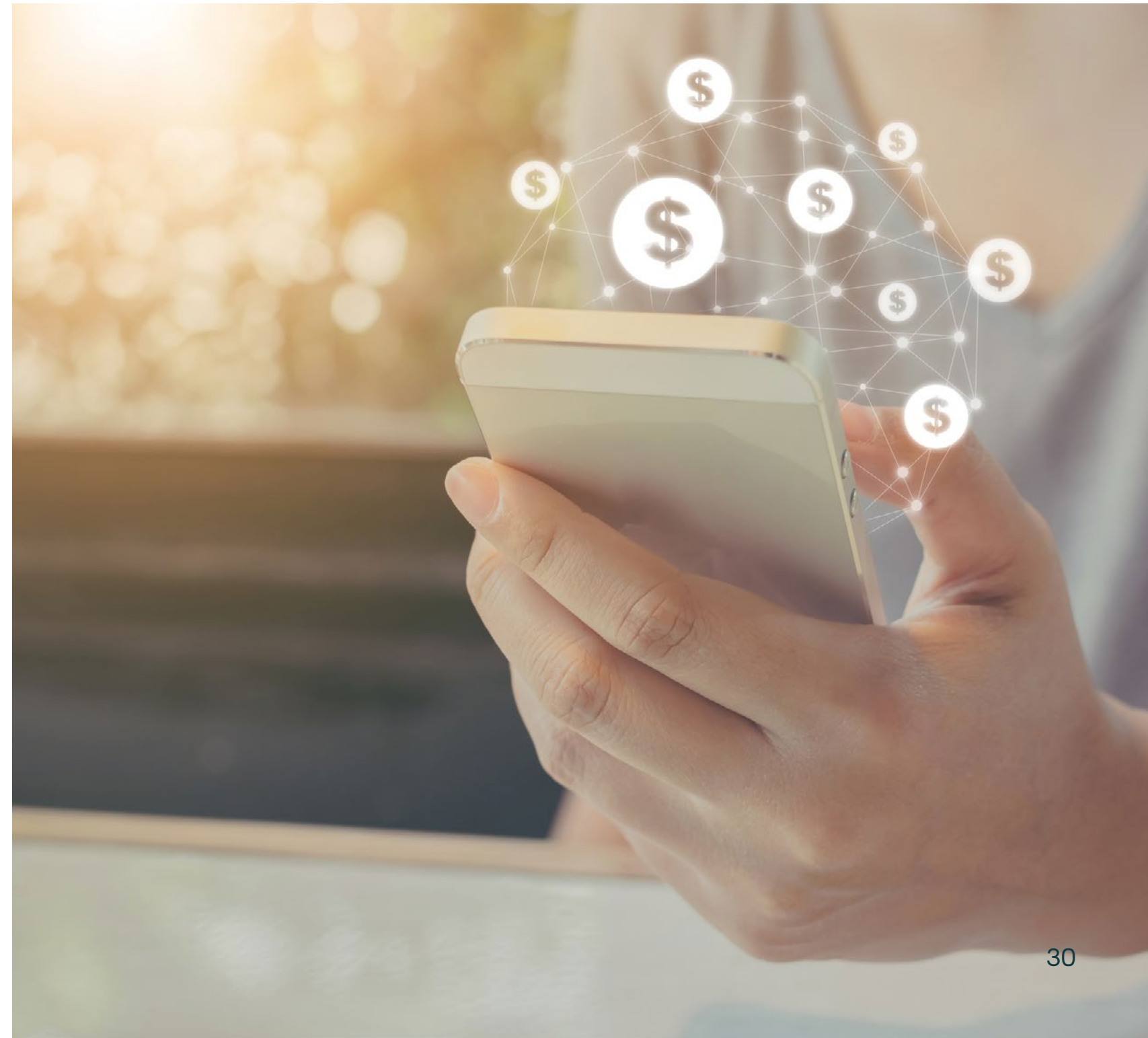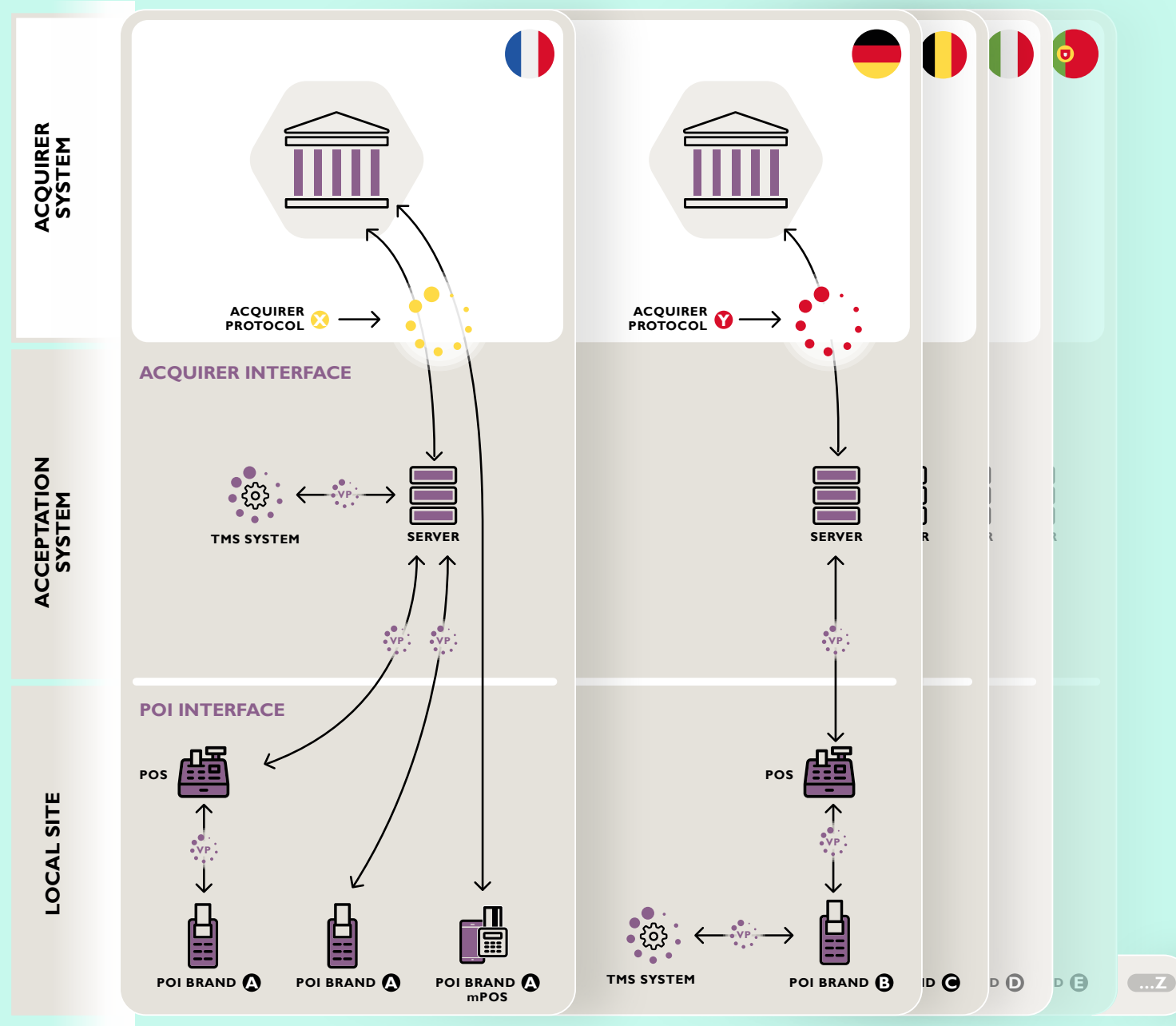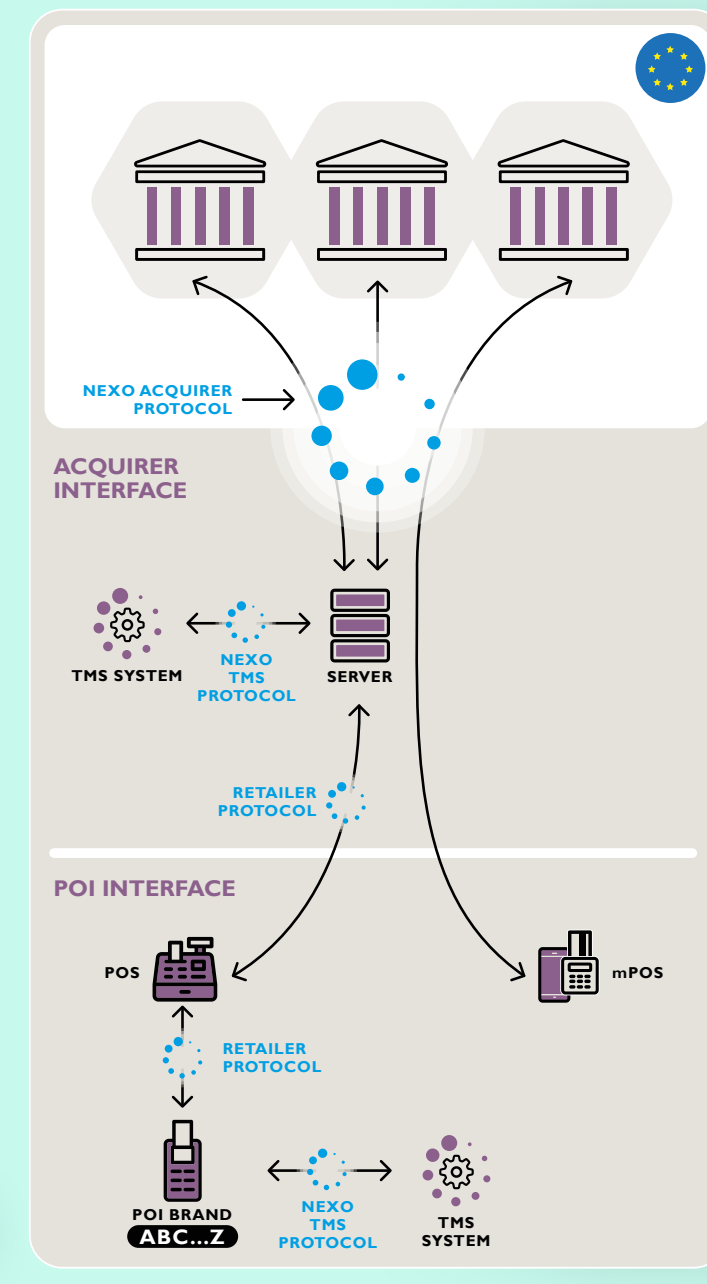
4. What does a nexo-compliant infrastructure look like?

Out with the old – in with the new.

LEGACY RETAIL
A FRAGMENTED ECOSYSTEM

NEXO RETAIL
A CENTRALIZED ECOSYSTEM

ACQUIRER SYSTEM

ACQUIRER INTERFACE

ACQUIRER PROTOCOL

NEXO ACQUIRER PROTOCOL

ACCEPTATION SYSTEM

TMS SYSTEM

SERVER

NEXO TMS PROTOCOL

RETAILER PROTOCOL

POI INTERFACE

LOCAL SITE

POS

mPOS

POI BRAND A

POI BRAND A

POI BRAND A mPOS

POI BRAND B

TMS SYSTEM

POI BRAND ABC...Z

RETAILER PROTOCOL

NEXO TMS PROTOCOL

TMS SYSTEM

...Z

5. Ensuring a smooth integration project.

What value can a payment testing partner add?

The benefits of nexo are clear but, as with any deployment, there are obstacles to be overcome to ensure a timely, cost-effective project. But far from having to make it on your own, partnering with an industry expert can help navigate the technical nuances of the industry.

1. Mapping your path to nexo interoperability

2. Ensure compliance with the payment world

3. Understanding unique market requirements

4. Quality assurance

5. Speed up time to innovation

1. Mapping your path to nexo interoperability.

The new-age of nexo efficiency and interoperability is an exciting one, but we're not quite there yet. Migration from legacy systems and establishing new, or redefining existing, partnerships present a whole host of challenges.

Plotting out all your project requirements with a compliance and testing expert right at the start is a great way to ensure the smoothest path to deployment.

Save time and benefit from long-term cost-savings as no internal resource is needed to be pumped into research, training or developing knowledge in-house.

2. Ensure compliance with the payment world.

While the efforts of nexo simplify payments acceptance integration, it is one part of the much larger payments world. The demands of international standards, and domestic and global schemes, still need to be met.

Whether you are a merchant, vendor or bank, testing and certification specialists can help to both plot your path to project success, while keeping wider industry requirements front of mind.

Save time and navigate unexpected delays by letting a compliance expert take the lead.
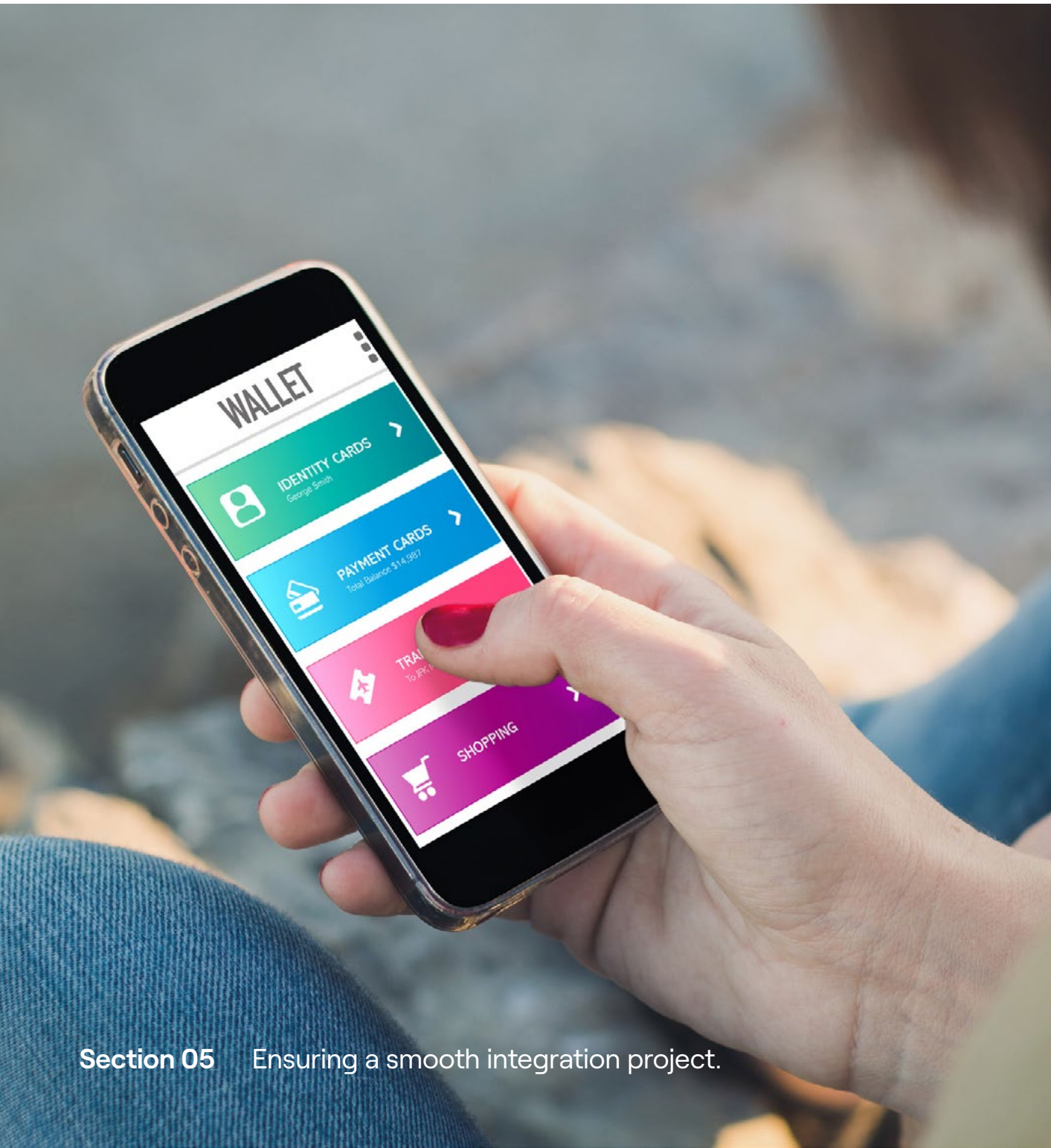
3. Understanding unique market requirements.

Borderless payment acceptance is the vision of nexo. But while the doors may open more easily to expand internationally, understanding **unique local ecosystems remain imperative to ensure resources and efforts are aligned**. A good example is acceptance of PIN-online – while in some markets this service isn't available for certain schemes, it forms an essential part for integration into others.

Equally with accepting new form factors – mobile payment acceptance may be not worth investment if the market has low adoption rate, or terminal infrastructure is lagging. Consultancy right at the start can ensure the most appropriate and effective go-to-market plan is defined.
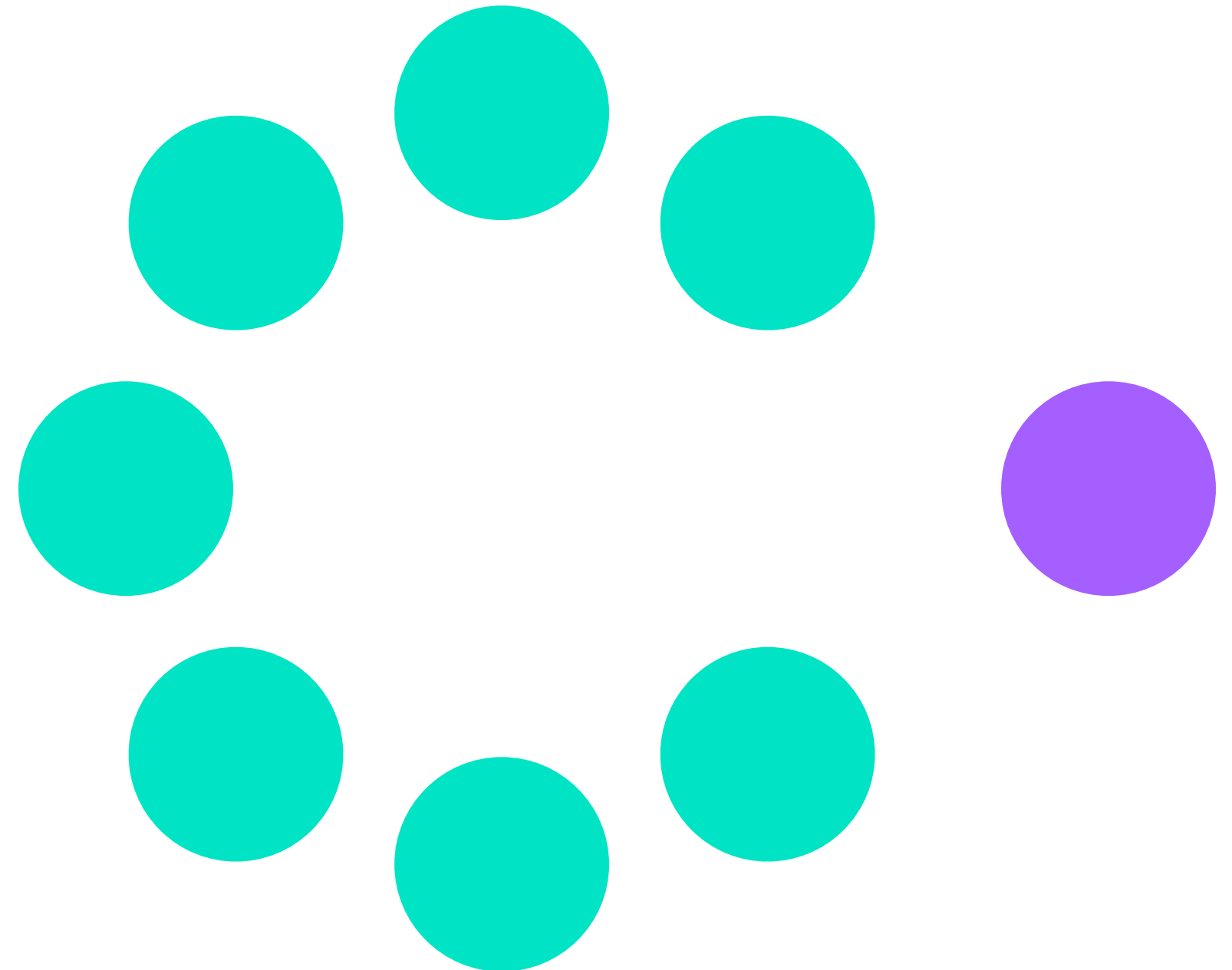
4. Quality assurance.

Selecting quality hardware and software products that comply with standards from the beginning of new projects is vital. Expertise to not only support the selection, but the testing, integration and interoperability of both hardware and software will ensure long-lasting operational efficiency and navigate unwanted frustrations ahead of going live.

Quality assurance also confirms solutions are reusable. Often, it is easy to define a product that is specific to one market without even knowing.

To reap the full benefits of nexo-compliance, a neutral partner can determine that all efforts are uniform, universal and easily transferable across borders.

This saves money and heartache further down the road and provides a central contact between project stakeholders for any issues.

5. Speed up time to innovation.

The beauty of nexo standards is that it simplifies the addition of new services and, via time saving efficiencies in integration, frees up more resource for innovation.

However, keeping pace with the latest technologies demanded by today's connected consumers can be a challenge. Combining the physical and the digital worlds, with multiple form factors, can be a time-consuming process. **An effective and efficient testing process and best-in-class automated test tools speed up deployment and safeguard modernization efforts**.
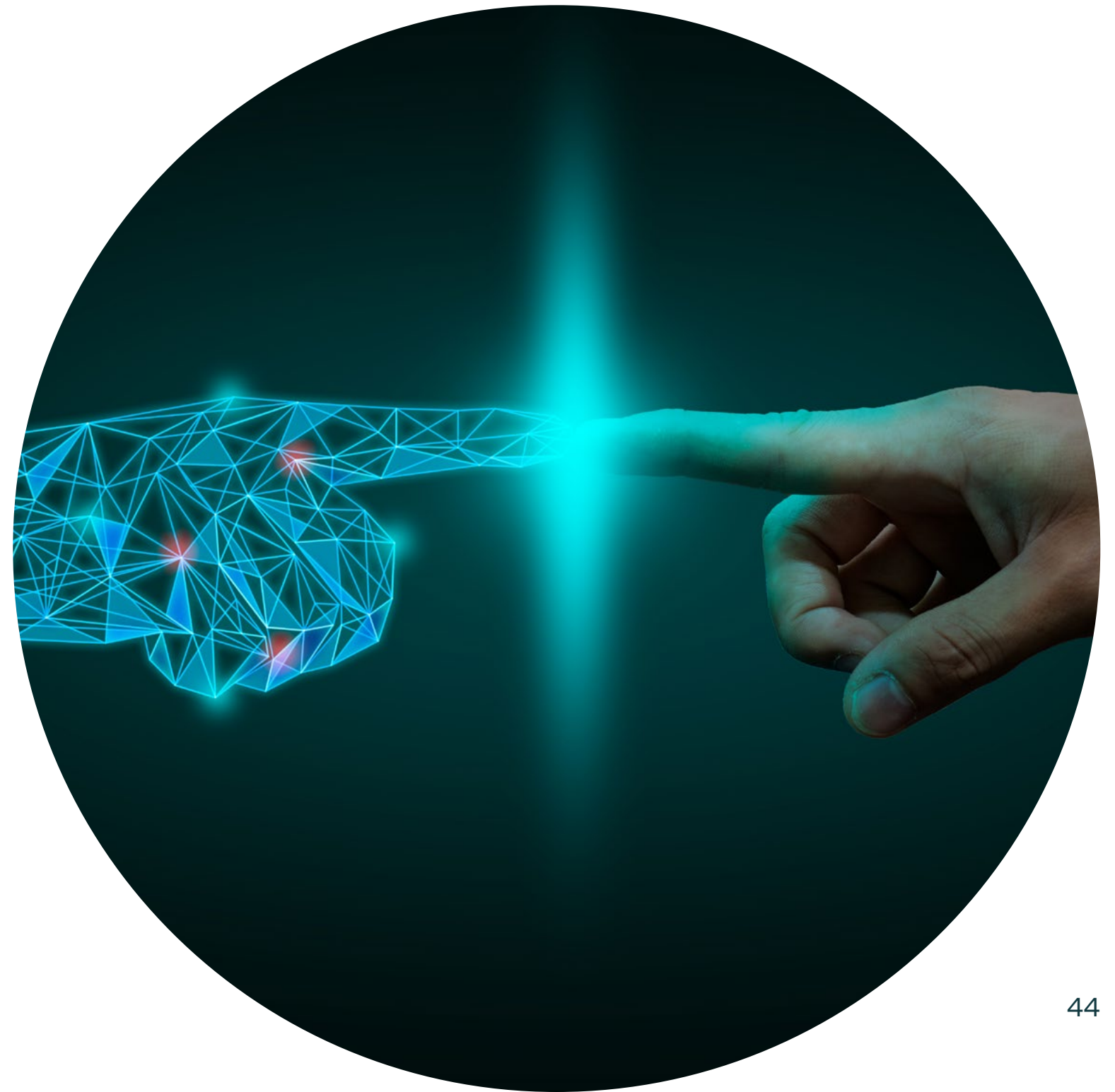
# 6. The next steps for standardized implementations.

nexo standards addresses some of the major challenges that have faced retailers for years and, crucially, is committed to delivering benefits to the whole ecosystem. Whether a bank, scheme, PSP or vendor, its specifications and protocols have the potential to streamline operations and ensure each can continue to best address the rapidly evolving needs of its customers.

Fundamentally, though, they ensure true interoperability of technology between stakeholders and across borders both now and in the future.
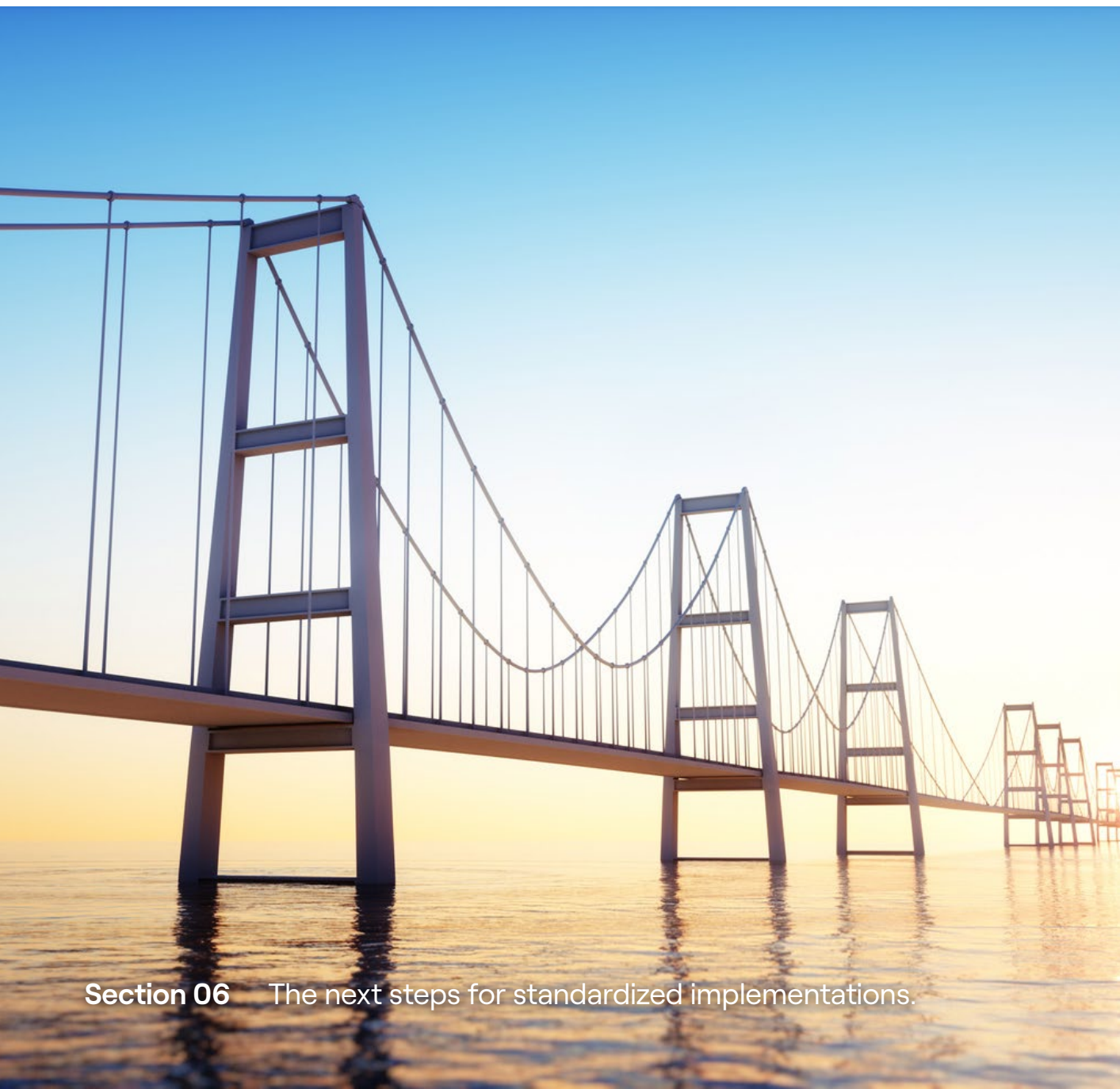
Crossing the tipping point.

nexo standards is gathering real momentum. With deployments and stakeholder engagement rising, the time to get ahead is now - maximizing investment, realizing instant cost-efficiencies and ensuring systems are future-proof.

As long-term stakeholders in the payments industry, we've supported countless technological migrations. Each new technology presents its own, unique set of challenges but with the right partner your project can get off to the best start and launch successfully, on time and within budget. And, importantly, all of this can be achieved while ensuring the ongoing efficiency of your infrastructure during the project.
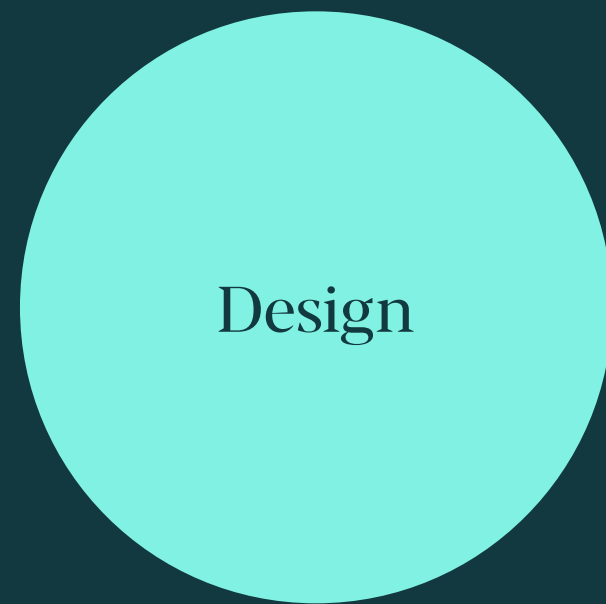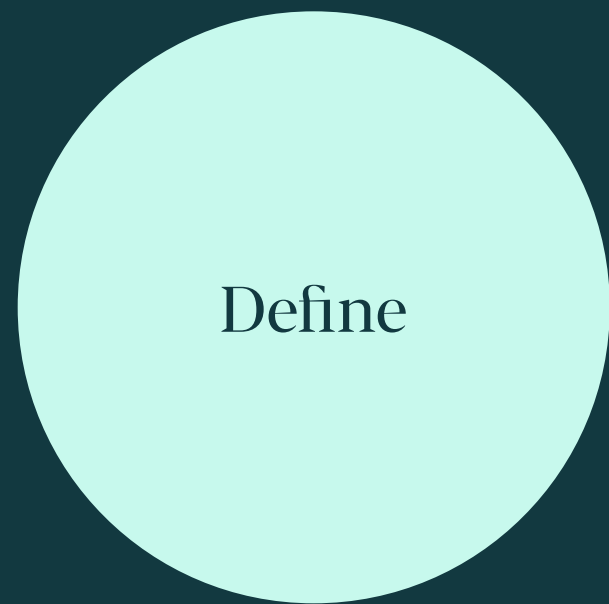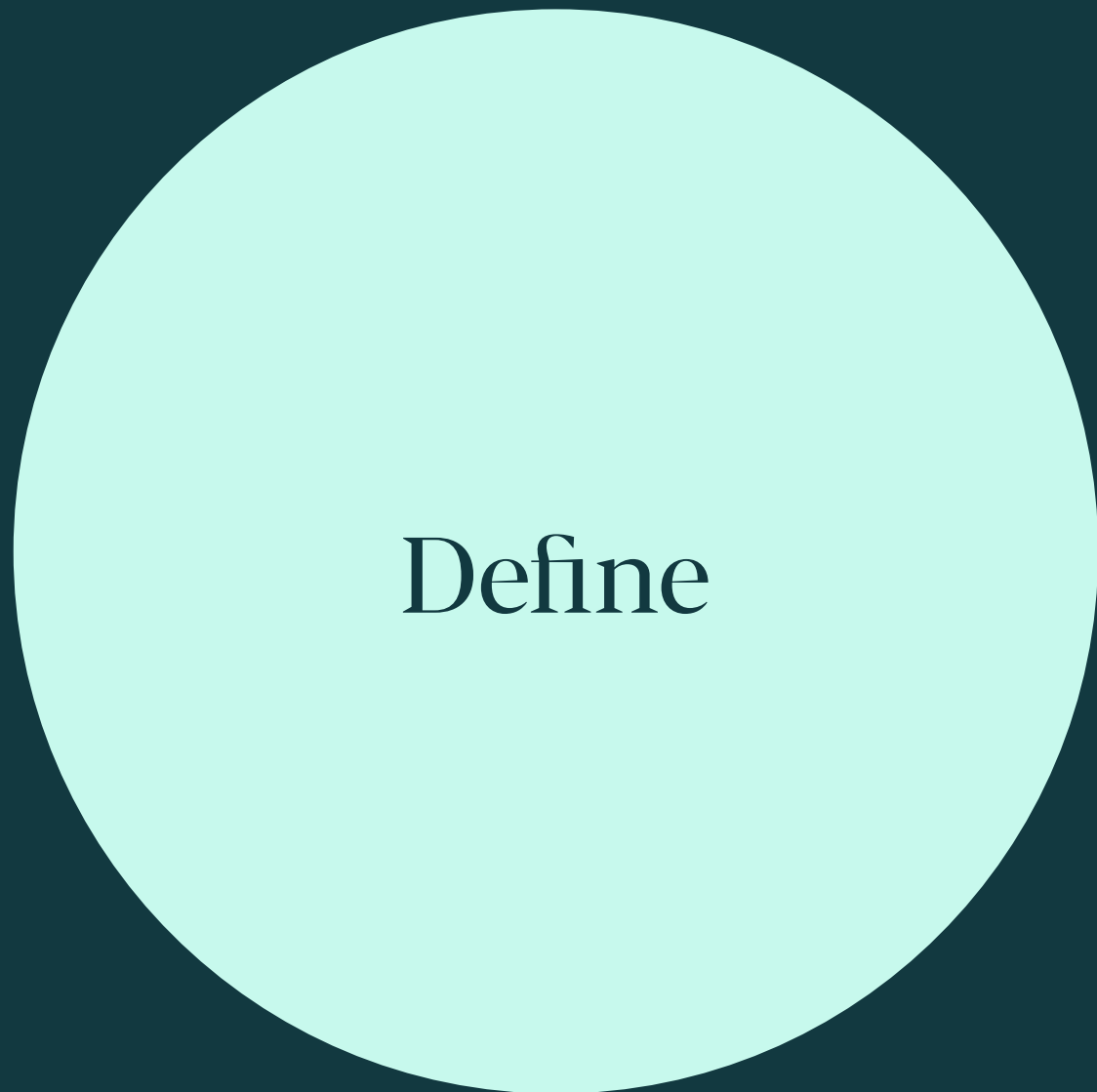
Let an expert take the strain of compliance - tap into the benefits of nexo while focusing your additional resource on what you do best, serving your customers.

Checklist to ensure a smooth integration project

Define

Design

Deliver

Test

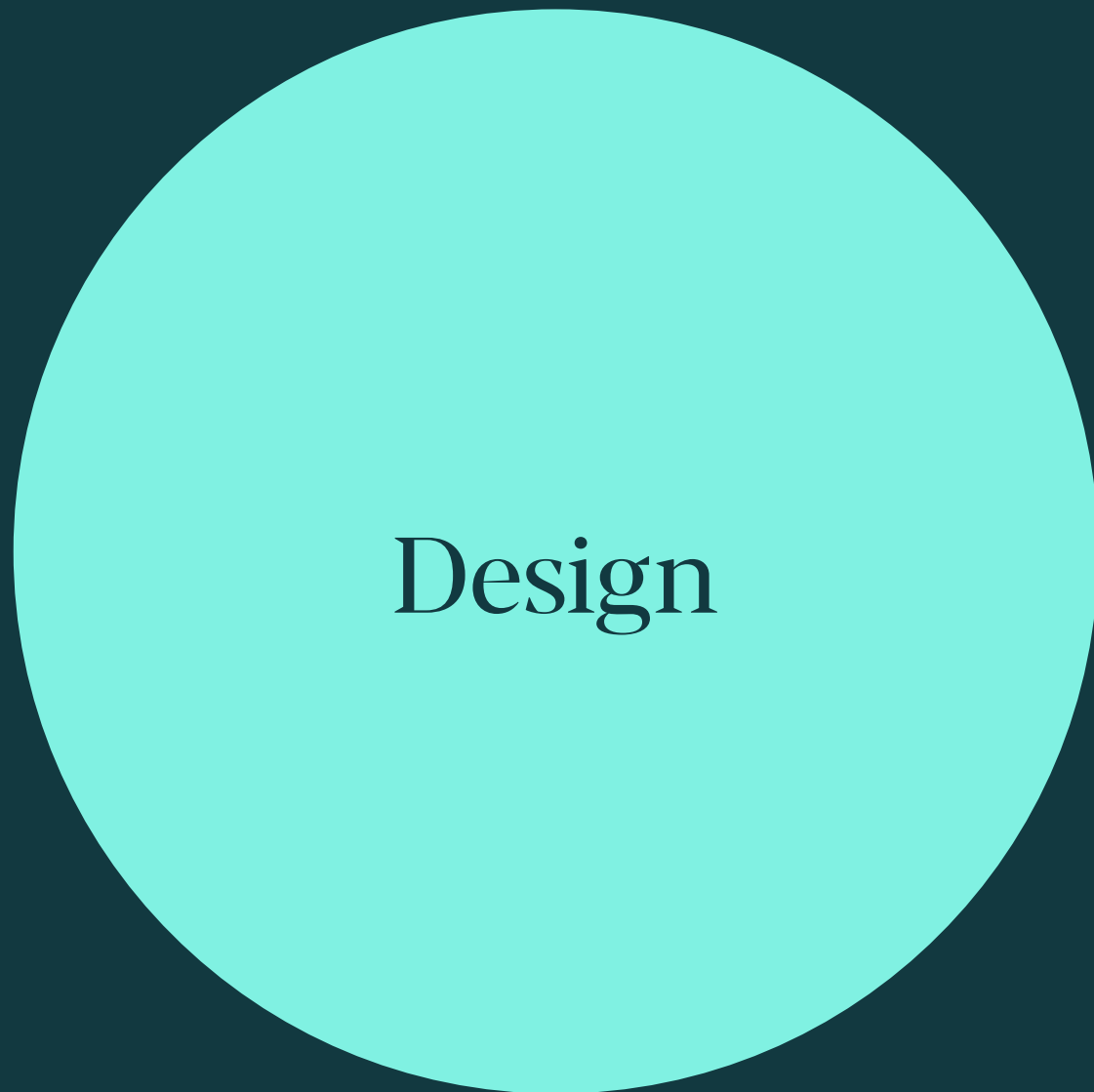**Define** · **Design** · **Deliver** · **Test**

Define

Understand the market and need with expert training and consultancy.

Evaluate nexo protocols in-line with your requirements.

Plot your path to migration incorporating a thorough impact analysis.

Design

Define **Design** **Deliver** **Test**

Find and select the best partners and products for your solution.

Complete a full functional and security design review.

Utilize technical consulting to support project audits, ISO 20022 understanding, certification and debug requirements.

Deliver

Define · **Design** · **Deliver** · **Test**

Manage migration projects across card, POS and ECR systems, e-commerce payments and mobile payments.

Conduct pilot trials to ensure stability and scalability ahead of commercial roll-out.

Define a nexo compliant test plan and test tools to ensure long-term efficiency and a uniform deployment.

Define   **Design**   **Deliver**   **Test**

Test

Plot your path to compliance with nexo standards and adjacent scheme and industry body requirements.

Evaluate the readiness of your point of interaction and acquiring solution with thorough testing and certification support.

Monitor performance, and complete thorough audits and evaluations, both before and after service launch.

7. About Fime and nexo standards.

Fime is a leader in payments testing, with more than 20 years of experience in reducing risk, accelerating time to market and ensuring the quality of its customers' payment and transport products and services.

Fime's global network of laboratories combines with expert teams to give customers the tailored consultancy, solution engineering, automated test tools and testing services they need throughout every stage of product and service lifecycles.

Visit the Fime website for our full scope of nexo standards' testing services.

www.fime.com

nexo standards enables fast, interoperable and borderless payments acceptance by standardizing the exchange of payment acceptance data between merchants, acquirers, payment service providers and other payment stakeholders.

nexo's messaging protocols and specifications adhere to ISO20022 standards, are universally applicable and are freely available globally.

nexo standards is an open, global association dedicated to removing the barriers present in today's fragmented global card payment acceptance ecosystem.

Headquartered in Brussels, its members represent the full spectrum of card payments stakeholders, including acceptors, processors, card schemes, payment service providers and vendors.

For more information, please consult www.nexo-standards.org

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