

### Connected Customer Platform Strategy DRAFT

Compiled By: Wayne Beckley

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### Executive summary



Disclaimer

This strategy complements existing ShopriteX business and technology strategies. The purpose is to provide a view on the current state, highlight challenges and opportunities and emphasize the importance of architectural, engineering and ways of working improvements.



Document Purpose

Position precision retail enhancements to continue to make the everyday effortless for our customers by striving for architectural and engineering excellence and by harnessing our data and technology more effectively.



Strategic intent

Lead retailing with a cost effective, flexible and scalable connected customer platform by implementing optimised team structures and a modern data and software ecosystem which allows for rapid delivery of features and changes.



Tactical approach

- Create capability and product centric autonomous business and technical teams
- Establish processes and structure to ensure business and knowledge continuity
- Implement technical investment initiatives keep things simple, get basics right
- Follow engineering best practices and standards to increase our rate of delivery

#### Technical investment enablers

There are various known technical investment initiatives underway and the level of adoption of these initiatives across our teams will directly influence the rate at which we are able to execute the business strategies. These are noted here as additional activities which the business and delivery teams need to consider and factor into their planning as we continue to build out and evolve the connected customer platform.

The full implementation of these initiatives will result in a rock-solid foundation with less complexity and give us the ability to deliver features and changes as quickly as possible with greater longevity and lower total cost of ownership.



#### **Autonomous teams**

Capability and domain aligned teams
Product and value stream led teams
Decoupled architecture and design
Documented business and technical knowledge
Little to zero cross team dependencies
Little to zero key person dependencies
Maximize reuse of data and deliverables
Optimized and effective light agile processes



#### Code design and security

Automated testing across entire stack
Decoupled architecture and design
Design and develop once for organisation
Leverage Al across all areas
Micro frontends and microservices
Static code analysis for quality
Static code analysis for security



#### **Application and data integration**

Self-service real-time access to data
API, container, event stream first approach
Data accountability and ownership
Decentralised integration function
Develop and publish once culture
Perpetuate canonical model approach
Timing: Sales available end of May

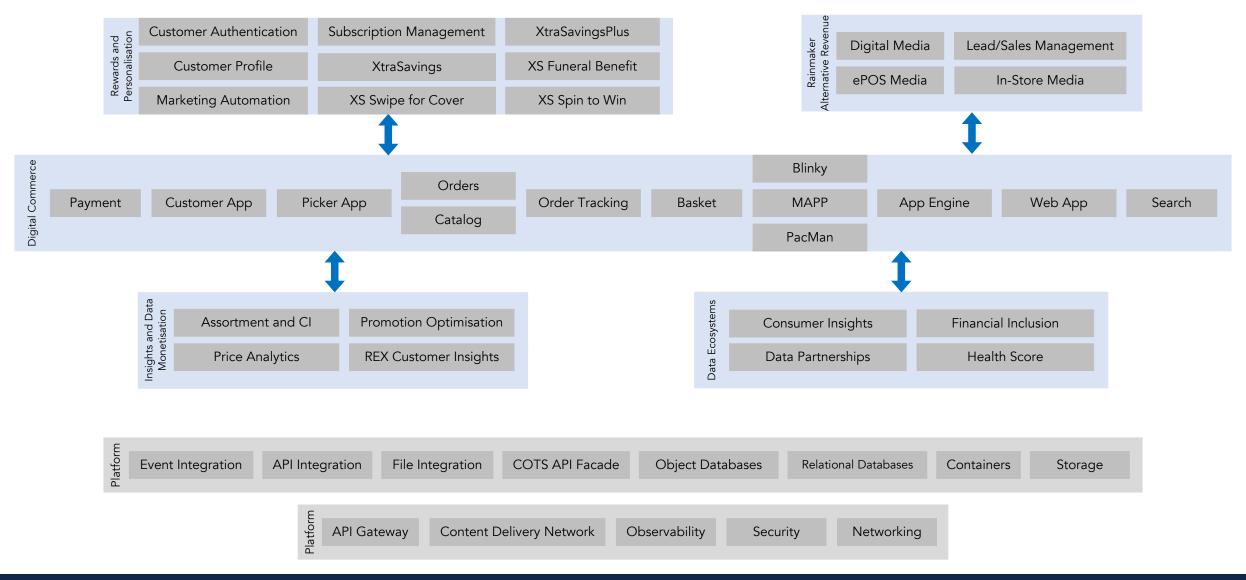


#### Platform and observability

Augment platform and internal capabilities
Cloud agnostic container-based hosting
Chaos engineering
Continuous integration and delivery
Leverage open-source platforms
Progressive delivery
Rationalise all tools and technologies
Synthetic monitoring



# Connected customer platform reference architecture (current)



## Significant considerations, challenges and opportunities

Tribe	Domain	Challenges	Opportunities			
All	Technology	Replatforming considerations for key solutions such as:  CIAM (EOL Dec 2027)  LPRO (EOL 2028)  PIM (EOL Jun 2026)  REX stabilization	Complete architecture and roadmap assessments to determine future fit solutions.			
Data Ecosystems	Partnerships	Maintain growth and expansion of collaboration and partnerships.	Focus on partnerships that drive health, economic and financial inclusions.			
	Commerce	Quick implementation for other retail brands such as:  Pet Shop Science Shoprite	Use existing systems and prove value with web app rather than mobile app.  Implement batch solving to improve delivery economics.			
Divital Community	Fulfilment	Picking capacity in stores needs to be increased.	This must be analyzed to determine what application and process improvements can be made to remove bottlenecks, prevent system issues and streamline operations.			
Digital Commerce	Payment	Extending payment providers depends on SUP implementation.	Figure out how to accelerate development of SUP platform to support Capitec Pa Discovery Miles, Apple and Google payments and wallets, coupon or vouch redemption, as well as SnapScan, Zapper and any other forms of payment. The D payment API will be key to implement this for customer app and web channels.			
	Pharmaceuticals	Quick implementation to prove value.	Test Medirite using the existing Zulzi platform.			
Rainmaker	Advertising	Maintain growth and expansion of digital media products.	Implement sponsored products and sponsored lists.			

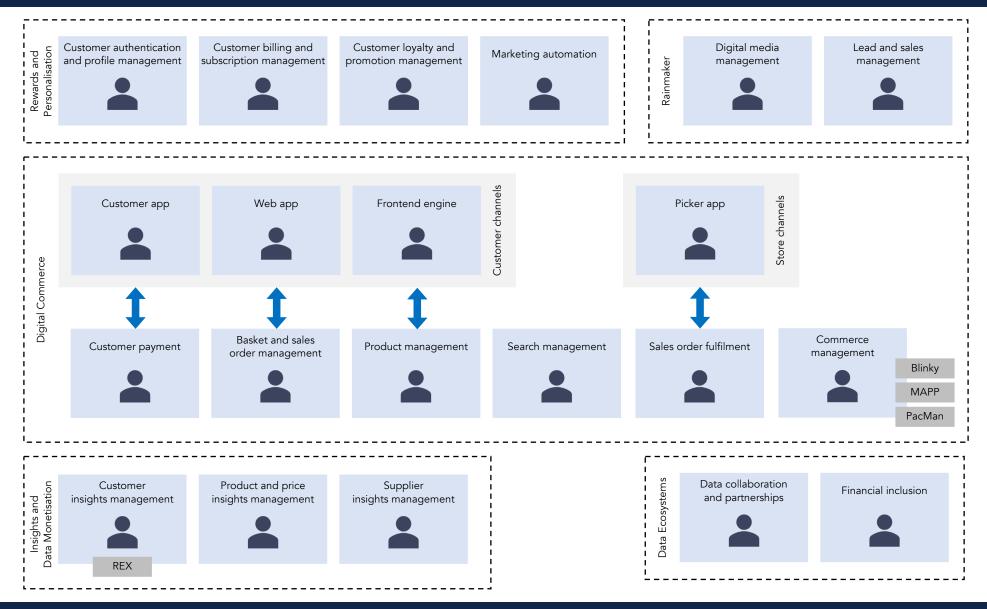


# Significant considerations, challenges and opportunities

Tribe	Domain	Challenges	Opportunities		
	Authentication	How customers are authenticated is inconsistent across channels. Identity and contact information is an issue across products.	Implement consistent authentication and authorization mechanisms across all channels.  Integrate with social platforms like Apple, Google, Facebook and Twitter using a platform we already have in place such as Firebase.  Include unknown device detection to further improve security.  Include ability to configure family members which can be extended to our other products.		
	Customer	Data quality of XtraSavings customer base is not great.	Complete mission mobile initiative. Implement the recommended application and data integration strategy.		
	Loyalty Promotion	Maintain growth and expansion of XtraSavings product.	Implement XtraSavings cross border and for the U\$ave retail brand.		
Rewards	Loyalty Promotion	Heavily dependent on the DC and DSL teams to deliver features.  Build annual plan - R99pm for loyal members.  Build household accounts.  Build subscription promotion codes used at check.  Additional 10% vouchers (and revisit look and feel).  Assign/redeem plus only deals in-store/online with badging.  Refer and earn ability.	Business logic for backend and frontend features are scattered across DC and DSL rather than in shared loyalty API owned by the rewards team.  Loyalty API should enable majority of these features, e.g. all promotion code logic and rules should reside here, and channels must have generic promotion code functionality. In addition, frontend logic should be reused across channels with micro frontends and standardized technology. Long term alternative is to explore single promotions engine for		
	Promotion	New promotions and reward types.	both digital and store channels.		
	Marketing	Insider requires a customer data feed for each banner.	Created a unified view now to be used across all banners but this could benefit from more simplified customer data integration and should be revisited.  Implement the recommended application and data integration strategy.		

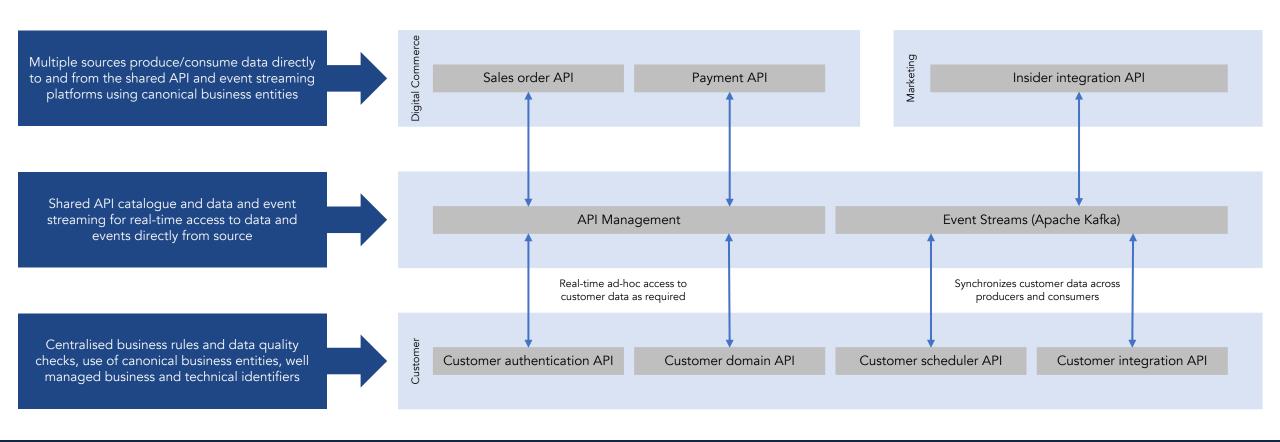


### CCP capability teams target state (proposed)



# CCP application and data integration target state (example)

While there are multiple technical investment initiatives underway, how we integrate our applications and data is key to unlocking agility and speed of delivery. We need to decouple applications and streamline how data and information is shared and synchronised across our environment. The following approach and patterns can be utilized to simplify and optimise how customer and related data is integrated which will ultimately remove the need for full-blown master data management or customer data platform solutions. This is also a powerful enabler and catalyst for capability aligned teams as it reduces physical dependencies between domains:



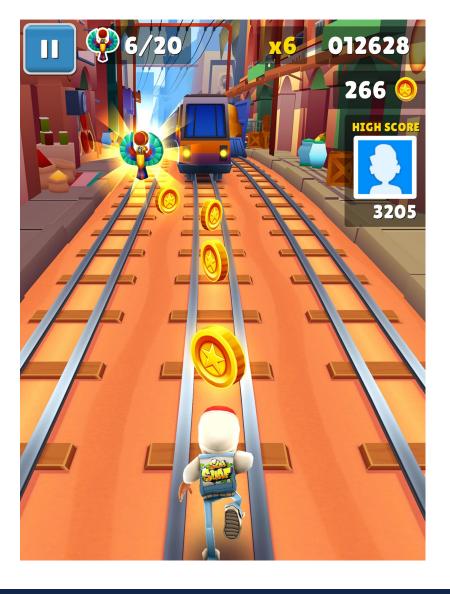


### Ideas

### Sixty60 Endless Runner Game

- Subway Surfer by Sybo is the most popular endless runner game ever
- Released in 2012 with 20 million DAU and 4 billion lifetime downloads
- Great opportunity for a Sixty60 endless runner game with a South African spin
- Be the first retailer with a mobile game and further boost brand awareness
- Leverage local culture humour with hazards like potholes, taxis, load shedding
- Integrate rewards and discounts with Sixty60 and XtraSavings
- Integrate advertising with partners and suppliers
- Could use real addresses and areas in South Africa
- Endless monetization and personalization options
- Leaderboards country, weekly, friends, family
- Collect minis which are then delivered to user
- Promote safer driving, highlight road rules
- Vehicles can be branded/skinned, e.g. Discovery
- Zero hosting costs could be standalone or integrated with our systems



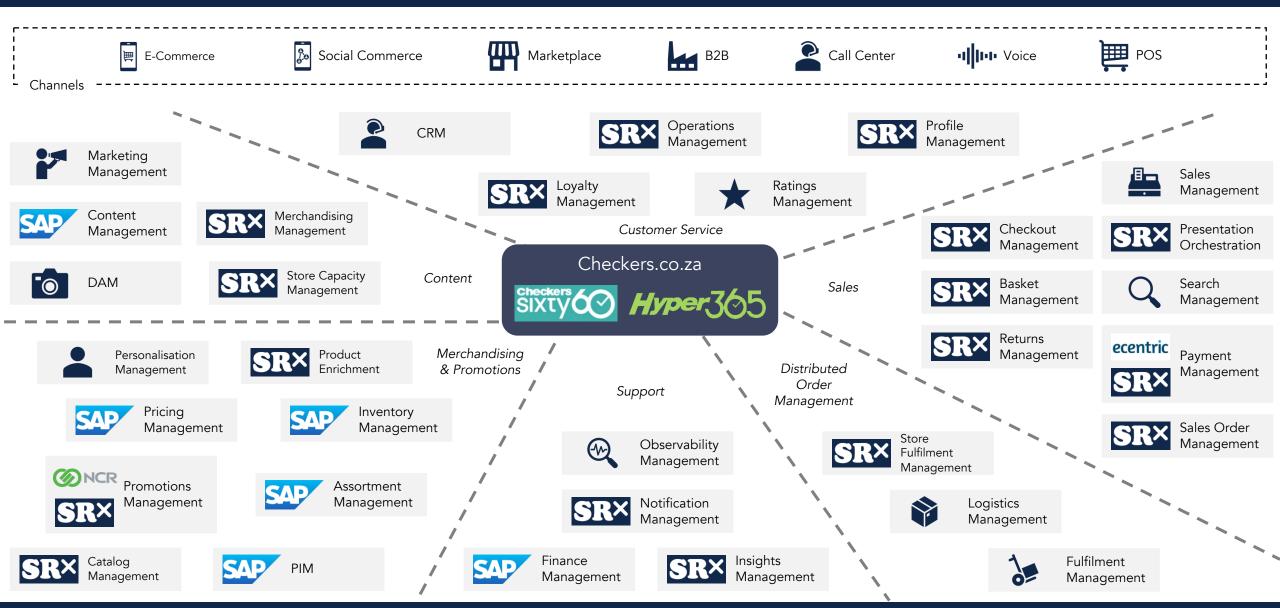


### **Appendices**

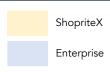
- High level conceptual commerce capabilities
- Ideal unified commerce reference architecture
- The evolving digital delivery model
- Ideal application architecture with micro FE and BE
- Application and data integration key building blocks
- Event streaming and microservice reference architecture

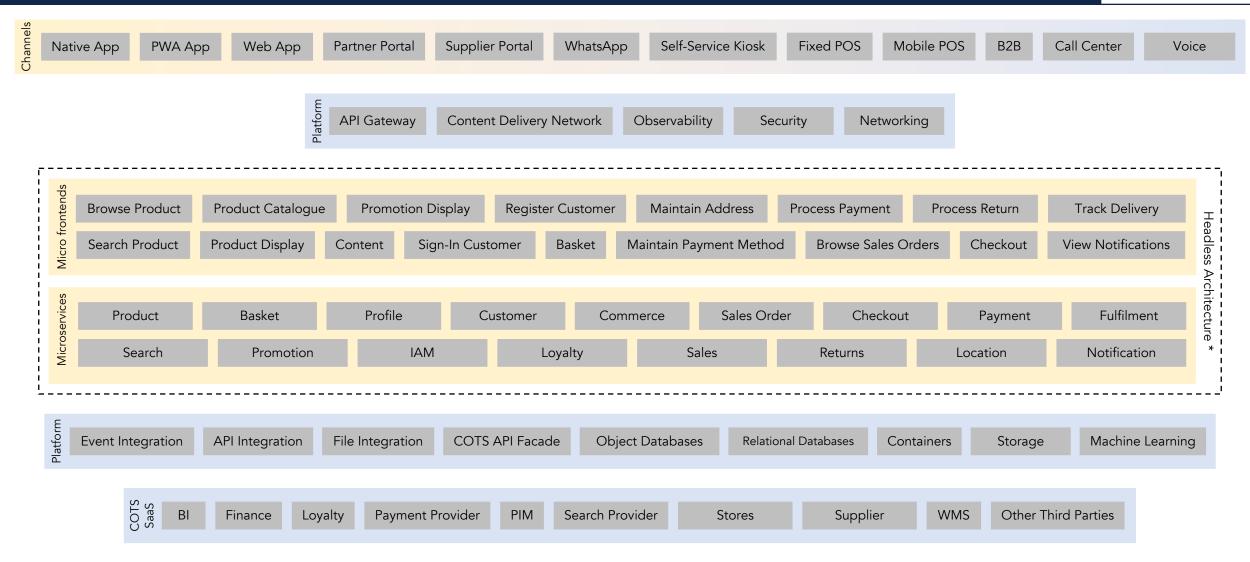


## High level conceptual commerce capabilities



#### Ideal unified commerce reference architecture





<sup>\*</sup> These capabilities are for illustrative purposes only and do not include many of the differentiating capabilities found in Sixty60 and our digital commerce environment.



## The evolving digital delivery model\*

Organisational Model	Practice Model	Development Model	Release Model	Architecture Model	Hosting Model	Data Model	Support Model
Hierarchical I Organisation I	Process Driven	   Waterfall 		Monolithic	Physical Datacentre	Silos	Tier   Based
	<u></u>						L1 L2 L3
Product Line	Practice Driven	Agile	I I Monthly I I I	N-Tier	Virtual Machines	Lakes	   Skilled   Support
		<b>6</b>					
Swarm Organisation Autonomous Teams	Value Stream	DevOps	Continuous Delivery	Microservices And API	Cloud and Containers	Artificial Intelligence	Self Service and Self Help
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## The target digital delivery model

Organisational Model	Practice Model	Development Model	Release Model	Architecture Model	Hosting Model	Data Model	Support Model
Swarm Organisation Autonomous Teams	Value Stream	DevOps	Continuous Delivery	Microservices And API	Cloud and Containers	Artificial Intelligence	Self Service and Self Help
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Solution Delivery				Software Engineering	Platform Engineering	Business Intelligence	Service Delivery
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**Enterprise Architecture** 

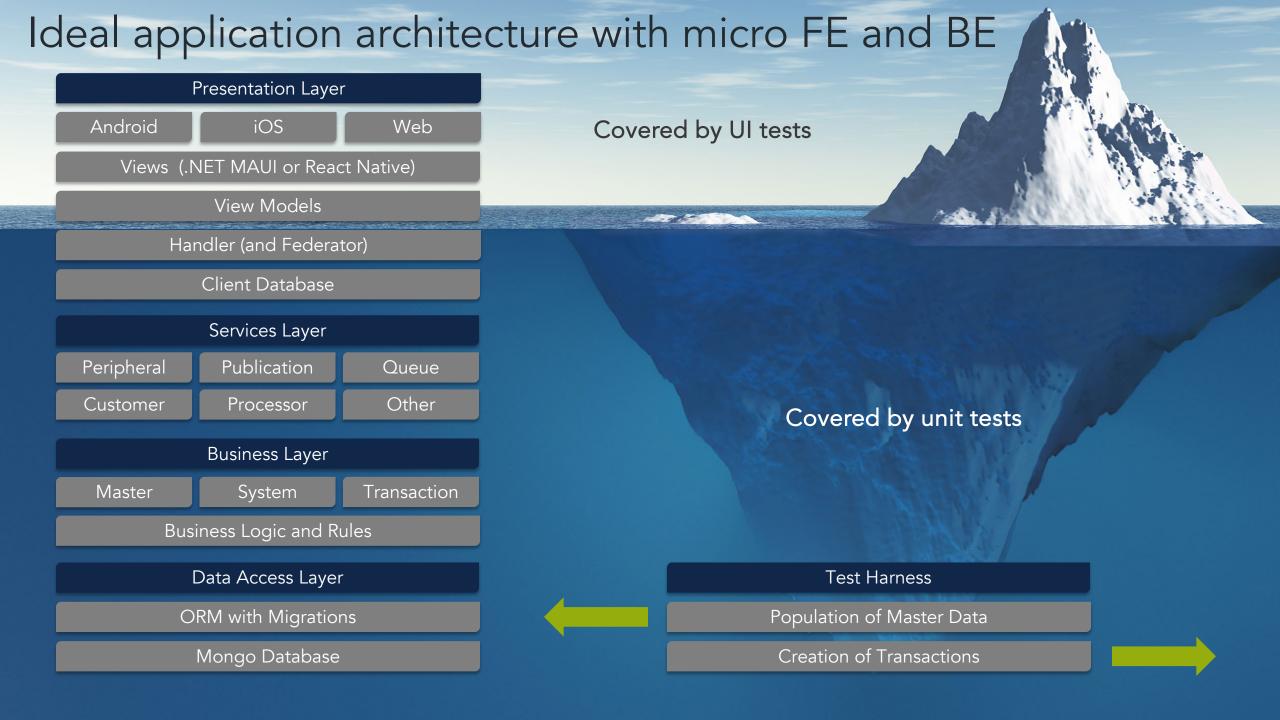
**Enterprise Integration** 

Security and Technology



# What must change and how does this impact teams?

Organisational Model	Practice Model	Development Model	Release Model	Architecture Model	Hosting Model	Data Model	Support Model
Swarm Organisation Autonomous Teams	Value Stream	DevOps	Continuous Delivery	Microservices And API	Cloud and Containers	Artificial Intelligence	Self Service and Self Help
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Create self- organising cross functional team for each	Foster reuse mindset: never create anything which already	Everything in source control  Automate all	Design and develop for small incremental changes	Design for microservices Expose CRUD	Design for containers to run anywhere	Sources own data availability and quality	Endeavour to resolve root cause ruthlessly
capability I I Team and	exists	aspects of SDLC	Reduce WIP	functions for all data using microservices	Then design and develop for cloud	Sources produce all data once to event bus, no	Automate repetitive tasks
solution structures must	improve the customer (or	Automate all testing	Release as ready all the time	Expose business	Leverage native cloud when there	direct access	Empower teams to serve
reduce I dependencies I I	employee) I experience I I	Automate platform (SRE)		functions using microservices	is no alternative	Shift focus from ETL or ELT to exploiting data	themselves
 	Keep things simple and focus on things that matter	Automate monitoring		 	Make APIs and data available across all environments		 
•	İ	Pu	blish all data to event str	reaming platform and sub	scribe to events in real-ti	me	



## Application and data integration key building blocks

#### Legacy systems

Where the data is captured and stored

Mostly systems of entry and systems of record

Can include systems of engagement

Many Shoprite bespoke applications, ERP and packages



#### **Connectors**

Keeps legacy systems and consumer data stores synchronised offloading relevant changes in real time

Build Shoprite API components and template to consume and produce data

Canonical domain business entities



#### **Event store**

Highly reliable and performant platform to support real time event driven data integration

Apache Kafka on Kubernetes across cloud and on-premise environments



#### **Data store**

Stores domain specific data and supports fast ingestion

Can be portable on containers

Can be application or domain specific



#### **APIs**

Connect to data store for read queries and could write to legacy systems through event store

Can be portable on containers

Can be application or domain specific



#### **Applications**

Where the data is used

Assumes modern
application with micro
frontends and
microservices
architecture

Could be legacy system using API wrappers



Source for analytical and operational reporting

Shift legacy systems across to micro frontends and microservices architecture wherever possible



# Event streaming and microservice reference architecture

