Microsoft Dynamics 365 for
Retail

Solution overview

July 2017

Microsoft

Dynamics 365 for Retail

Dynamics 365 for Retail is an end-to-end retail solution delivering unified commerce across all channels encompassing sales, mobility, intelligence, and productivity to help retailers and workers achieve more in a cloud first, mobile first world. Dynamics 365 for Retail is a modern SaaS solution hosted and managed by Microsoft (with support for hybrid deployment) built on state of the art, cloud engineered, secure, and flexible architecture. The solution offers comprehensive support to operate a broad range of business processes, including merchandising, inventory and channel management capabilities, while providing immersive customer experiences across all touchpoints. Uniform business logic across the touchpoints enables operational efficiency and ensures consistent and accurate information. The solution includes a cross platform unified Point of Sale (POS) application, integrated call center capability, Retail experience app (for your customers), and integration with 3rd-party e-commerce websites.

The solution has been fine-tuned to enable retail-specific functional needs with a focus on the following:

- Unified experience: Providing easy and intuitive access to all the components/functionalities that are required to enable and manage retail business. It also limits the need to learn other parts of the Dynamics 365 solution offering.

- Retail-specific user experience: Enables a simplified user experience for various entities by showing only retail-specific fields, labels, and functions and excluding non-retail industries such as professional services, manufacturing, etc. that are not applicable to retail business.

- Faster time to value: Seamless configuration/initialization of reference data during the deployment of the Dynamics 365 for Retail solution.

- Enables integration with other accounting systems: Provides accounting export functionalities containing account level sales data using built-in chart of accounts. This can then be consumed by retailer's existing primary accounting system.
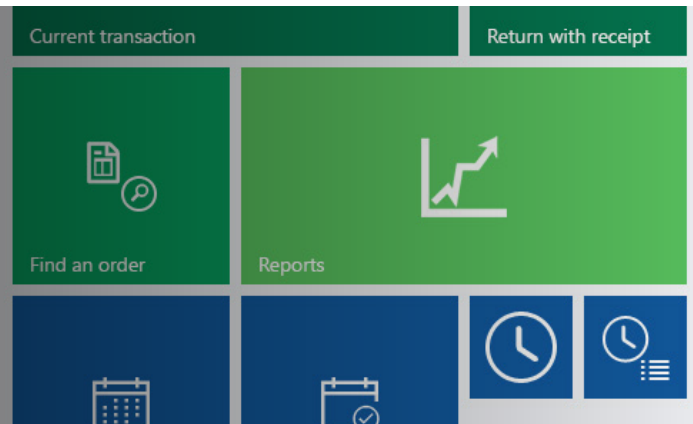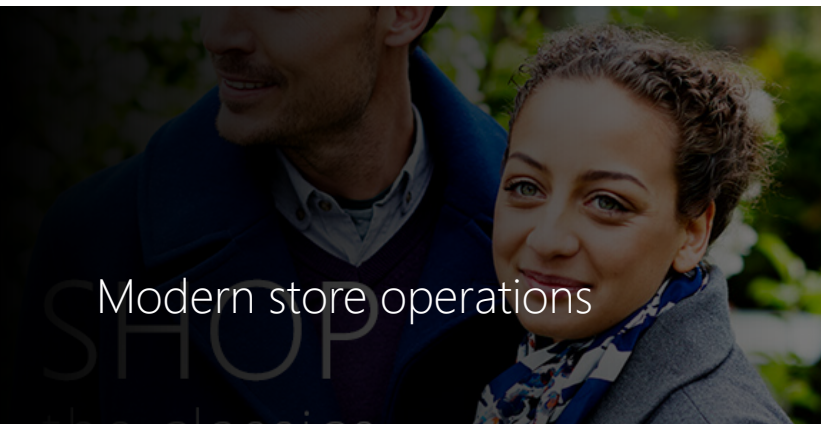
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Modern store operations

The unified point of sale app included in the solution is cloud engineered, designed, and optimized to run on different form factors across Windows, iOS, Android, and web. It enables modern, role-tailored, rich, and immersive experiences entailing clienteling scenarios as well as a broad range of traditional transactional capabilities with support for offline use and peripheral devices.

Modern store operations · Workforce management · Retail experience app and e-commerce channels · Centralized channel management · Merchandising · Unified commerce, order, and inventory management · Customer engagement · Intelligence and analytics · Cloud platform

Modern store operations
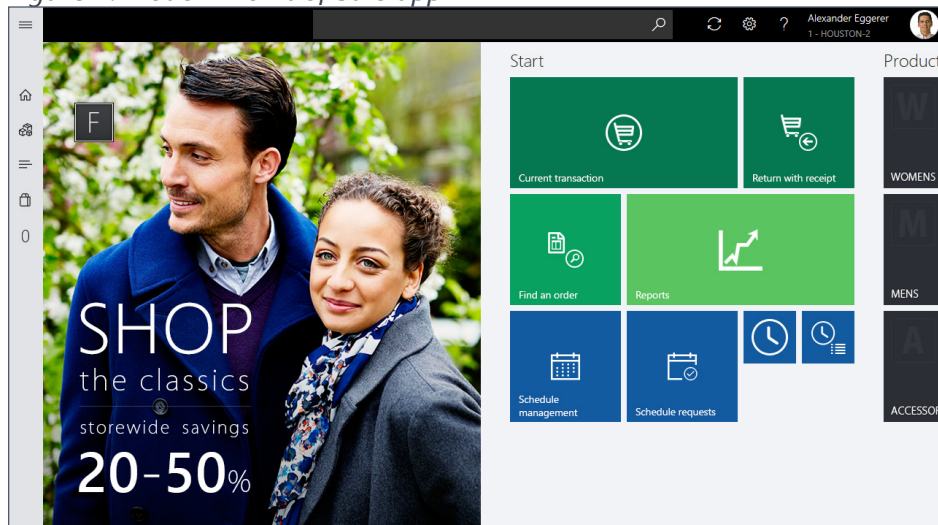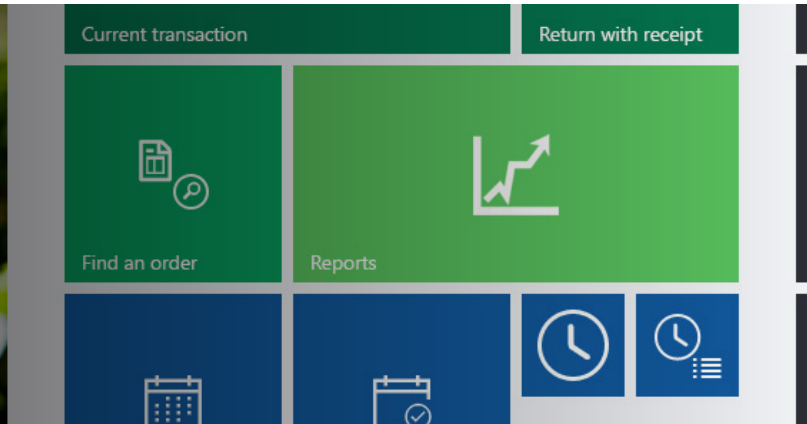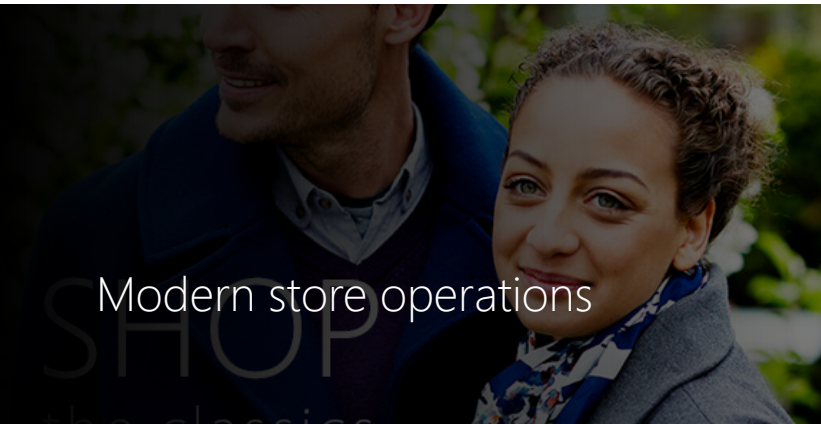
Modern store operations

Sales and returns
- Process various fulfillment options in a single order: Carry, ship, pick-up in same or other stores
- Ability to create customer orders both synchronously and asynchronously
- Enable sale and return of products that are not assorted to that store
- Process transactions with automatic best price discount applied, in case of multiple discounts
- Return items with or without receipt
- Email and print receipts with custom branding
- Accept credit, debit, and other forms of payment
- Ability to track sales by sales representative instead of by cashier

Assisted sales and clienteling
- View detailed product specifications, including variants, attributes, and images
- Browse, search, filter, and compare products side by side
- View recommended products for a transaction and get personalized, customer-centric recommendations driven by machine learning technology
- View and manage detailed customer profile including cross channel order history
- Ability to create customers both synchronously and asynchronously

Figure 1: Modern Point of Sale app

Modern store operations

Store inventory
- Improved inventory visibility in POS by including warehouses and distribution centers in inventory lookup, surface ATP and On-order quantities, and offline quantity lookups
- Pick and receive transfer orders and purchase orders
- Perform stock counts

Daily operations
- Perform daily operations such as end-of-day processing, including X and Z reports, blind closing shift a register, declare starting amount, tender declarations, etc.
- Employees perform time registration and managers view time registrations of employees
- View BI reports relevant to the store such as sales by hour, sales by cashier, etc.

App and device configurations
- Use the application with branding, layout, and business processes tailored to your unique organization, processes, and device type
- Use Point of Sale offline during network disruptions
- Use peripheral devices that are either locally connected or connected via hardware station

Modern store
operations

Workforce management

Dynamics 365 for Retail enables a globally diverse workforce to be productive and to provide the best customer experience. Administrators can easily manage many workers to safeguard system access and company data, while simultaneously providing store associates with a productive and personalized experience while using the system.

Modern store operations · Workforce management · Retail experience app and e-commerce channels · Centralized channel management · Merchandising · Unified commerce, order, and inventory management · Customer engagement · Intelligence and analytics · Cloud platform

Workforce management

Worker management capabilities

- Manage workers, assign positions, establish effective dates, and assign workers to one or more stores
- Manage role-based permissions for workers to control access to POS operations to safeguard against malicious behavior and accidental disruptions
- Define role-based POS screen layouts to provide a tailored and coherent experience for store associates, managers, and store workers in other roles
- Enable store managers to easily approve elevated privileges within the context of the operation being attempted by store associates
- Configure employee-specific language preferences to display localized strings regardless of which register they log on
- Support employees with a wide range of accessibility needs via high contrast mode interface, keyboard navigation, and shortcuts
- Enable your store associates to easily record and track their work hours at any register
- Enable administrators to manage shift schedules, pay rates, exception handling, and payroll in a centralized fashion
- Enable your workers to log on with a single identity even if they work in multiple store locations or stores in different legal entities
- Utilize task guides and comprehensive documentation to accelerate new employee on-boarding and training
- Self-service cashier password reset at POS
- Enable back office workers to personalize their workspaces with relevant information

Workforce management capabilities

- Enable store managers to view and manage planned workforce schedules that ensure their store is adequately staffed to handle foot traffic
- Enable store managers to view shift assignments and leave requests by day for store associates
- Enable store managers to assign the right tasks to the right resources for a shift and approve shift change/swap requests
- Enable employees to view shifts, put in request to change shifts or swap request, and view and approve swap requests
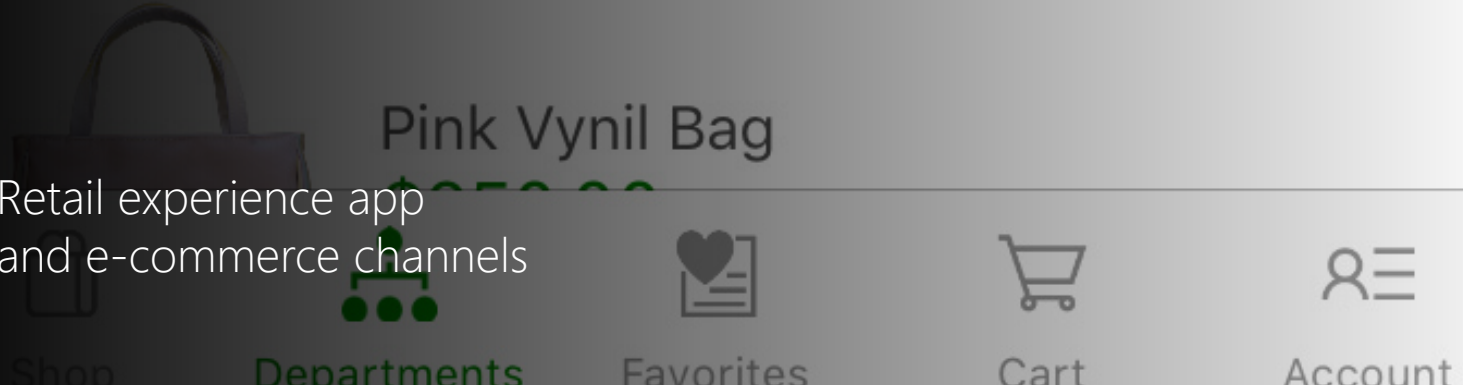
Workforce management

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Retail experience app and e-commerce channels

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Retail experience app and e-commerce channels

Retail experience app and e-commerce channels
- Leverage partner-built, industry-leading e-commerce platforms deeply integrated with Dynamics 365 for Retail
- Retail experience app: Publish Microsoft-built white label Retail experience app-to-app stores for iOS and Android
- Enable retailers to configure branding and theming
- Enable retailer's customers to browse products and view product details
- Enable retailer's customers to login with their social identities (Facebook, Google and Microsoft account) and view their purchase history from across all channels
- Enable retailer's customers to add items to the wish list or favorites list
- Enable your customers to add items to the cart for immediate or later checkout, and ship to address or pick-up in store
- Accept payments from retailer's customers

Retail experience app and e-commerce channels

Figure 2: Retail experience app

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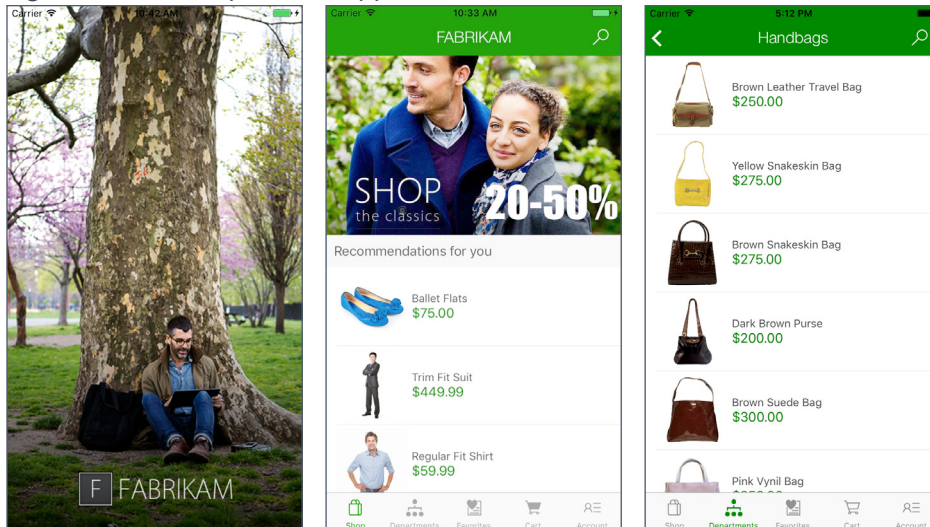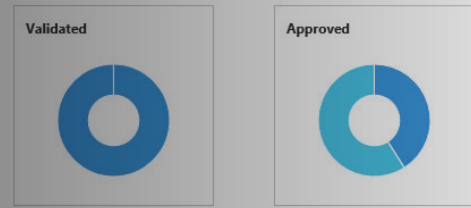
Centralized channel management

Dynamics 365 for Retail is built to handle globally diverse and distributed organizations operating upon varied business models. Retailers can centrally manage all their channels from a single pane of glass and in a coherent and efficient manner.

Modern store operations   Workforce management   Retail experience app and e-commerce channels   Centralized channel management   Merchandising   Unified commerce, order, and inventory management   Customer engagement   Intelligence and analytics   Cloud platform

Centralized channel
management

Centralized channel management
- Manage all channels and channel types including physical stores, e-commerce websites, Retail experience app, and call centers
- Bulk manage channel configurations via extensive use of channel hierarchies and profiles, which is particularly useful for retailers with large number of stores and registers
- Review configuration progress of key channel entities during the channel deployment process
- Configure channel-specific currencies, time zones, languages, delivery methods, and payment methods
- Configure navigation category hierarchy and other product attributes
- Easily bulk edit data using native integration with Office 365 and Microsoft Excel

Centralized store
management

Figure 3: Review configuration status of entities

Centralized channel management

Retail store (aka, Brick and mortar store) specific configurations

- Configure store, register, or role-specific screen layouts shown at POS
- Configure devices with different application types (MPOS, Cloud POS, Phone POS)
- Configure channel-specific receipt layouts
- Manage workers, worker roles and permissions, and language preferences
- Configure cashier prompts during transaction processes using info codes
- Easily install and update in-store components with minimal configuration using Self-service installation
- Centrally control offline data synchronization capabilities as well as at Point of Sale and in Retail Store Scale Unit. Optimize data synchronization by configuring specific entities and records to be synchronized to devices and channels, thereby enabling devices with low storage and network bandwidth resources to utilize offline capabilities

Centralized store management

Figure 4: Manage channel navigation hierarchy

Centralized channel management

Centralized store management

Figure 5: Screen Layout Designer
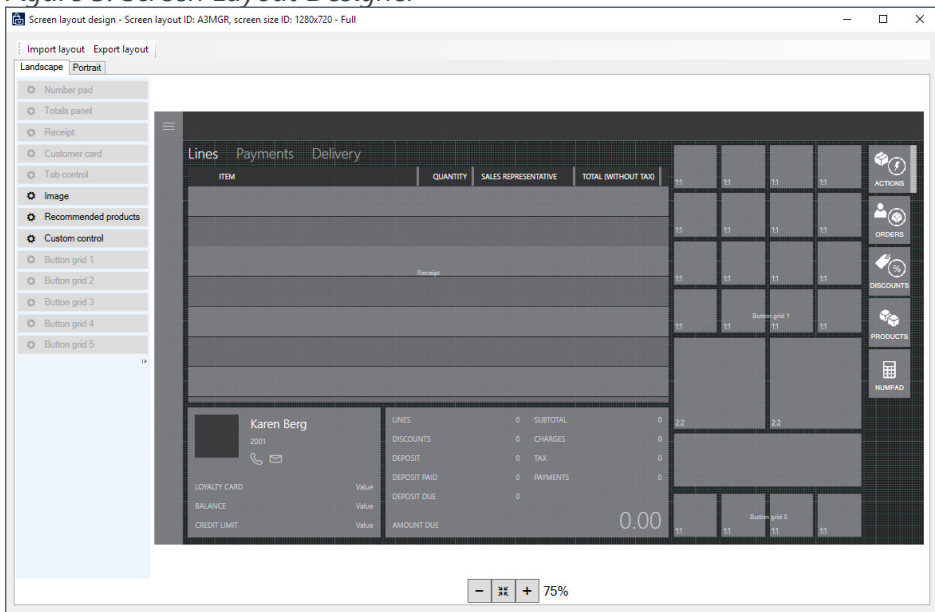
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Merchandising

Utilize a robust set of core product, pricing, and promotions management capabilities to meet merchandising needs for your business. Merchandising entities and constructs are consistent across channels and channel types, while at the same time allowing for channel-specific configurations. Product management capabilities include product category hierarchies, assortments, and catalogs. Products include support for variants, kits, as well as user configurable attributes.

A wide range of pricing and promotions capabilities enable you to support specific business objectives, including category and channel-specific pricing, as well as category, product, or catalog-specific promotions. Best price algorithms automatically calculates the best price during checkout if multiple discounts are applicable.

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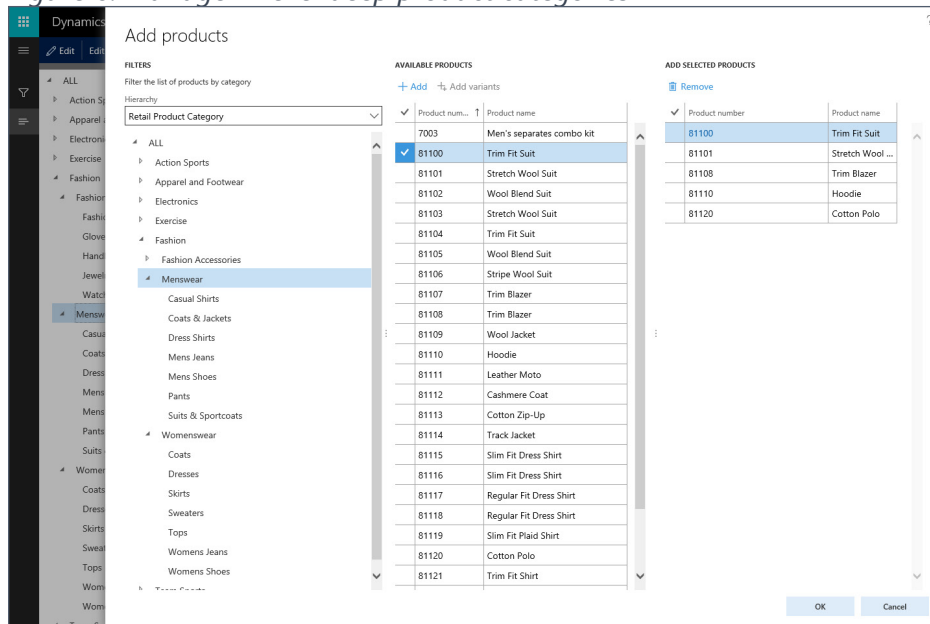
Merchandising

Category management

- Centrally manage products using n-level deep product category hierarchies for bulk categorization of products
- Bulk edit product properties and override properties at child nodes and at the product level
- Define channel navigation category for browsing and navigating products across channels
- Define a primary retail product category and one or more supplemental retail product categories
- Add products manually to the category nodes, or bulk add using existing categories

Merchandising

*Figure 6: Manage n-level deep product categories*

Merchandising

Attribute management and enrichment
- Define product attributes, such as branding or storage size for laptops
- Define product attribute groups which can be reused across products, product category nodes, and catalogs, such as different attribute groups for TVs (resolution, display size, etc.) and laptops (storage, memory, processor, etc.)
- Assign attribute values at the category or at the product level
- Override attribute values at the product, channel, or catalog level

Merchandising

Figure 7: Attribute groups allow attributes to be categorized and bulk reused
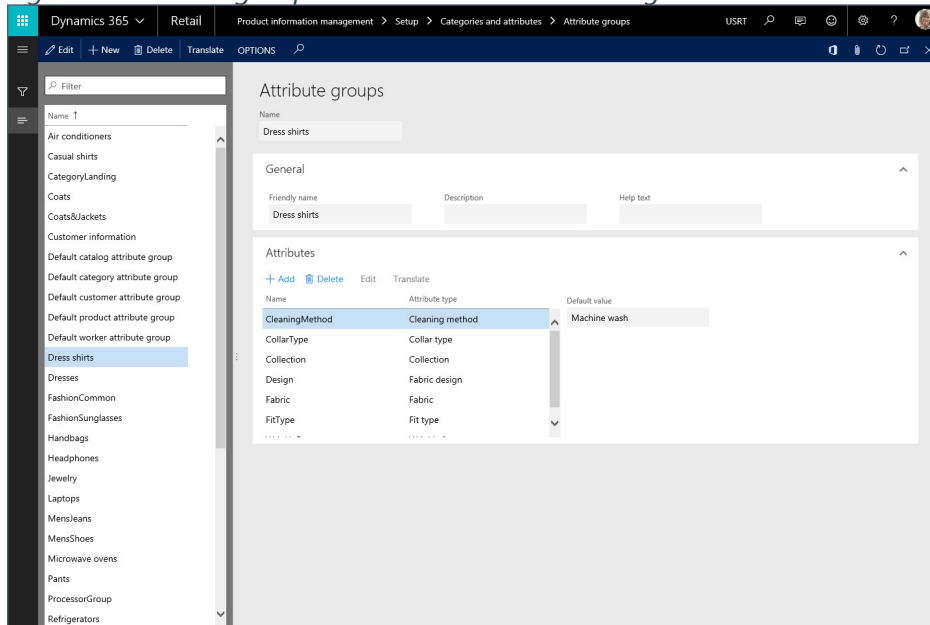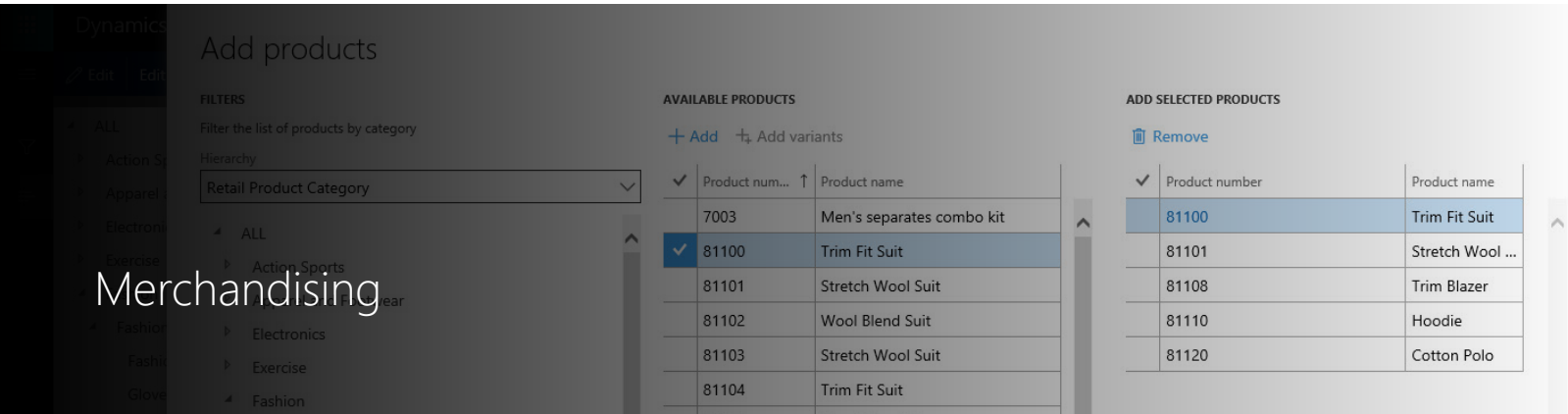
Merchandising

Assortment management
- Enable specific products to be sold in specific channels for a defined period
- Add products to an assortment manually, as a category, or selectively exclude products from a category when adding to an assortment

Catalog management
- Enable product enrichment in specific channels for a defined period
- Sell products using mail-order catalogs

Pricing, discount, and tax management
- Define quantity discounts, threshold discounts based on transaction value, and mix-and-match discounts
- Choose from multiple discount calculation algorithms. Best price algorithm automatically calculates the best price during checkout if multiple discounts are applicable
- Define product, category, catalog, customer, or channel-specific pricing rules and discounts
- Define pricing and promotions activation and deactivation dates and times
- Use a pricing simulator when defining prices and promotions to preview the computed prices.
- Generate and support coupons
- Use out-of-box tax calculation framework, or plug-in partner-built tax calculation solutions
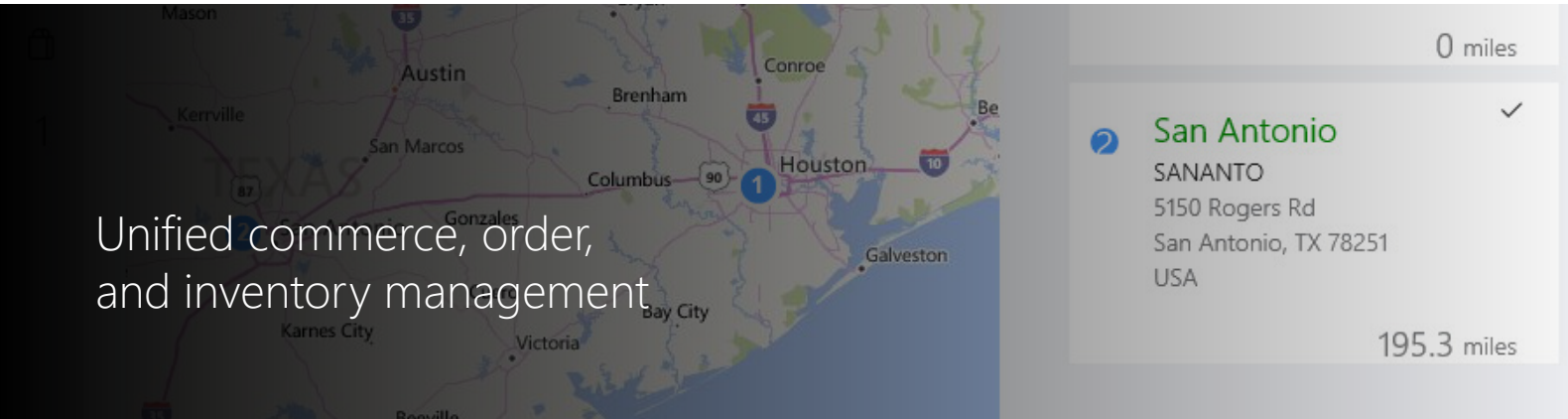
Merchandising

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Unified commerce, order, and inventory management

Unified data entities and business logic across all sales channels allow your business to offer seamless omni-channel experiences for your customers, including customer orders, customer profile, gift cards, loyalty, and others. Key omni-channel capabilities include experiences such as order online and pick-up in store, earn and redeem loyalty points across channels, unified customer profile across channels, gift card redemption across channels, and more. Inventory management capabilities such as automatic replenishment based on replenishment rules, cross-dock, buyers-push, and cross channel inventory transfer requests allow you to more quickly maintain optimal inventory levels in your stores and warehouses.

Modern store operations | Workforce management | Retail experience app and e-commerce channels | Centralized channel management | Merchandising | Unified commerce, order, and inventory management | Customer engagement | Intelligence and analytics | Cloud platform

## Unified commerce, order, and inventory management

Omni-channel experiences
- Provide visibility into inventory availability across channels for your employees and customers
- Accept customer orders using various ordering and fulfillment modalities, including order online > ship from warehouse, order online > pick-up in store, with unified payment and deposit management
- Allow your customers to sell/return outside of the assortment for that store, with or without receipt
- Provide a unified customer profile across channels: customer wish list, purchase history, product recommendations, contact and shipping address details follow across all channels
- Enable customers to earn and redeem loyalty points across channels
- Accept the same gift card as a payment method across channels
- Accept the same promotional coupons across all channels

Figure 8: Customer order store selector at POS for pickup
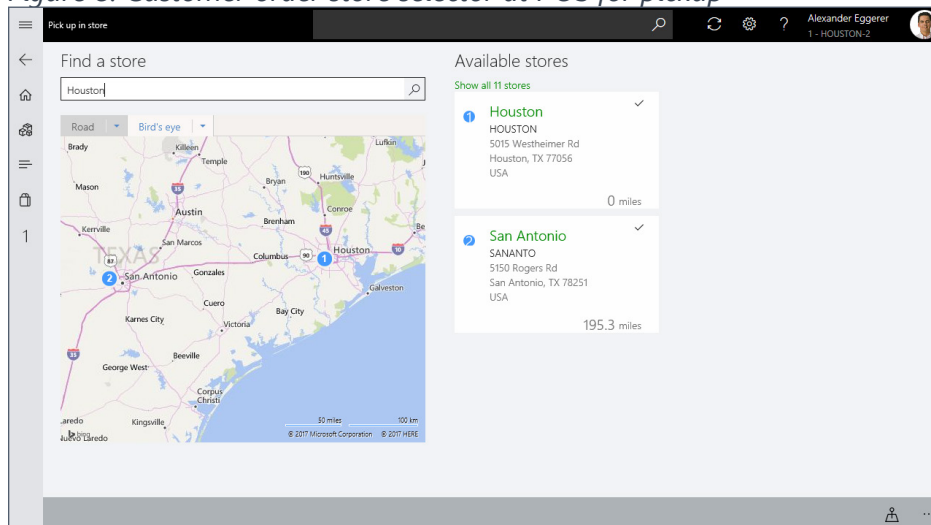
Inventory management
- Define automated replenishment rules for creating purchase orders
- Perform *cross-dock*, i.e. distribute products from the receiving warehouse to stores, based on quantities and rules that you specify
- Configure buyers push, such as centrally purchase and distribute products to stores based on various criteria
- Receive orders in a store using Point of Sale, or at a receiving warehouse

20

0 miles

② San Antonio
SANANTO
5150 Rogers Rd
San Antonio, TX 78251
USA

195.3 miles

Unified commerce, order, and inventory management
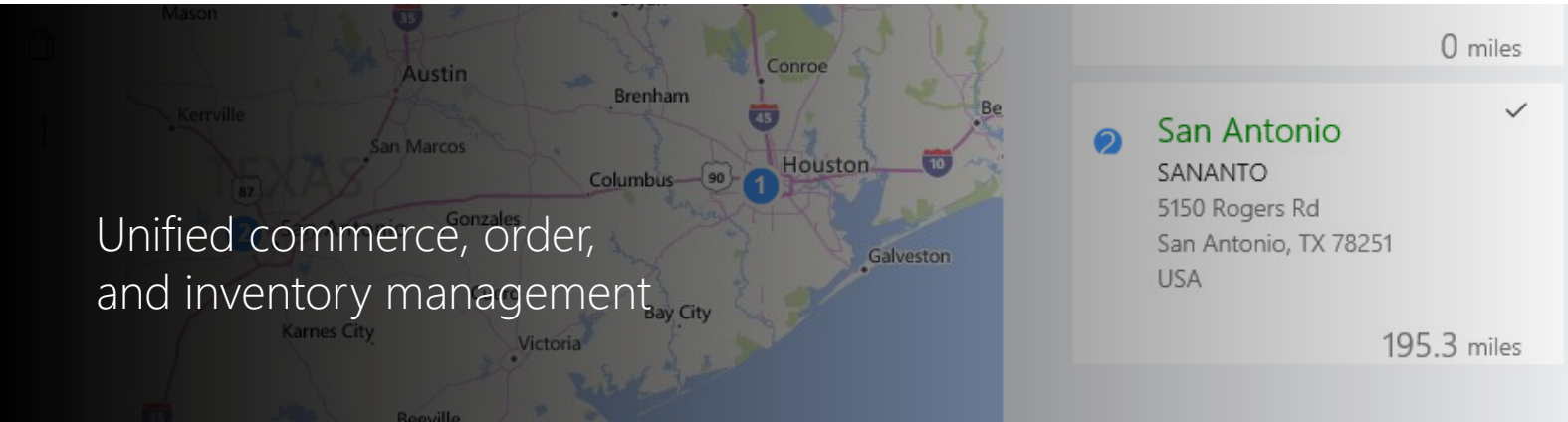
Call center operations
- Perform new sales and modify existing orders created in any channel
- Configure scripts for associates to follow to provide a consistent and reliable customer service experience
- Cross-sell and upsell customers during call center interaction
- Offer continuity programs to your customers
- Detect potential churn using RFM analysis and respond with targeted promotions
- Detect fraud using configurable rules

Unified commerce, order, and inventory management

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Customer engagement

Understand and engage with your customers throughout their shopping journey and get a 360° view of all their engagements with you across all of your channels. Customer profile, history, and preferences that follow across channels, cross-channel customer sales reports, RFM analysis, targeted promotions based on customer segmentation, among other capabilities enable you to holistically understand and respond to the needs of your customers at every level of engagement. Loyalty programs, wish lists, and social identity integration enable you to foster brand loyalty and stickiness with your customers.

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Customer engagement

Customer engagement capabilities

- Manage comprehensive customer profile details including multi-contact and multi-shipping address support
- Enable your customers to use their social identities (Facebook, Google and Microsoft Account) to engage with your business
- Enable your customers to manage wish lists
- Provide visibility into customer's purchase history from across all your channels
- Run global loyalty programs with full control to manage customer groups, loyalty tiers, accrual and redemption rules, and associate loyalty programs with discounts
- Create targeted promotions based on customer segmentation
- Create affiliation-based pricing and discounts
- Surface personalized customer product recommendations to your cashiers for cross-sell, up-sell opportunities at POS
- Detect potential customer churn through RFM analysis
- Send email receipts to your customers

Customer engagement

Figure 9: POS provides a 360° customer view
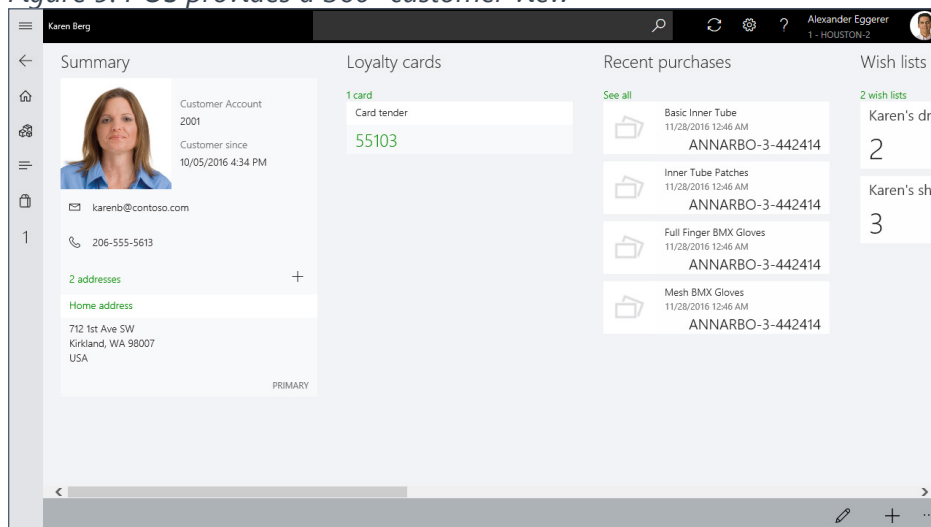
Intelligence and analytics

Role-based personalized workspaces, advanced data analytics, and visualizations using Power BI, along with BI reports available directly at POS ensure that your employees have access to the right data to drive business decisions. Machine learning-based intelligence capabilities provide an unprecedented level of operational actionability by contextually weaving intelligence into existing operational scenarios and driving continuous business value.

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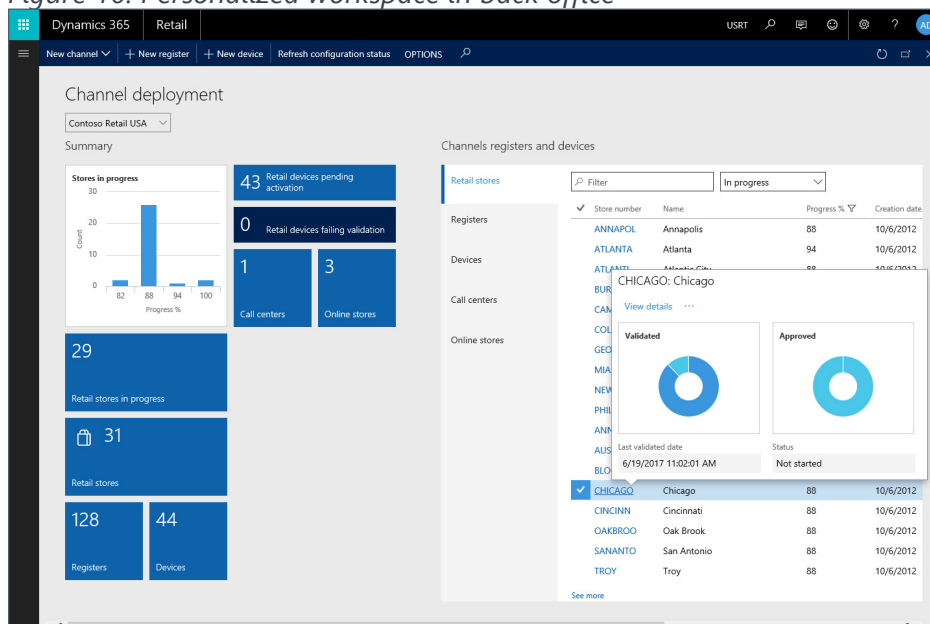
Intelligence and analytics

Intelligence and analytics capabilities

- Leverage personalized workspaces, view role-based KPIs and reports, modern data visualizations using Power BI (enabling organization, customer, product, category centric sales analysis etc.), data entities, and actions in a single place without requiring navigating through various forms and menu items
- View business reports directly within POS for cashiers and store managers to easily access insights. BI reports embedded in POS bring insights directly to where the action is and enables your store managers and employees to respond quickly to local market conditions and trends. Out-of-the-box reports in POS include reports covering sales metrics, cash management, employee productivity, as well as summarized X and Z reports
- Reporting is built on a robust and fully extensible platform, allowing you to implement supplemental reports relevant to your business needs, both in the back office as well as at POS
- Utilize personalized product recommendations backed by advanced machine learning technology that enables store associates to cross-sell and upsell products based on customer's interests and buying habits
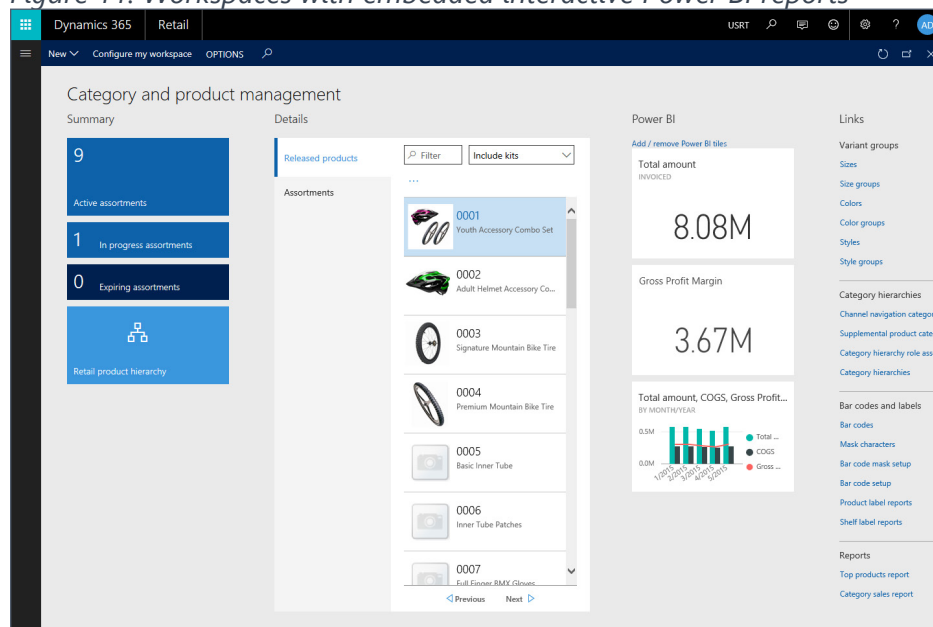
Intelligence and analytics

Figure 10: Personalized workspace in back office
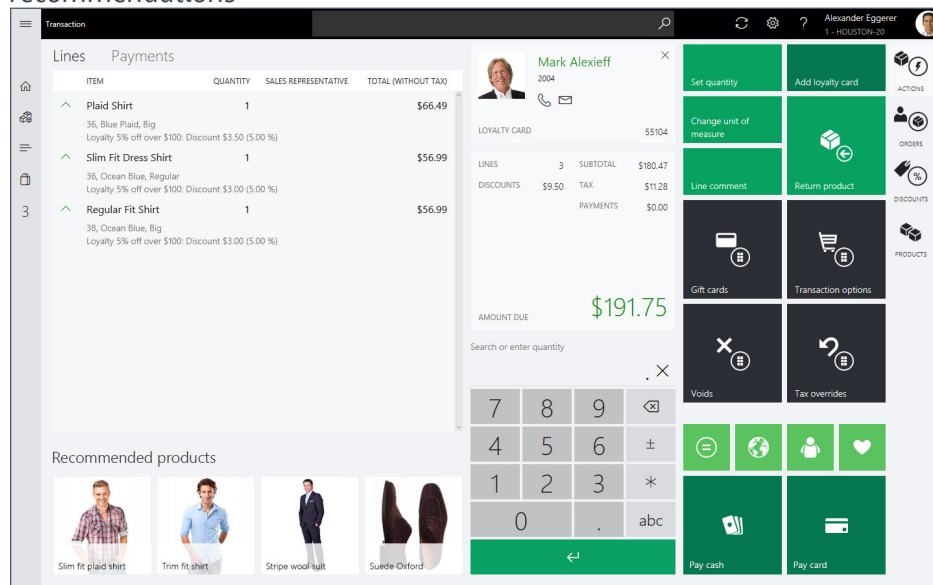
Intelligence and analytics

Figure 11: Workspaces with embedded interactive Power BI reports

Intelligence and analytics

Figure 12: Frequently bought together and personalized product recommendations

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Cloud platform

Dynamics 365 for Retail is a Microsoft-managed cloud service with a financially backed 99.9% uptime service-level agreement (SLA) that meets stringent security, privacy, and compliance guidelines. It is available for purchase across 135 markets and 40 languages. The service can be provisioned in one of 20 Azure data centers across 8 geographic regions, is highly available and has built-in disaster recovery capabilities to make it resilient to component-level and data center-level outages. The system allows flexible hybrid deployment options based on your business and IT needs.

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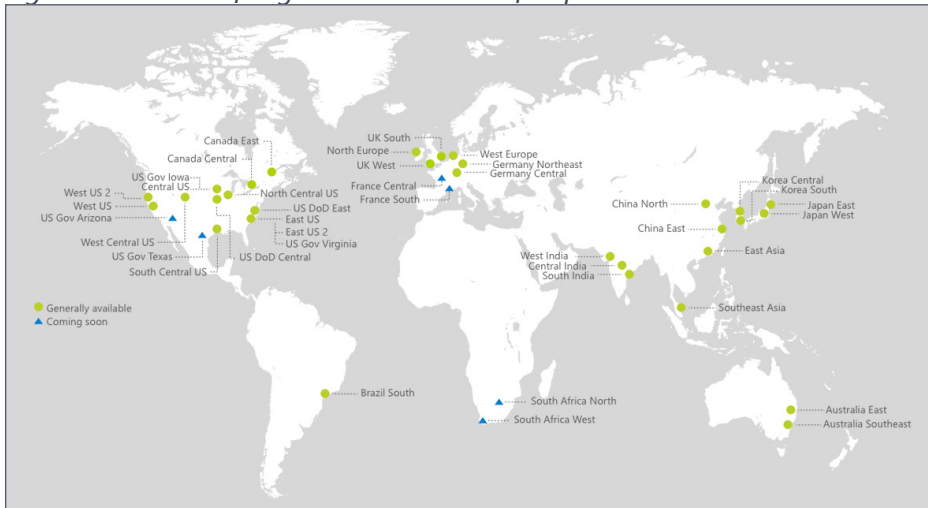
Cloud platform

Cloud platform and hybrid-deployment capabilities

- Utilize Microsoft-hosted and managed cloud SaaS solution with a 99.9% financially backed uptime SLA and double redundant business continuity and disaster recovery support
- Choose to deploy the solution in any one of 34 regions (and growing), including North America, EMEA, and APAC
- Utilize hybrid deployment capability for your store. You can choose a low footprint cloud-only solution, add device-level offline capability to one or more devices in a store, or deploy store-level offline capability (using Retail Store Scale Unit) for enabling store operations during Internet disruption
- Seamlessly switch between online and offline processing on Point of Sale, without disruption or loss of state to deal with network unreliability. Switch to offline mode on-demand to operate POS with low latency
- Use POS app on Windows, iOS, Android or in a browser
- Use a wide range of OPOS peripheral devices either locally connected or connected with a shared hardware station
- Troubleshoot issues using centralized access to diagnostic logs from both cloud hosted and in-store components in Lifecycle Services (LCS) portal
- Restore your environment to a previous state using point-in-time restore capability

Cloud platform

Figure 13: Microsoft's global data center footprint
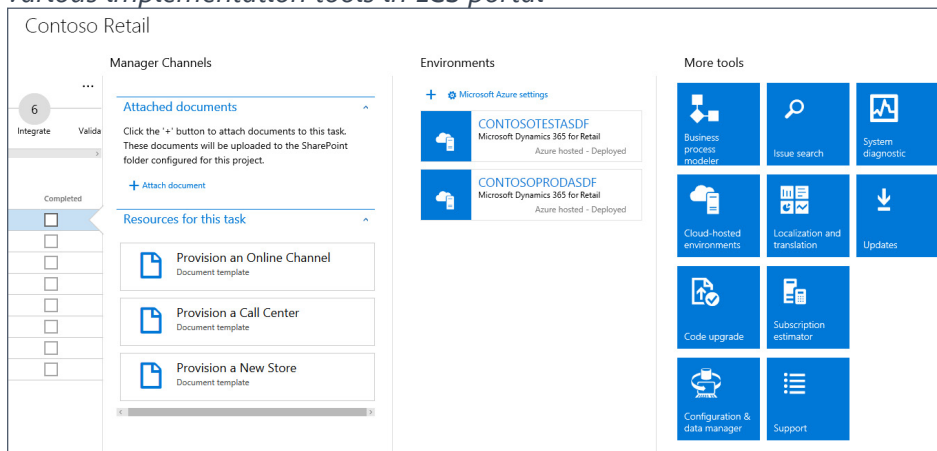
Cloud platform

Integration and implementation capabilities

- Utilize unified business logic (Commerce run-time) across all channels and platforms (including iOS, Android, Web), as well as between cloud and in-store and on-device components to provide a unified experience for developers and a predictable experience for customers
- Deploy the system as a standalone system with out-of-box capabilities or selectively integrate with existing systems for financials, inventory management, taxation, payments, shipping, e-commerce, etc.
- Integrate easily with external systems using Data Import Export Framework
- Utilize pre-prepared developer environments, with a robust set of development tools including Visual Studio add-ins and templates, integration with Visual Studio Team Services for source control, build, and work tracking, and other application-specific tools
- Easily copy configurations of standard legal entities, version, and reuse these, to speed up implementation times
- Implement your own interactive task guides for back office business processes to easily train new employees
- Use peripheral devices simulator to easily validate your scenarios end-to-end, during implementation, and to assist with troubleshooting peripheral device issues
- Leverage a global ecosystem of Microsoft implementation partners, Value Added Resellers, as well as Microsoft's 1st-party consulting services

Cloud platform

Figure 14: You can deploy and monitor your cloud environments access various implementation tools in LCS portal

Cloud platform

Cloud platform

Extensibility via extension points

Source code "sealing" is a critical step for the success of Dynamics 365 for Retail. It enables Microsoft to provide Continuous Integration and Continuous Deployment (CICD) of updates/fixes to the cloud enabled solution with zero to minimal impact on retailer's customizations resulting in avoidance of disruptions on their day-to-day operations. It averts the need to perform code merge when applying Microsoft updates. It reduces total cost of ownership for both Microsoft and for retailers.

- Provides specific extension points for the following components in Dynamics 365 for Retail:
  - Retail Headquarters
  - Commerce Runtime
  - Hardware Station
  - Modern POS/Cloud POS
  - Channel database
- Provides specific extension points for the following retail components in Dynamics 365 for Finance and Operations:
  - Commerce Runtime
  - Hardware Station
  - Modern POS/Cloud POS
  - Channel database
- Enables customers or partners to extend Customer entity, Sales order header and line, and cash-and-carry transaction header/line by providing user-defined attributes without having to write code
- Enables customers or partners to follow the existing Life Cycle Services (LCS) process to accept and download updates/fixes to the existing extensions
- Enables customers or partners to approach Microsoft with requests for new extensions or changes to existing extensions
- Enables customers or partners to follow the existing Microsoft AppSource process to upload any custom applications that they build by leveraging the extensions as well as easily discover curated ISV solutions

Cloud platform

Hardware and peripheral devices support
- Run POS on a wide range of devices and form factors, screen sizes, and resolutions, including touch-based tablets, all-in-one computers, mobile phones, large screen displays such as Microsoft Surface Hub, and keyboard and mouse driven workstations, across Windows, iOS, and Android operating systems as native or browser-based app
- Utilize a wide ecosystem of OPOS and Windows Driver-based peripheral devices with POS including payment devices, barcode scanner, receipt printer, line display, scale, etc.
- Deploy peripheral devices connected locally to POS via wired or Bluetooth interface, as a Network Addressable Peripheral, or in a shared configuration with a Hardware Station used by POS in a wireless mode
- Use peripheral devices simulator to easily validate your scenarios end-to-end in a pre-production virtual environment during implementation, as well as assist with troubleshooting peripheral device issues
- Leverage Microsoft peripheral device certification program (coming soon) to identify list of supported peripheral devices to streamline implementation and deployment

Cloud platform

Payment capabilities
- Accept payments across all channels including Retail store, Call Center, Retail experience app, and 3rd-party e-commerce store, as well as in the back office for sales order processing to capture payments
- Accept credit, debit, check, cash, loyalty card, and other payment methods, including Credit and Debit support for Chip and PIN, Chip and Sign, Tap to Pay such as Apple Wallet, Android Pay, etc.
- Accepts payments with payment device connected locally to POS or remotely to a shared Hardware Station
- Use out-of-the-box VeriFone and MasterCard payment solutions, or other Dynamics ISV payment solutions. You can also integrate with other payment service providers by using Payment SDK

Cloud platform

Microsoft ecosystem

- Leverage one of several support plans along with comprehensive on-line documentation to suit your implementation and ongoing support and training needs
- Leverage a global ecosystem of Microsoft trained implementation partners, Value Added Resellers, as well as Microsoft's 1st-party consulting services
- Utilize a wide range of ISV solutions to easily address your unique business needs
- Connect with Microsoft during various outreach and engagement events such as Ignite, Dynamics technical conference, etc.

Privacy, security and compliance capabilities

- Solution development using Security Development Lifecycle, a mandatory Microsoft process that embeds security requirements into every phase of the development process
- Comprehensive compliance framework to help you comply with your specific requirements. The solution meets many industry standards including PADSS 3.2, SOC 1 and 2, ISO 27018, and many others
- Constantly monitored environments to help protect against online threats, including regular penetration testing, and use of special-purpose security devices for firewall, NAT, and IP filtering functions
- Safeguards for your data using the highest levels of encryption, both in flight and at rest
- Security audit logs available to track system access
- Stringent, privacy, and transparency policies. You retain full ownership of your data, and your data is never mined for advertising. You know where your data is stored, who can access it, and under what conditions. If you ever choose to terminate the service, you can take your data with you
- Azure Active Directory with optional support for multi-factor authentication, as well as extensible support for biometric, security device, and other alternate forms of authentication, using Open ID

Cloud platform

Cloud platform

Figure 15: Microsoft Trust Center portal with detailed resources to help you understand and learn more about our policies

Cloud platform