Trusted for today and tomorrow

Choosing your own Retail Adventure

Propel your change with pragmatic approaches to Modern Commerce Technology in store

A PMC Insight Paper

Retail Sector Best Practice

Introduction

It’s not uncommon for industry definitions of omni-channel, unified commerce, headless and API-led architectures to differ widely between technology vendors, sales channels and experts alike. So making clear choices on where to start - and which approach you might take to delivering change - can quickly become daunting.

Modern commerce, comprising cloud native, serverless, microservice and API led architectures, promotes openness so that newer best of breed functions can be adopted quickly across channels and operations. However, delivery models must be flexible in order to enable this. Too often, technology change can get caught up in competing organisational agendas and prioritisation dilemmas.

In this paper we explore how retailers are undertaking pragmatic and ‘benefits led’ approaches to this modern commerce transformation in their retail stores and we outline four approaches retailers are currently taking to delivering their change. We show how business-led Proof-of-Concepts can better align the needs of an organisation with a technology function’s ability to deliver rapid change. At the same time as evolving to more flexible and future proofed operating models.

Where pragmatic technology operating model choices are made in meaningful collaboration with vendors and technology service providers, choices become boundless for those who are seeking to truly put technology at the heart of great customer experience.

A Compelling Backdrop for Change

The shift to modern commerce architectures creates a compelling backdrop for change. These technologies can help organisations break away from large, complex, hard to change systems, supporting a new modern blend of off the shelf solutions and in-house self-designed and configured software components and services. These can then rapidly support the creation of unique customer experiences across both online and offline channels.

Implemented well and supported alongside existing - what some might call ‘legacy’ - technologies, they allow businesses to move quickly without having to change too much at once. More releases of technology, more often, with lower risk each time, creates pace for businesses.

Those who do it well are those that are doing well.

Supporting Definitions

Microservices

Breaking down applications into smaller sets of services, deployed independently and loosely coupled.

These architectures facilitate parallel development, delivery and integration for deploying change more rapidly.

API led

Placing APIs at the centre of application communication that can be delivered quickly and maintained independently.

Allows the opening up and unification of business capabilities

Cloud native

Utilising the cloud to build and deploy applications that scale with supporting infrastructure dynamically.

Supports high frequency change and operational resilience.

Approaches to the Modern Store

Despite the challenges of monolithic systems, most retailers have managed to deliver on their multi-channel customer promise through clever approaches to integrating systems that have not been designed to work together.

As retail increasingly centres around a single view of the customer, dynamically unifying channels and experiences is fundamental to driving the success of the modern store.

A design-led approach to adopting modern commerce does not have to rely on a single change program, nor a replacement of everything that already works.

We outline four approaches retailers are currently taking to delivering their change. These can be implemented independently or concurrently, but supporting them with the right technology operating model is important to success.

1. Build in the Cloud
2. Implement & integrate leading retail platforms
3. Mobilise where you can
4. Make payment work

1 Build in the Cloud

What are Retailers building in the Cloud?

Common focus areas when adopting Cloud and building microservices in foundation architectures alongside existing systems are:

- Capturing customers at the point of sale for loyalty, gift card and reward programs and leveraging Cloud services for customer data capture
- Delivering transaction communications to customers digitally without reconfiguring (electronic receipts)
- Delivering bespoke user journeys and experiences either alongside, or instead of, current systems
- Building centralised identity, access management and permissions hierarchies for distributed store systems, including integrating single sign-on across PoS, stock management and mobile in store devices

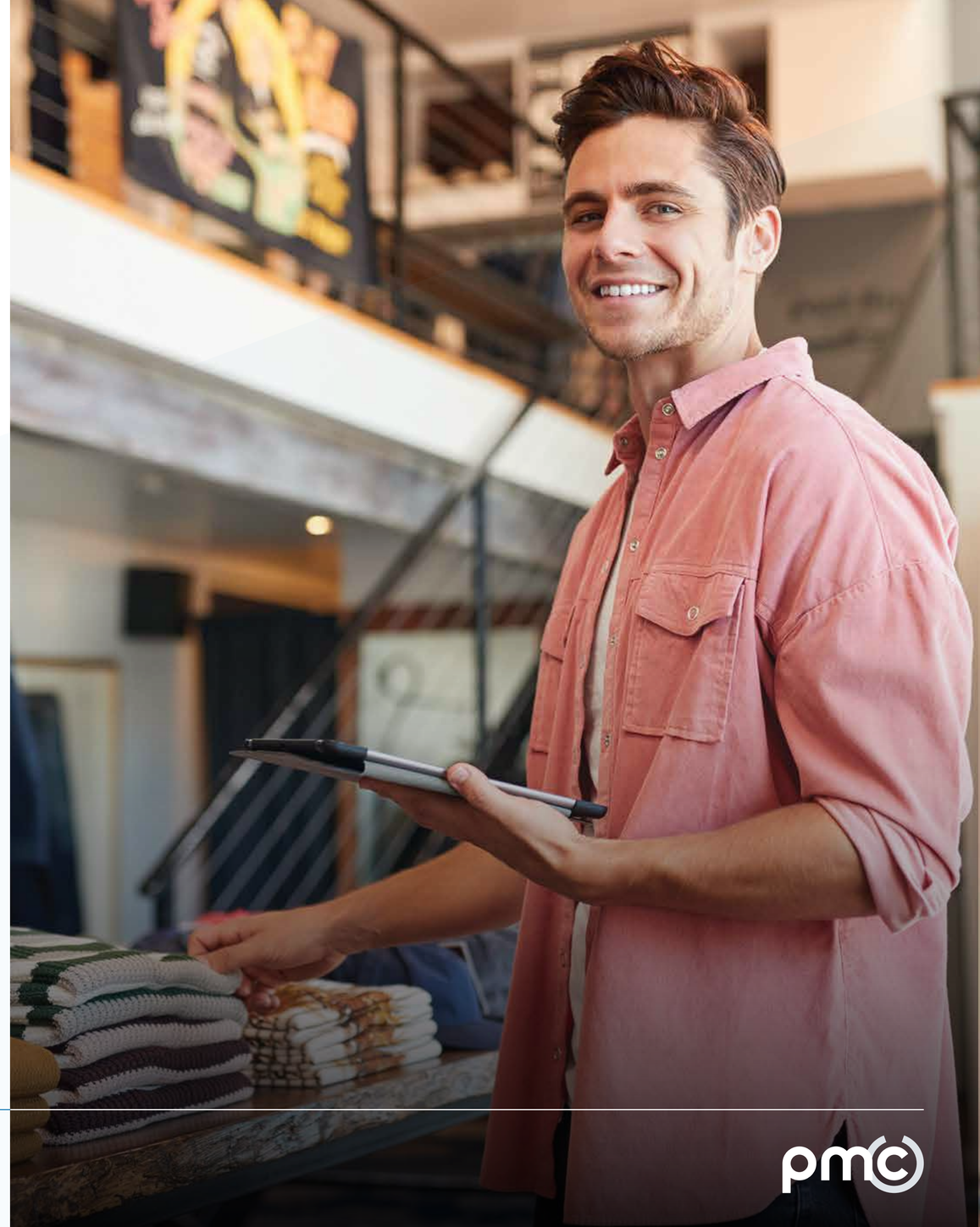
Benefitting from a Low Cost of Entry

Cloud native architectures have fundamentally changed the pace of software and functionality delivery. Getting started on a modern commerce journey no longer requires a full ‘rip and replace’ of existing systems.

Increasingly, retailers are adopting modern commerce and cloud native toolsets to get started. The relative cost of entry is low for technology teams that already have architecture and development skills in-house, or through their delivery partners.

In addition to lower run cost considerations, scalability, flexibility, security and resilience are further benefits that Cloud can offer, supporting retailers’ long term business cases.

Foundation architectures exist in design patterns from AWS, Microsoft Azure and Google to support building out services, together with NoSQL databases from companies such as Couchbase.



2 Implement & integrate leading retail platforms

What's on Offer?

There has been a rapid shift to cloud native in the packaged software vendor market. Incumbent on-premise and SaaS vendors have re-purposed their extensive sets of feature-rich capabilities and their delivery approach (commonly DevOps).

This offers natural advantages of consistency in product engineering, access to R&D investment, proven delivery models and full delivery and support models from vendor and implementation partner channels alike.

Commercial models have also radically changed with this shift, as implementation patterns standardise and the time to deliver pilots and rollouts of packed software reduces.

Leading retail technology vendors, such as Enactor and Flooid, can also offer a wider suite of pre-integrated products, where tightly coupled functionality can make a lot of sense (for example, POS and promotions, or POS and Order Management).

Leveraging the new leading retail platforms

Many newer and emerging vendors can also quickly become recognised as creating leading retail platforms and components in a rapidly changing market.

This is increasingly being recognised within in-store 'experience transformation' - such as promotions, self-scan apps, mobile commerce and clienteling - and back office solutions, like order management, pricing and inventory management.

Taking advantage of the choice in feature set, commercials, delivery and TCO models requires retailers to:

- Consider systems selection criteria design, selection assessment and the commercial diligence of vendors
- Understand delivery and support choices between own teams, vendor teams and/or systems integrators and managed service providers
- Factor in the interoperability and orchestration with surrounding systems, hardware and payment

3 Mobilise where you can

Are you delivering agility in store?

The benefits of mobile are well understood in retail. The ability to bring the transaction capture to the customer in many formats (tablet, kiosk, self scan), allows retailers to drive more agility into their store.

This agility supports assisted selling, concierge services, appointments, queue busting and improving the interaction with customers. It also drives productivity and, if implemented well, can lower costs substantially.

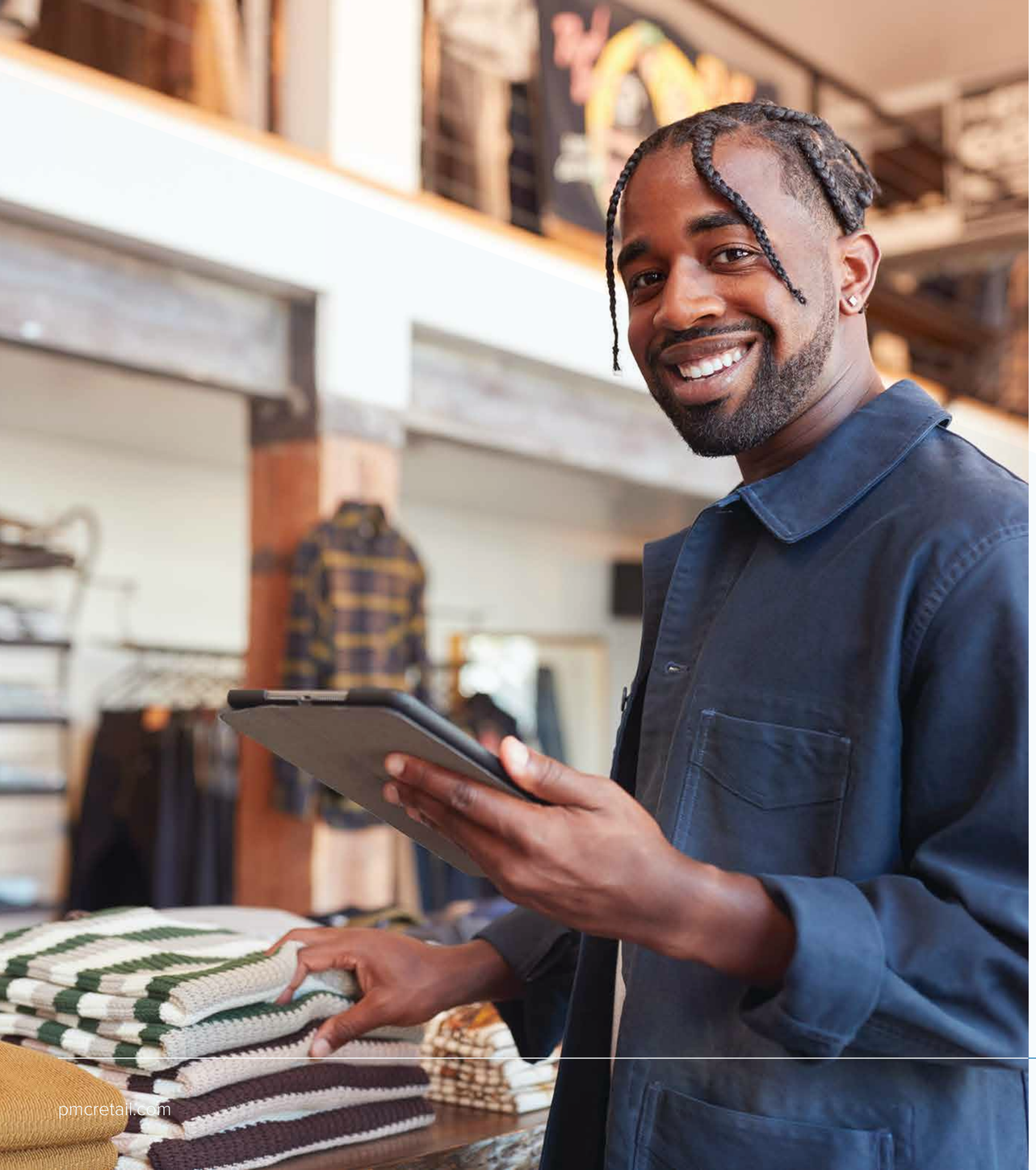
Modern commerce architectures can further enhance mobility strategies in stores, as they lower the hardware burden and physical back end requirement in distributed estates. This is where the financial benefits can really accelerate, as the total cost of operation can be designed to be far lighter on hardware inventory, logistics and maintenance.

Increasingly retailers are adopting Agile mobile development at the heart of their modern commerce strategies. The relative cost of entry is low for technology teams that already have mobile development skills in house, or through the delivery partners.

Retail Mobility Solutions

Common focus areas for retailers adopting mobility footprints, tied to modern commerce platforms and/or alongside existing systems include:

- Capturing customers at the point of sale at any point in the store through Mobile Selling, Payment, Clientelling and Concierge services.
- Replicating basket functionality on mobile devices (tablets) and integrating back to incumbent PoS and ERP systems.
- Extending basket functionality on customer mobile devices (self scanning) and integrating back to incumbent PoS and ERP systems.
- Mobile devices for other store functions, such as inventory management.
- Recording and managing the transaction data securely for regulatory, taxation and compliance purposes (EU fiscal compliance).



4 Make Payment work

Does Payment enhance your customer Experience?

Payment is the critical digital touchpoint to ensure a customer experience feels secure, convenient and personalised.

Building customer journeys that support contactless, mobility in store and compliance with international taxation regulations requires approaches that go beyond traditional service provider deployments.

modern commerce architectures offer a way to move quickly and develop alongside existing solutions. When tied together with end point technologies that are flexible and agile, payment can quickly become an enabler rather than a hindrance to strong customer experiences.

Cloud and Microservices Payment Solutions

Common focus areas for retailers adopting Cloud and building microservices to deliver payment solutions in foundation architectures alongside existing systems include:

- Development of customer booking, order and payment journeys with mobile apps tied to existing systems.
- Integrating mobile in store with existing payment terminals and systems using flexible API led architectures
- Rapid access to the latest payment technologies, APMs, digital wallets and partners to continuously evolve and grow payment capability

Bring it all together

What’s the best Operating Model for delivery?

Retailers will adopt modern commerce approaches to store in many different forms. These will be unique to their goals and plans for delivering engaging, trusted, convenient and personalised experience for shoppers.

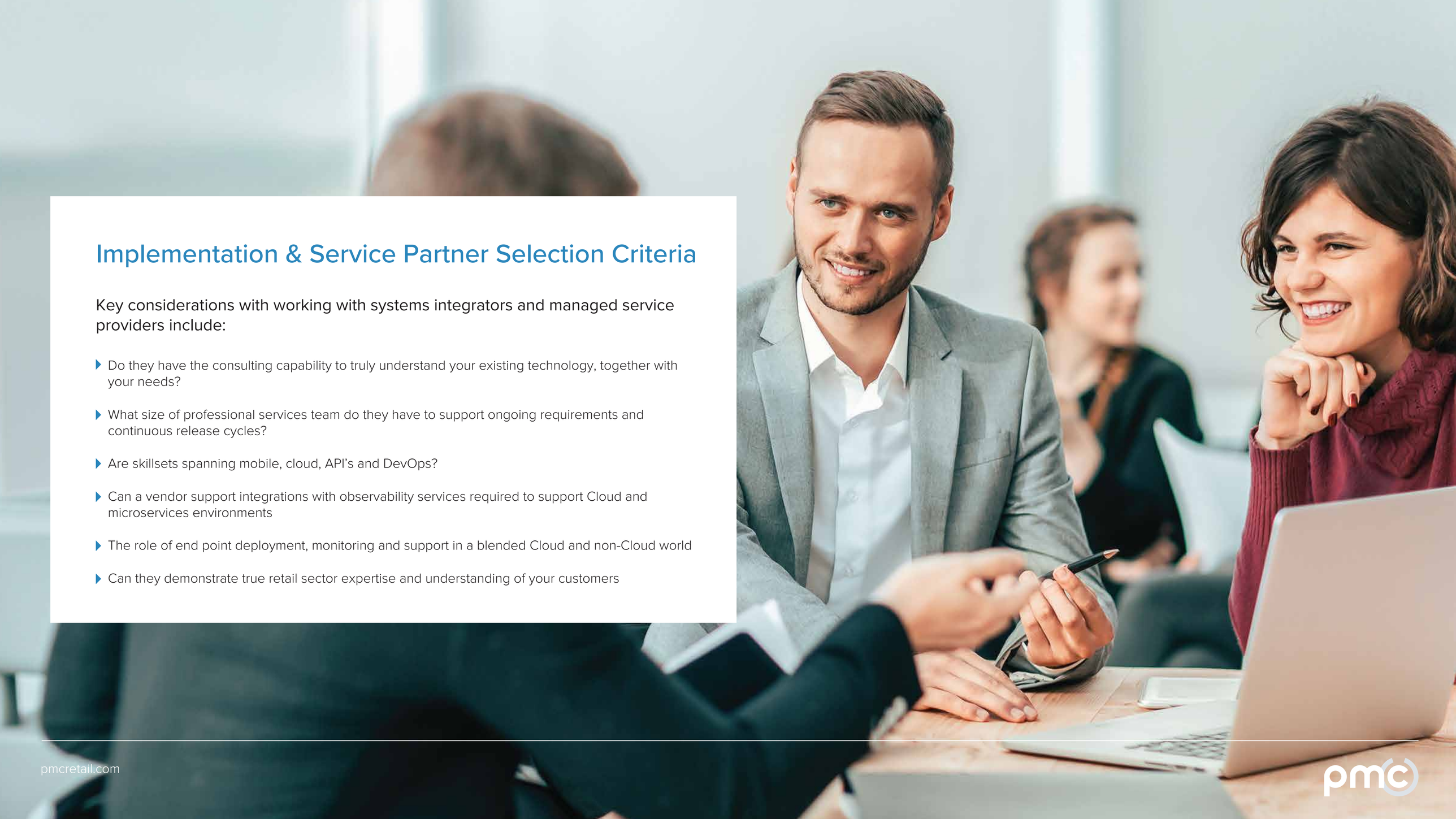
Designing operating models to make this shift also involves choices in relation to

- Design and architecture skills
- Development skills in-house, via partners, or blended
- Shifting to DevOps models to support a higher rate of change and robust release cycles
- Considering end to end architectures with RACI models for clarity of execution and support ownership, as multiple technologies are brought together
- Bring pragmatic solutions to making mobile work for you, including device management and in store design considerations (e.g. de-tagging, bagging)

Implementation & Service Partner Selection Criteria

Key considerations with working with systems integrators and managed service providers include:

- Do they have the consulting capability to truly understand your existing technology, together with your needs?
- What size of professional services team do they have to support ongoing requirements and continuous release cycles?
- Are skillsets spanning mobile, cloud, API’s and DevOps?
- Can a vendor support integrations with observability services required to support Cloud and microservices environments
- The role of end point deployment, monitoring and support in a blended Cloud and non-Cloud world
- Can they demonstrate true retail sector expertise and understanding of your customers



Bringing it to life!

The key to getting started is typically to move quickly into a ‘trial and learn’ approach to proving the business benefits of concepts.

Getting access to your own Cloud and microservices, or buying best of breed, can happen at pace and at relatively low cost with the help of the best vendor and service provider partners.

There are fantastic examples of retailers leveraging modern commerce to accelerate the way technology enables new store experiences across all customer and store staff touchpoints.

Crew clothing deploying a pop up store on top of their existing ERP in under 10 weeks of development

Read more

Worldpay leveraging mobile development teams and modern architectures to remove integration challenges

Read more

PMC Partners

About PMC

PMC is a leading Technology Service Provider with the experience, skillsets, and flexible teams to deliver Technology Transformation into retail and B2C.

Our Consulting and Professional Services offer the expertise and scalability that can be difficult to retain in-house, together with global 24x7 Managed Services

PMC invests in class-leading Cloud and microservices toolsets with AWS, Couchbase and Splunk, together with partnerships with some of the UK's leading best of breed software vendors, such as Enactor and Flooid, to ensure our customers have access to choice in this dynamically changing space.

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