

Dynamics 365 Commerce



DYNAMICS 365 FOR COMMERCE

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Cognitive Convergence is Subject Matter Expert in Office 365, Dynamics 365, SharePoint, Project Server, Power Platform: Power Apps-Power BI-Power Automate-Power Virtual Agents.

Our Microsoft Dynamics 365 Consulting, Development, Customization, Integration services and solutions can help companies maximize business performance, overcoming market challenges, achieving profitability and providing best customer service.

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OBJECTIVE

Provide exceptional experiences across traditional and emerging channels, or across different business models, scenarios, and personas. Connect digital, in-store, and back-office operations on a unified commerce platform. Empower customers to decide when, how, and where they want to purchase—on any device, and across online and offline channels. Empower customers to buy online and pick up in store or receive home delivery via connected ordering and fulfillment tools. Centrally manage promotions across all channels, organized by store, catalog, or customer affiliation, using accurate, real-time omnichannel sales and cost data. Use purpose-built functionality and capabilities needed by B2B organizations and users for self-service buying experiences.

DYNAMICS 365

Microsoft Dynamics 365 is a cloud-based business applications platform that combines components of customer relationship management (CRM) and enterprise resource planning (ERP), along with productivity applications and artificial intelligence tools.

Some essential features of Dynamics 365 are

- Sales insights
- Mobility
- Connection with LinkedIn sales navigator
- Email integration with Outlook 365
- Activity log and connections to CRM
- Smart search
- Dashboards based on customer data



Microsoft
Dynamics[®] 365

DYNAMICS 365 ONLINE VS ON-PREMISES

There are a number of significant differences between Microsoft Dynamics CRM 365 on-premises vs online. Each model should be carefully examined in deciding the best model for business. Microsoft CRM on-premises was released in 2003 and went through several versions (1.2, 4, 2011) before the online model was released in the 2013 version.



Online

The online version is a true cloud/Software as a Service (SaaS) application. SaaS applications are essentially rental models; monthly fee is paid to use the application. This makes the online version an opex or operating expense vs a capex or capital expense. No hardware or supporting software needed – Microsoft Dynamics CRM and 365 Online require no infrastructure hardware or software, users simply run the application through a browser, the Outlook application or mobile application.

On-Premises

Microsoft Dynamics CRM & 365 On-Premises gets installed on servers either in data center or at a hosting partners. The on-premises version is a capex or capital expense; need to pay for the licensing upfront (or over 3 years via the interest free spread pay option Microsoft offers). The hardware and infrastructure related costs are also capex. The on-premises model requires Microsoft SQL server, Windows Server, Internet Information Services, and additional supporting requirements.

DYNAMICS 365 MODULES/APPS

Dynamics 365 offers users several modules they can choose from to build a system that fits their unique needs. Each module/app ring-fences an area of CRM or ERP functionality, and can be used in conjunction with a wider package of apps, or on its own.

Organizations can choose from the following Microsoft Dynamics 365 applications and features:

1. Customer Insights
2. Customer Service
3. Field Service
4. Finance and Operations
5. Marketing
6. Project Operations
7. Commerce (Previously known as Retail)
8. Sales



We help to deliver unified, personalized, and seamless buying experiences for customers and partners

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COMMERCE

Dynamics 365 Commerce—built on the proven Dynamics 365 Retail capabilities—delivers a comprehensive omnichannel solution that unifies back-office, in-store, call center, and digital experiences. Dynamics 365 Commerce enables you to build brand loyalty through personalized customer engagements, increase revenue with improved employee productivity, optimize operations to reduce costs and drive supply chain efficiencies, ultimately delivering better business outcomes.

This module enables the creation of digital experiences using built-in web authoring and development tools to produce engaging and intelligent digital storefronts. A connected marketing and headless commerce platform further enable the seamless management of content, assets, promotions, inventory, and pricing across all channels.

- **Everything to build and run digital commerce:** Streamline your business and end-to-end commerce solution that scales to your needs across traditional and emerging channels. Built-in web authoring and development tools enable you to create engaging intelligent digital storefronts, while a connected marketing and headless commerce platform enables seamless management of content, assets, promotions, inventory, and pricing across channels.
- **Build loyalty and exceed customer expectations:** Use clienteling tools to gain a comprehensive view of your customer and respond to their needs at every level of engagement, based on customer profile, history, and preferences that flow across physical and digital channels. Empower your employees to foster lasting relationships through AI-driven recommendations, customer insights, and loyalty programs that elevate brand appeal.
- **Flexible and intelligent omnichannel experience:** Unify physical and digital commerce by providing consistent experiences to customers across cloud search and discovery, product reviews, wish lists, inventory, gift cards, and loyalty. Allow customers to purchase when, how, and where they want, on any device—while providing choice around modern payment methods and product collection or delivery.
- **Streamline operations using AI in the cloud:** Drive omnichannel commerce experiences and integrated, optimized back-office operations through ingrained, pervasive, and context-aware cloud intelligence. Use advanced merchandising, inventory management, distributed order management, and pricing and promotion to innovate and stay ahead of competition. Derive insights by visualizing and analyzing comprehensive and consistent data across all aspects of your business. Use AI-driven technologies to provide accessible websites, protect your business against payment fraud, and efficiently moderate user-generated content like ratings and reviews.



Why choose Dynamics 365 for Commerce?

Preferred vendor

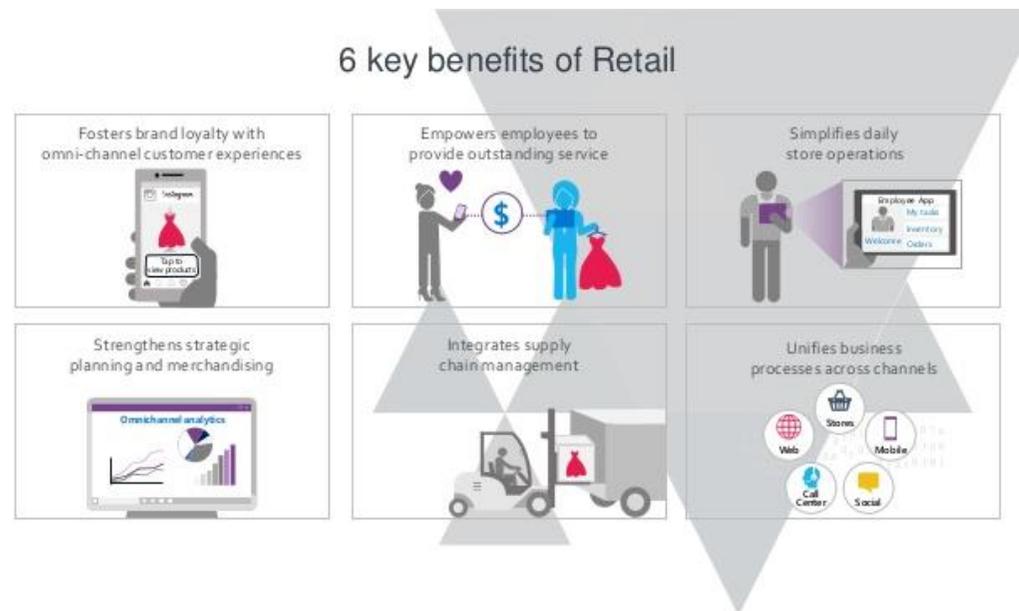
A survey asked 6,700 enterprise decision-makers worldwide about their ERP purchasing intentions. More than half chose Microsoft Dynamics as their preferred next investment.

Lower costs

Research by Panorama Consulting identified Microsoft Dynamics as the Tier 1 ERP solution with the lowest total cost of ownership.

Market share

In the manufacturing industry Microsoft Dynamics has greater market share than other Tier 1 ERP vendors.



What are the benefits of using Dynamics 365 Commerce?

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

DYNAMICS 365 COMMERCE CAPABILITIES

Unified Commerce

- **Omni-Channel Experience**—Give customers the convenience and flexibility to buy instore, pick up in other locations, or get home delivery through optimized ordering and fulfilment tools.
- **Modern POS**—Fully functional and customizable modern point of sale (POS) usable on any device, even offline, with no disruption.
- **Ecommerce**—An ecommerce platform supporting third-party storefronts, including features such as a rich consumer API, payment integration and a tailored retail experience app for iOS and Android devices.
- **Order Management**—Create customer orders both synchronously and asynchronously.
- **Payment Processing**—Accept credit, debit, cheque, cash, loyalty cards and other payment methods including Tap to Pay such as Apple Pay.
- **Call Centres**—Take customer orders directly over the phone using a responsive UI, accessible via any browser.
- **Social Integration**—Connect with customers, implement promotions and publish content to social media channels.

Manage Merchandising

- **Product Management**—Create product catalogues and categorization schemes that can be targeted to or shared between channels to enrich products with descriptions, images, videos and rich text content.
- **Categorization**—Centrally manage products using n level deep product category hierarchies for bulk categorization of products.
- **Product Attributes**—State product attributes and define groups which can be categorized and used across products.
- **Define Pricing**—Define product, category, catalogue, customer or channel specific pricing rules and discounts.
- **Orders**—Pick and receive transfer orders and purchase orders.
- **Manage Data**—Easily bulk edit data using native integration with Office 365 and Microsoft Excel.

Let us engage you across traditional and emerging channels

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Modern Store Experience

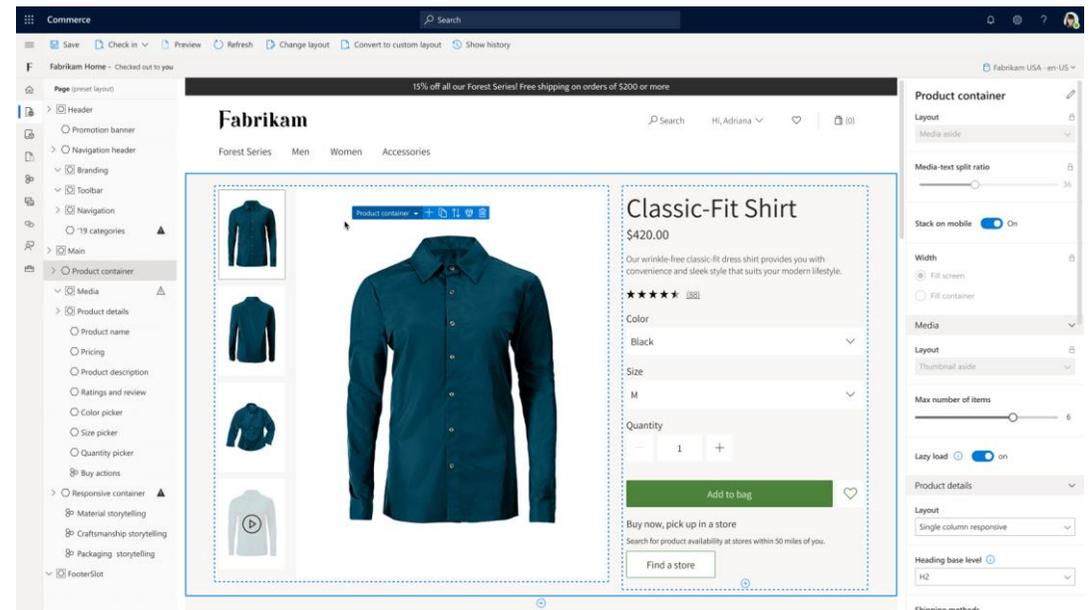
- **Daily Operations**—Perform daily tasks quicker using automated and streamlined workflows.
- **Employee Productivity**—Create and use schedules, time clock in/out and utilize manager dashboards to improve efficiency.
- **Inventory Management**—Define automated replenishment rules for creating purchase orders.
- **Consumer Convenience**—Accept orders using a range of ordering and fulfilment modalities and allow customers to sell or return outside of the assortment for that store, with or without a receipt.

Customer Engagement

- **Customer Profile**—Let customers use social identities (Facebook, Google or Microsoft accounts) to engage with business.
- **Loyalty Capabilities**—Configure and manage loyalty programs, promotions, discounts and gift cards seamlessly across channels.
- **Targeted Promotions**—Use customer segmentation to provide targeted promotions.
- **Email Receipts**—Send email receipts to customers.
- **Promotions**—Define pricing and promotion activation and deactivation times and dates.

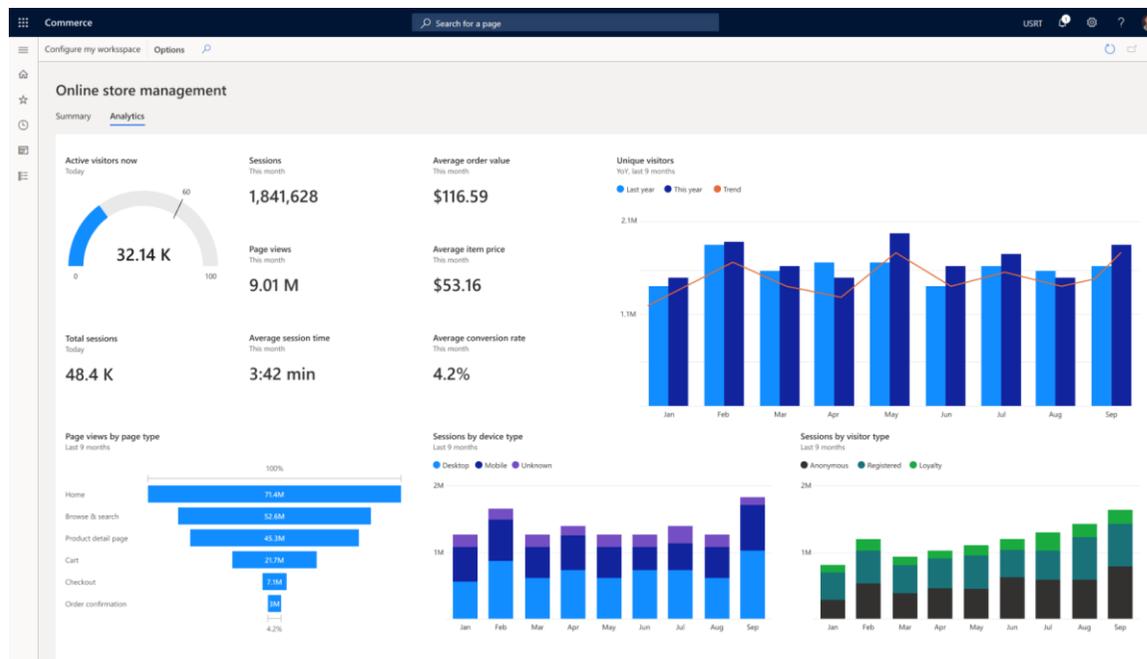
Intelligent Operations

- **Workspaces**—Leverage personalized workspaces and view role-based KPIs and reports with interactive data visualizations using Microsoft Power BI.
- **Reports**—View business reports directly within the POS, covering sales metrics, cash management, employee productivity and summarized X and Z reports.
- **Recommendations**—Provide personalized product recommendations backed by advanced machine learning technology to enhance up-sell and cross-sell opportunities.
- **Profitability**—Maximize profitability with AI-driven recommendations of the right products at the right time and price. Make informed, cost-effective inventory supply decisions with advanced analytics and machine learning.



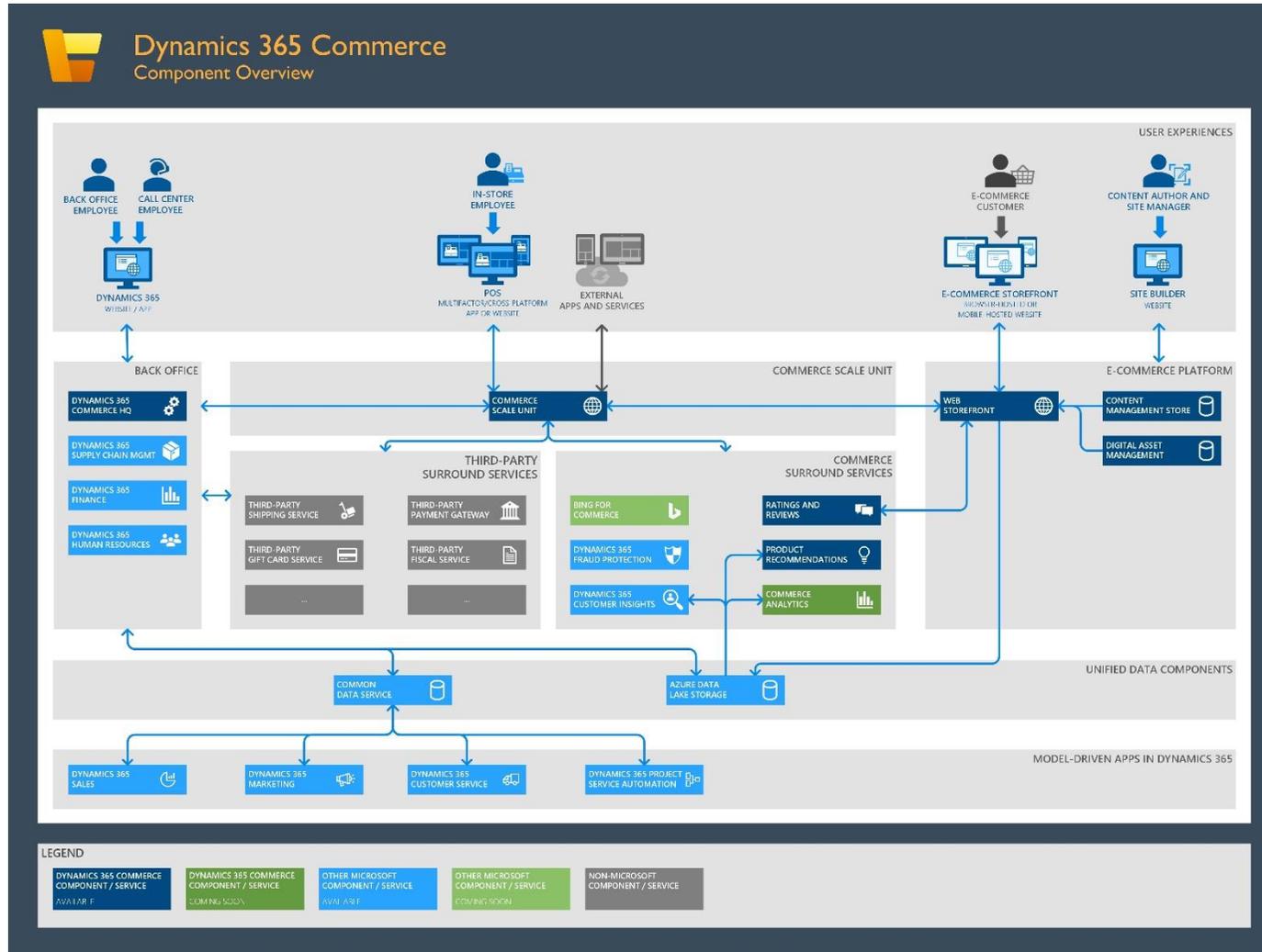
Adaptable and Secure Platform

- **Integration**—Integrate with existing systems using the Data Import/Export Framework.
- **Customization**—Customize solution with a configurable and extensible platform that expands and grows to fit the business.
- **Training**—Implement own interactive task guides for back-office business processes to easily train new employees.
- **Security**—A comprehensive compliance framework meeting industry standards including PA DSS 3.2, SOC 1 & 2, ISO 27018 and many others, to help comply with the specific business requirements.
- **Privacy**—Safeguard data using the highest levels of encryption so company know where their data is stored, who can access it and under what conditions.



DYNAMICS 365 COMMERCE ARCHITECTURE OVERVIEW

The following illustration shows an overview of Dynamics 365 Commerce components.



ARCHITECTURE BENEFITS

Omni-Enabled Headless Commerce Engine

The Commerce Scale Unit hosts the headless commerce engine. It serves as the central integration point for all commerce business logic, and powers a complete omni-channel solution across physical and digital stores. The Commerce Scale Unit is built by using a portable architecture, and allows for flexible hosting options across cloud, edge, and hybrid topologies.

The headless commerce engine powers all native Dynamics 365 Commerce channels, including in-store and e-commerce channels. It also serves as the single integration point for third-party channel solutions. Therefore, those solutions can take advantage of the power of Dynamics 365 Commerce business logic and integration with other commerce-related services that are provided by Microsoft and independent Software Vendors (ISVs).

Interconnected Business Processes

The platform that is shared among the various Dynamics 365 business applications, such as Dynamics 365 Commerce, Dynamics 365 Supply Chain Management, and Dynamics 365 Finance, provides a set of interconnected business processes that users can immediately benefit from. All back-office capabilities across these applications are built on the same web experience and data stores. Therefore, there is a seamless flow of business processes across various functions in the organization, but custom integrations across applications and services aren't required. The out-of-box integration between the headless commerce engine and the back office further expands the coverage of these interconnected business processes across the back office and commerce channels.

Unified Data

Dynamics 365 Commerce provides a unified data solution through out-of-box integrations with Dataverse and Azure Data Lake Storage. Integrations and data sharing across Dynamics 365 business applications such as Dynamics 365 Sales and Dynamics 365 Marketing are supported through Dataverse. Transactional data in Data Lake Storage is used to power various analytics and insight scenarios in the Dynamics 365 Commerce solution. However, it can also be used by any third-party software integration.

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Powered by AI and analytics

Because of the accessible, persistent, up-to-date, and unified organizational data that is available in Data Lake Storage, the whole organization has a "single source of truth" that analytics, artificial intelligence (AI), and machine learning (ML) can be applied on top of. In this way, the organization can derive insights and get key performance indicators (KPIs) that can be used to optimize and automate business processes across all channels.

COMPONENT OVERVIEW

User experiences

Dynamics 365

Dynamics 365 is a collection of applications that together provide comprehensive and flexible enterprise resource planning (ERP) solutions for medium to large businesses. It provides an extensible framework and ecosystem that can be tailored to customer-specific requirements via an extensive set of partners. Dynamics 365 applications provide capabilities for their target business segments. They also take advantage of each other, and other Microsoft services and offerings, to provide solutions that help run customers' complex businesses.

POS

POS simplifies the experience for the retailers by providing Omnichannel solutions in emerging channels. These channels perform a variety of commerce business operations like cash and carry transactions, cash/shift management, customer engagement, assisted selling, clienteling, endless aisle, order processing/fulfillment, inventory management, and reporting.

Modern POS

Modern POS is a cross-platform (Windows, iOS, and Android), multi-form factor (desktop, tablet, and phone) solution for all in-store first-line workers, such as cashiers, sales associates, stock clerks, and store managers. It can be deployed as an app that has offline capabilities. Alternatively, it can be deployed in the cloud and accessed through a web browser. The application is role-based and fully configurable from headquarters. It's also highly customizable, and can be extended or integrated into third-party services by using the Retail software development kit (SDK).

In addition to standard "cash and carry" transaction processing, Modern POS includes features for assisted selling, clienteling, endless aisle, order processing/fulfillment, inventory management, cash/shift management, and reporting.

E-commerce storefront

The e-commerce storefront is the customer-facing website rendering system. It's built on the React.js framework, and uses a combination of server-side and client-side rendering to deliver responsive web experiences for one or more online channels. Although the storefront has a rich set of out-of-box capabilities, it's also highly customizable, and delivers an efficient and scalable solution for online business.

Site builder

Site builder is the web-based authoring interface for the content management and storefront website rendering systems. Visual page builder in site builder is a what-you-see-is-what-you-get (WYSIWYG) editor for site managers and content authors who perform the day-to-day workflow tasks of managing and producing the marketing content for the e-commerce experience. In site builder, a marketer can provide more marketing detail for specific products to enhance the shopping experience for consumers. In addition, site builder includes integrated accessibility reporting, URL management, site map generation, and image focal point management, among other features.

External services and apps

The headless commerce engine that is exposed via the Commerce Scale Unit lets partners and customers take advantage of all the same channel-side capabilities and business logic that are used by the out-of-box e-commerce and point of sale (POS) components. Therefore, by tapping into the same data and business process capabilities, it allows for seamless omni-channel capabilities across out-of-box channel components and partner-provided/customer-developed services and applications. It also provides access to all out-of-box and ISV-developed surround services that are available through the Commerce Scale Unit.

DYNAMICS 365 COMMERCE PRICING

Commerce	Price for user's first Dynamics 365 app	Price for user's subsequent qualifying Dynamics 365 app
<u>Commerce</u>	₹ 8,330 Per user/month	
<u>Fraud Protection</u>		₹ 6,60,965 Per tenant/month
<u>Customer Insights</u>	From ₹ 99,155.30 Per tenant/month	

DYNAMICS 365 NO CODE SOLUTIONS

Dynamics 365 includes preconfigured entities, fields, forms, views, security models, reports, and workflows that help businesses manage their sales, marketing, and customer service needs. These out-of-the-box features are designed to provide functionality that is common to most sales, marketing, and service processes.

Microsoft Dynamics 365 includes many out-of-the-box tools to customize business logic into Dynamics 365, including the ability to build custom entities, fields, forms, views, security models, and workflow to inject specific business needs into Dynamics 365.

Dataverse

The Common Data Model is a secure business database implemented by Microsoft as a service as the Common Data Service. The model holds typical business entities such as Accounts, Contacts, Opportunities, Products, etc. and those entities hold typical fields such as addresses, phone numbers etc. A business can then take this model and extend it as needed – add custom fields, create custom entities etc. The idea is that having a common data model as a service allows for out of the box integrations to many other products and services, such as PowerApps, Flow etc.

The Common Data Service was previously implemented as a database/schema service separated from Dynamics 365 but is now tightly coupled with Dynamics 365.

Model Driven Apps

Model-driven apps are built using the Dynamics 365 framework and can only connect to the Common Data Service as their data source. These applications are more suited to complex scenarios with multiple functions and utilize the Unified Interface UX.

While building a model-driven app, there is an advantage of the great features of the Dynamics 365 platform, which includes building entities, forms, business rules, business process flows, workflows, plugins, API, ALM, etc.

Also, if Dynamics 365 is used as an organization and open its instance in PowerApps, all D365 entities can be seen and take advantage of those to build apps:

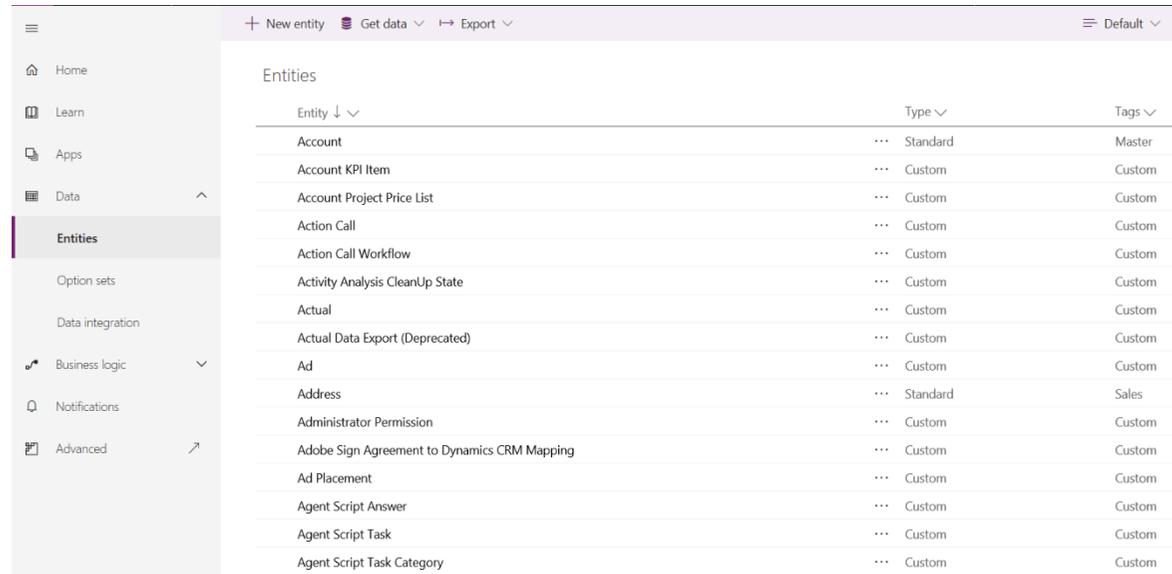
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Entity ↓	Type ↓	Tags ↓
Account	Standard	Master
Account KPI Item	Custom	Custom
Account Project Price List	Custom	Custom
Action Call	Custom	Custom
Action Call Workflow	Custom	Custom
Activity Analysis CleanUp State	Custom	Custom
Actual	Custom	Custom
Actual Data Export (Deprecated)	Custom	Custom
Ad	Custom	Custom
Address	Standard	Sales
Administrator Permission	Custom	Custom
Adobe Sign Agreement to Dynamics CRM Mapping	Custom	Custom
Ad Placement	Custom	Custom
Agent Script Answer	Custom	Custom
Agent Script Task	Custom	Custom
Agent Script Task Category	Custom	Custom

Power Apps

Powered by Dynamics 365's Common Data Service for Apps, PowerApps allows organizations to create their own responsive business applications with the click of a button. Employee engagement surveys, cost estimators, budget trackers, to-do lists, booking apps; these can all be created for web and mobile without the need for coding knowledge or input from developers.

PowerApps' drag-and-drop interface enables anyone to build and launch richly functional, professional apps without writing a single line of code. The apps can be easily integrated with Office 365 and Dynamics 365 to gather and utilize business data, and help engage customers.

Power Automate

A sister-service to PowerApps, Microsoft Flow-Power Automate uses the same Common Data Service for Apps to help users build automated workflows that take care of repetitive administrative tasks.

There are already thousands of ready-made workflows — digital sequences that trigger predefined actions when certain activities occur — for users to take advantage of, from creating CRM leads when someone tweets a particular word or phrase, or tracking Outlook emails in an Excel spreadsheet, to sending an email to a group when a data alert is triggered in analytics.

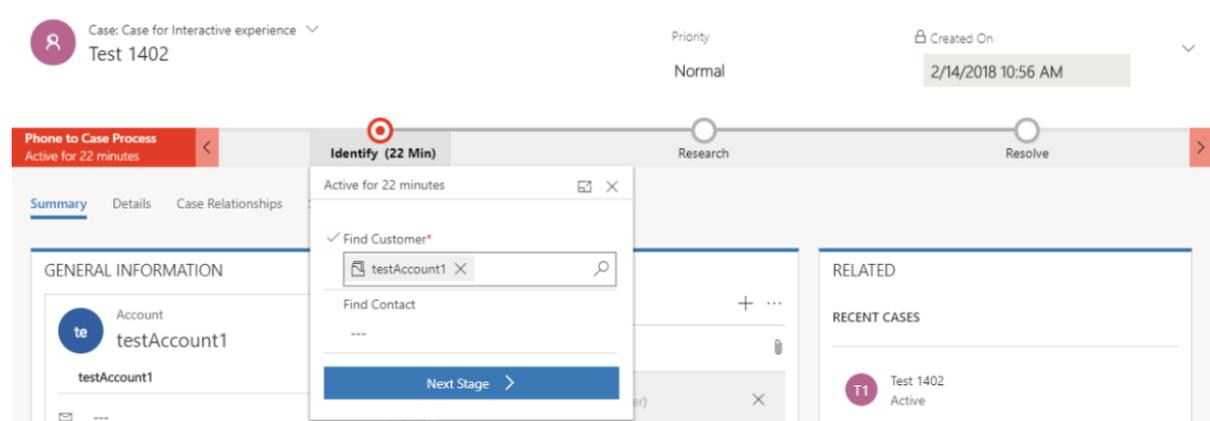
These workflows can be used to connect Microsoft services to third-party apps and programs, without the need for complex custom integrations.

Business Process Flows

A Business Process Flow in Microsoft Dynamics 365 is a tool which is meant to help guide users through a business process in the system. Business process flows are representations of business processes and are displayed visually in Dynamics 365 as a heading across the top of an entity form.

A business process flow is composed of Stages and within each stage there are steps to complete which are fields. In the business process flow heading, a user can see which stage they are at in the process, and which steps they need to complete before they proceed in the process.

Business process flows require users to complete certain steps before completing the process and if needed users can also be allowed to jump stages. They are available for out-of-the-box entities and even for custom entities. Additionally, an entity can have many business process flows associated with it. They are highly configurable to fit organizational needs.



Business Rules

Business rules are provided in a simple to use drag-and-drop interface which allows to quickly implement and easily change some of the most commonly used rules. The good thing with this is that a business rule runs in real-time so user will be able to see the action as soon as the condition has been met (unlike a workflow that will run on form save). Business rules can be applied on a Main Form or Quick Create Form. They will also work online, on Microsoft Dynamics 365 for Tablets and Dynamics 365 for Outlook.

Here are the actions can be taken by configuring a simple drag-and-drop Business Rule on a form:

- Set Field Value
- Clear Field Values
- Set Field Requirement Levels
- Validate Data & Show Error Messages
- Show Fields
- Hide Fields
- Enable Fields
- Disable Fields
- Create Business Recommendations



Charts and Dashboards

A chart is a graphic representation of data from multiple records of an entity. Charts are integrated with grids in the web application. They are built from the query on the data. When the query is updated for the data, the associated charts also get updated automatically.

Several different types of charts can be created within Microsoft Dynamics CRM:

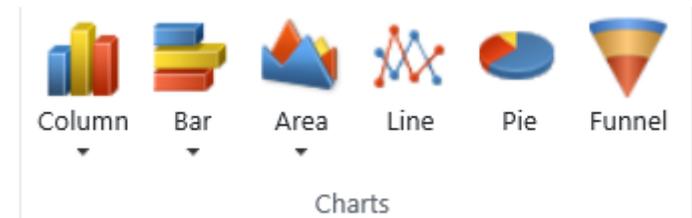
Charts are available for all views on CRM. There are 2 types of charts: system and personal.

- **System Charts.** System charts can only be created by users with the security roles of System Administrator or System Customizer. These charts are by default visible to all users. These charts can be customized by going on to the settings area and customizing the system.
- **User Charts.** Personal charts can only be seen by the users that create them or the ones to whom these charts are shared with. These charts can only be shared if the owner has sharing privileges.

Dashboards host vast set of information in forms of charts and tasks. Dashboards can be created and customized, and users can also create their own personal dashboards.

Out-of-the-box dashboards for Microsoft Dynamics CRM are as follows:

- Customer Service Operations
- Customer Service Performance
- Customer Service Representative



- Marketing
- Sales Activity
- Sales Performance

Customizing Entities, Fields, Forms and Views

Entities are used to model and store business data in a Model-Driven Apps. Conceptually they are like tables in a relational database. The Common Data Model defines quite some build-in entities like contact, account, case... but almost always customizers will have to create new entities. Customizing entities includes adding fields to entities, changing the schema, and creating custom entities.

Fields are the equivalent of columns in the database table, just as an entity correlates to a table. Administrators have the ability to customize fields in a number of ways. They can define a field's name, data type, requirement level, search ability, security, and auditing. Remember: fields are specific to an entity, and a field created in one entity is not available in other entities. Fields are classified as either of the following:

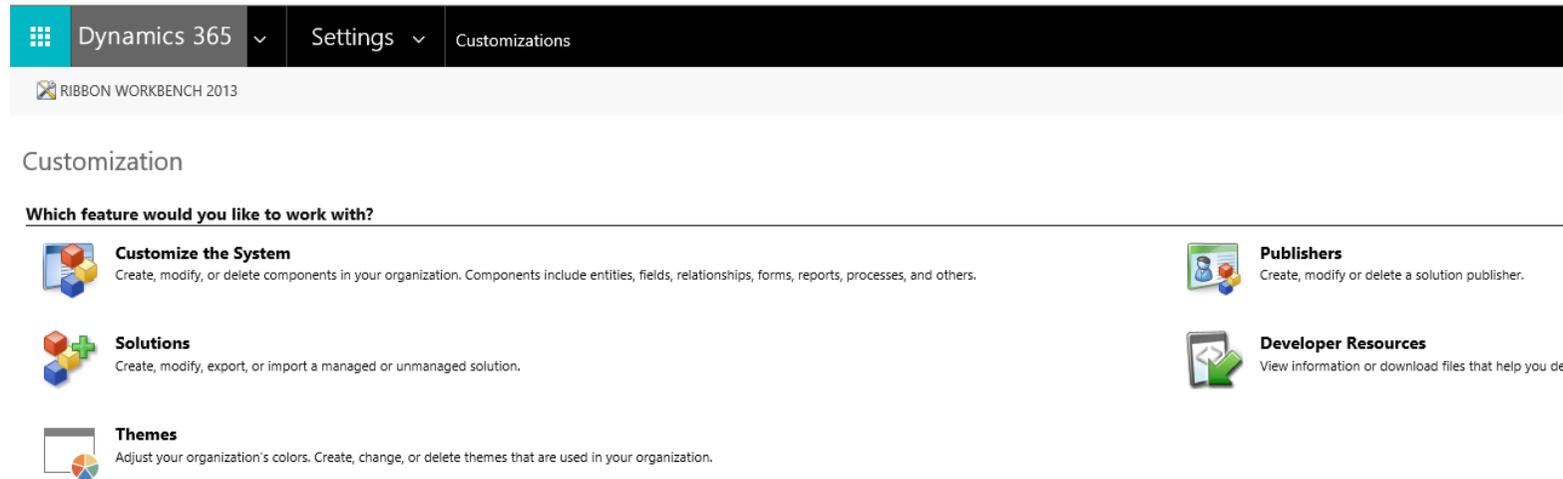
- **System fields:** These are out-of-the-box fields that cannot be deleted but can be modified to some extent.
- **Custom fields:** These are fields that are built within the system and can be modified and deleted.

Forms can be modified to show only those fields that are necessary for business processes. There are several types of forms available: **Main, Main – Interactive, Mobile, Card, Quick Create, and Quick View**. The Main, Main – Interactive, Card, Quick Create, and Quick View forms are available in the web application, Dynamics 365 for Outlook, and Dynamics 365 for tablets. The Mobile form is used for Dynamics 365 for phones.

Views are grids with records listed under select column headings. It is a type of saved query. Users can select different views to look at a subset of records of the same entity that fit into pre-specified filter conditions. There are three main types of views: public, system, and personal.

- **Public Views**
These are the views that come with the application. Custom views that an organization creates are also public views. One of these public views can be defined as a default view. When a user selects an entity by clicking on it in the navigation pane, the default view is what gets displayed.
- **System Views**
These views, similar to Public views, are automatically created by CRM on installation. They are used for unique situations within the application. System Views include Associated View, Advanced Find View, Lookup View, and Quick Find View
- **Personal Views**
Users can create their own views using the Advanced Find tool and save them as personal views.

All these customizations can be made through Dynamics 365 Settings > Customizations > Customize the System:



DYNAMICS 365 DEVELOPMENT SOLUTIONS

Web API

The Dynamics 365 Web API provides a development experience that can be used across a wide variety of programming languages, platforms, and devices to access Dynamics 365. The Web API implements the OData (Open Data Protocol), an OASIS standard for building and consuming RESTful APIs over rich data sources. Because the Web API is built on open standards, no assemblies are required for a specific developer experience. HTTP requests can be composed for specific operations or use third-party libraries to generate classes. It uses **JSON** in the body of the HTTP requests and response.

Using Web API following CRUD operations, Actions and Functions can be executed:

- **Basic Operations** (Create, Update, Delete)

- **Retrieve Operations** (Retrieve, Retrieve Multiple, Change Tracking)
- **Batch Operations**
- **Functions** (Bound/unbound functions with/without parameters)
- **Actions** (Bound/unbound actions with/without parameters)
- **Metadata** (Retrieve entity/attribute metadata)

SOAP Web Service

The Organization service, also sometimes known as the “SOAP endpoint,” has been available since Microsoft Dynamics CRM 2011. The HTTP requests and responses are sent using **XML**, which must conform to specific schema and namespaces. The Organization service is optimized for use with **.NET**. The Microsoft Dynamics 365 SDK provides a set of assemblies and tools which allow to generate strongly typed classes and proxies that streamline the development process and enjoy a better development experience using Microsoft Visual Studio.

Business logic that runs in plug-ins or workflow assemblies on the server expect to use the Organization service. Input and output parameters use specific classes defined with the assemblies that support the Organization service.

FetchXML

FetchXML is a proprietary **query language** that is used in Common Data Service. It's based on a schema that describes the capabilities of the language. The FetchXML language supports similar query capabilities as query expressions.

In Dynamics 365 WebAPI, data can be retrieved using OData queries, but if there is some complex requirement, it's better to query using fetchXML. FetchXML have two main advantages - it can be easily generated using Advanced Find, and it is more readable. Even Joins and Aggregate functions can be used in fetchXML queries.

Web Resources

Web resources represent files that can be used to extend the Microsoft Dynamics 365 web application such as html files, JavaScript, and Silverlight applications. Organizations can use web resources in form customizations, the SiteMap, or the application ribbon because they can be referenced by using URL syntax.

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Web resources are stored as records in the database, they can be managed programmatically by using the standard techniques to create, retrieve, and update records. Text-based web resources (JScript, CSS, XML, XSL, and HTML) can be edited and saved in the application.

Client-Side JavaScript programming

The use of JavaScript in Dynamics CRM allows to manipulate CRM forms and data in real time using lightweight and easy to use syntax. Because JavaScript is commonly used in web development, it has been heavily extended with methods that allow developers virtually limitless possibilities. This does not, however, mean that all tools available should be applied to Dynamics CRM environments.

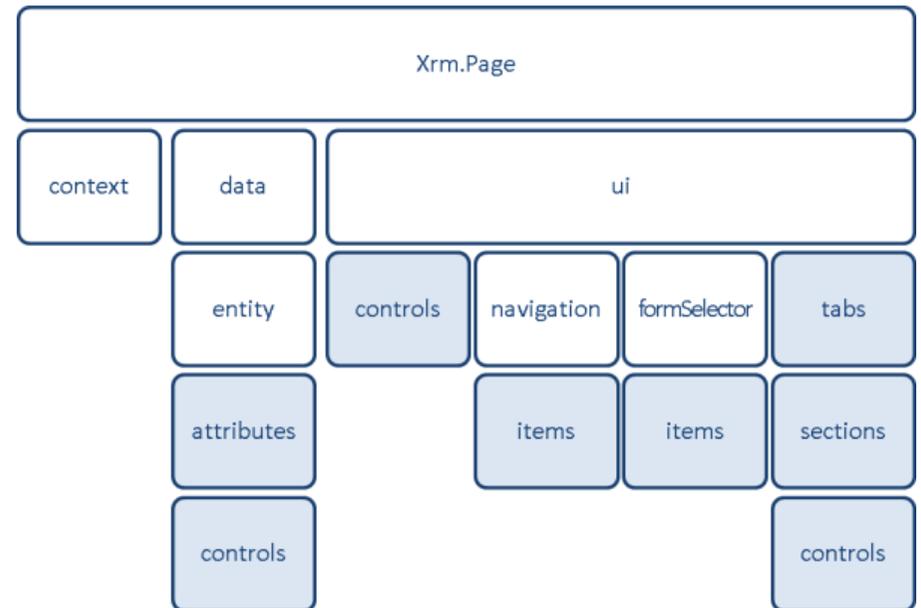
Microsoft Dynamics CRM uses the XRM Page Hierarchy JavaScript model as displayed.

The Xrm.Page object serves as a namespace object to consolidate three objects on the form:

Xrm.Page.context: Xrm.Page.context provides methods to retrieve information specific to an organization, a user, or parameters that were passed to the form in a query string.

Xrm.Page.data.entity: Xrm.Page.data provides an entity object that provides collections and methods to manage data within the entity form.

Xrm.Page.ui: Xrm.Page.ui provides collections and methods to manage the user interface of the form.



Plug-ins

A plug-in is a custom business logic that integrates with Microsoft Dynamics CRM to modify or extend the standard behaviour of the platform. Plug-ins act as event handlers and are registered to execute on a particular event in CRM. Plugins are written in either C# or VB and can run either in synchronous or asynchronous mode.

Some scenarios where plugins can help are:

- Execute some business logic such as updating certain fields of a record or updating related records, etc. when a specific record is created or updated.
- Call an external web service on certain events such as saving or updating a record.

- Dynamically calculate the field values when any record is opened.
- Automate processes such as sending e-mails to customers on certain events in CRM.

CHALLENGES

Like most digital transformations, implementing Microsoft Dynamics 365 has challenges that need to be overcome. Here are a few of the challenges to keep in mind when embarking on Microsoft Dynamics 365 transformation:

1. **Privacy**

It can be a bit difficult to believe but there are still companies that prefer on-premises CRM than cloud-based ones. They want full control of their data and privacy. Unfortunately, the latest version of Dynamics CRM—Dynamics 365—is a cloud-only (SaaS) CRM. Even if Microsoft is a trustworthy company, some companies are still not embracing cloud technology fully.

2. **Flexibility**

Microsoft Dynamics 365 is one of the more flexible ERP systems in the digital transformation space. This is mostly a good thing, but it can also create unique problems during implementation. Flexibility leads to more decisions and potential analysis paralysis, so it is important for business process management activities to drive the design of software.

3. **Cloud Infrastructure**

Microsoft Dynamics 365 is a pure cloud solution. Though cloud ERP is gaining market share and adoption at the expense of on-premises solutions, it isn't for everyone. Some multi-national organizations with operations in developing countries with unreliable infrastructures, for example, are simply not able to realistically adopt cloud solutions across the entire company.

4. **Data storage capacity**

Data and file storage limit issues are common especially to those who use Dynamics 365 online. To compensate, Microsoft made add-on storage capacity available. However, small and mid-size businesses don't prefer this kind of additional expenses.

5. **A little expensive**

Dynamics 365 is considered a bit heavy on the pocket. Especially when it comes to adding extra portal sites either for QA, development or even for user acceptance testing, there is a heavy cost involved. Also, there is a repeated monthly cost which is tough to bare especially by the small enterprises.

CONCLUSION

Dynamics 365 Commerce provides retailers with a consistent management solution across all retail channels. The application is designed to produce an excellent customer experience across traditional and modern digital channels.

Since Dynamics 365 Commerce is based on Microsoft products and technology, the solution allows you to maximize your investments with a quick return, since you are ready to innovate by means of adding functionalities at a faster and more profitable pace, which is ideal for growing retailers.

Cognitive Convergence is currently helping a handful of clients implement Dynamics 365, so we can attest that it is a strong product when used in the right situations. The easiest way to mitigate these risks is to hire an independent, technology-agnostic digital transformation consulting firm such as Cognitive Convergence to help validate your software decision, prepare for implementation readiness, help manage your organizational change program, and provide quality assurance over your system integrator.



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