

Dynamics 365 Sales- Customization, Development and Consulting Practice



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 Sales 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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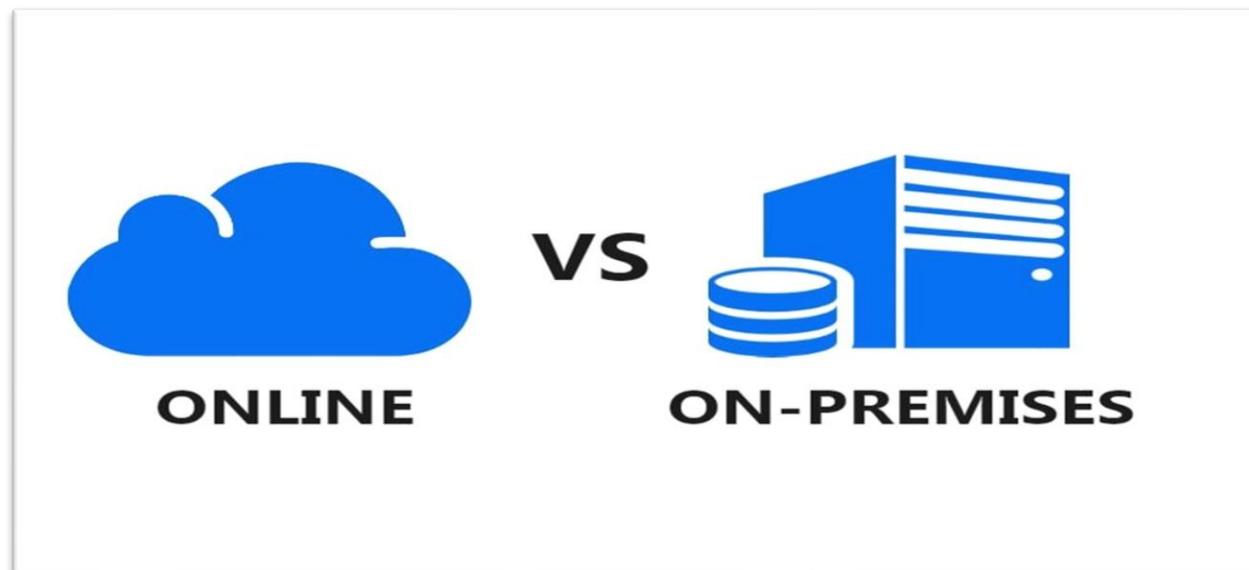
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DYNAMICS 365

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.

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 Service Automation
7. Commerce / Retail
8. Sales
9. Human Resource
10. Business Central
11. Connected Store
12. Customer Service Insights
13. Customer Voice
14. Dynamics 365 Guides
15. Product Visualize
16. Remote Assists
17. Fraud Protection
18. Intelligent Order Management
19. Layout
20. Talent
21. Supply Chain Management



These can be implemented together or individually, and you can start with one application and easily add additional Dynamics 365 applications to expand your capabilities and integrate them with your existing systems. Built-in intelligence allows you to derive fast and actionable insights that can be optimized even further

when you leverage the purpose-built AI of Dynamics 365 Customer Insights. All applications are web-based and responsive to screens of all sizes, and we have a consolidated Dynamics 365 for phones app that supports modern multifactor authentication and mobile device management (MDM) controls to meet your security requirements.

SALES

Sales for Dynamics 365 is designed to support the sales process from lead acquisition to close of sale. CRM has a place to store the contact information for new leads. It also has a place to track the follow-up communications (Phone Calls, Emails, and Appointments) and the ability to qualify a Lead into an Account, Contact, and Opportunity.

It gives a 360-degree view of interactions with prospects and customers so working team can plan and forecast their next interactions with them. It provides a single source of truth for sales, marketing, and account management teams.

Microsoft Relationship Sales Package

Microsoft's acquisition of professional networking site LinkedIn has proved a massive boon for its CRM users, and nowhere is this more evident than in Dynamics 365's Relationship Sales package. Relationship Sales is essentially a bundle containing Dynamics 365 for Sales and LinkedIn's Sales Navigator Enterprise service.

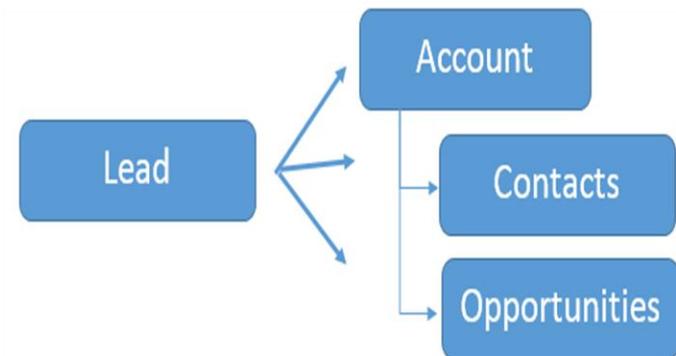
Relationship Sales enables salespeople to make more effective connections by giving them access to data that helps them personalize their outreach and highlights existing connections that can assist in warming the lead.

Dynamics 365 for Sales Professional

Dynamics 365 for Sales Professional will be infused with artificial intelligence to offer guidance and recommendations throughout the sales cycle. Customers will also be able to take advantage of the suite's native integration with LinkedIn by using the app alongside Dynamics 365's LinkedIn Sales Navigator. Like other apps under the Dynamics 365 umbrella, Sales Professional will work seamlessly with Office 365 to help users get more out of their business and email data. The app's analytical dashboards will enable users to make sense of and act upon their sales data.

Different sales solutions for different size of businesses

Dynamics 365 Sales is available in the following flavors Dynamics 365 Sales to suit the different business needs:



- The Sales Hub app is built on the Unified Interface framework. The Unified Interface framework uses responsive web design principles to provide an optimal viewing and interaction experience for any screen size, device, or orientation. The Sales Hub app is optimized to work on mobile devices as well as desktops. This app is available with the Dynamics 365 Sales Enterprise licensing plan.
- The Sales Professional app is like the Sales Hub app, but the entities included in the Sales Professional app are a subset of the entities included in the Sales Enterprise. This app is available with the Dynamics 365 Sales Professional licensing plan.

WHAT DYNAMICS 365 SALES OFFERS

Dynamics 365 Sales offers great benefits, whether you're using a desktop, phone, or tablet.

Benefits for salespeople

- Follow guided business processes, so you know which steps to take next to close deals faster. You can tailor these business processes for your organization's needs.
- Manage customers and deals wherever you are, on any device (phone, tablet, PC, or Mac).
- Get productive faster by using familiar tools. Dynamics 365 Sales is tightly integrated with Microsoft 365 apps, which makes it easier to get going more quickly:
 - Use SharePoint to store and view documents like presentations or notes in the context of a record, such as an opportunity, so anyone working on the opportunity can view them.
 - Open sales data in Excel, make changes, and save the changes back to Dynamics 365 Sales—all without switching between applications.
- Get actionable insights and suggestions based on how you work. For example, if you have an opportunity closing next week, the Relationship Assistant will send you a reminder to connect with your customer.
- Find all activities (appointments, phone calls, and so on) related to a customer or opportunity in one central place, so you have the context you need to do your job.

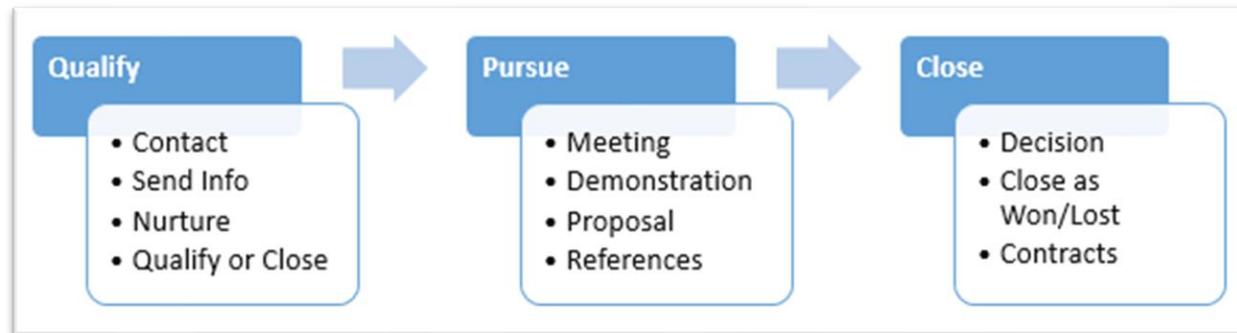
Benefits for sales managers

- Accelerate your team's performance by using real-time analytics based on historical data and predictive information.
- Monitor results, and provide feedback and coaching, in real time.
- Use immersive Excel and prebuilt templates to do quick analysis without leaving Dynamics 365 Sales.

- ❖ Predict and manage pipelines with confidence
- ❖ Spotlight potential strengths and weaknesses
- ❖ Quickly onboard new sellers
- ❖ Easily implement best practices through a single collaboration platform
- ❖ Office 365 Integration
- ❖ Predictive lead and opportunity scoring
- ❖ Create engaging Social Posts

CONFIGURATION OF DYNAMICS 365 SALES

Every organization implementing Sales for Dynamics 365 must spend time analyzing their unique processes and configuring CRM to reflect that. This might mean just changing a few fields. It also could mean significantly modifying the forms and view, adding new record types, and/or deciding to disable unused features.



For example, out-of-the-box CRM most closely supports a Business-to-Business (B2B) sales process with a longer sales cycle. If that describes the organization, then it will have an easier time using CRM out-of-the-box with only minor business process analysis and configuration.

Other organizations that might be Business-to-Consumer (B2C) or have a shorter sales cycle should analyze their process and consider what customization may be needed. Therefore, each organization must carefully evaluate their own sales process to determine how much CRM can be used out-of-the-box.

DYNAMICS 365 SALES ENTITIES

Dynamics 365 sales module comes preloaded with the main entities used in sales process. Of course, the existing entities are fully customizable and if they're not enough, create new custom entities with different relationships.

There is much more out of the box functionality beyond these entities, however these entities are the main pillars upon which the Sales module lies.

- Accounts
- Contacts
- Leads
- Opportunities

Accounts

List down the Accounts as the companies or vendors that organization work with. This is the top-level record which can be used to track numerous pieces of valuable information for existing customers such as:

- Key information about the company itself, such as the given company's name, location, website, and size
- Company hierarchies (Parent and sub-accounts)
- The individuals that work at the given company (Contacts)
- Recent Sales Opportunities
- Recent Service Cases (if Dynamics 365 for Service is configured)
- Past and future activities related to the given company



Contacts

Organizations have the capability to track the individual people that they work with as well within Dynamics 365, these records are called contacts. Tracking Contacts in Dynamics 365 allows them to capture critical information on the individuals they work with in a centralized database accessible to everyone else in the company in real-time. Examples of information can be stored within the contact record includes:

- Details specific to the contact itself, including their: name, job title, phone number, email etc.
- The ability to track which company (account) they work for
- Information on when they were last contacted via several mediums such as phone calls, emails, faxes, etc.
- Sales opportunities they are the primary contact for
- Service cases they are the primary contact for



Leads

Think of Leads as sales engagements regarding a company and/or individual. Within the sales process, this is the qualification step where it needs to be determined whether or not solution is a possible fit to the customer's need.

Within the Lead record, there is possibility to:

- Capture information about the individual organization is working with such as their name, job title, contact information, company name, etc.
- Capture key information around the specific sales engagement, such as the purchase timeframe, the estimated budget, and any other notes gathered about the lead
- Qualify the Lead to an Opportunity which can automatically create an Account and Contact
- Define specific sales process qualification steps with business process flows



Opportunities

Opportunities represent a potential sale that has either been qualified from a lead or from an existing customer. Tracking opportunities in Dynamics 365 allow to manage individual sales pipeline, while simultaneously providing management with the overall sales pipeline for the entire organization.

Within an opportunity record, numerous pieces of information can be tracked such as:

- The customer and primary contact related to the opportunity
- Which phase within the sales pipeline the opportunity resides.
- Estimated Revenue and close date of the opportunity
- Key stakeholders and sales team members
- Products/line items that make up the opportunity
- Generate quotes that automatically pull information directly from the existing opportunity
- Track competitors
- Close opportunities as won or lost and create actionable sales data
- Specific activities (Emails, phone calls, tasks, etc.) related to the opportunity

Competitor entity

The Competitor entity stores details about another organization offering similar Products and/or Services. This allows us to associate a Competitor record throughout the sales cycle. In addition, we can store details about the competitor, including listing of their products, competing directly with our products, sales literature, and any other sales materials.

- The given below shows the standard New Competitor form in Microsoft Dynamics 365.

Product Entity

Part of the Product Catalogue entity, the Product is a record representing an individual Product or Service offered to customers. Products can be associated with Opportunities, Quotes, Orders, and Service Cases. Manages all the products offered by the organization to its customers (Example, all the credit card plans).

Quote Entity

The Quote entity represents an offer of products and/or services at a predetermined price. In addition, payment terms are associated with the respective quote. A formal offer for products or services proposed at specific prices sent to a prospective customer (Example, yearly pricing of a certain credit card plan sent to the customer).

Order entity

The Order entity is in fact a Quote that has been accepted by a customer. They can be created from a Quote, or directly as a new Order. A quote that gets accepted by the customer turns into an Order (Example, out of all the plans that the organization offers you, you may go for a 6-month subscription).

Invoice entity

An Invoice represents an Order that has been processed and billed. A billed order generates an invoice.

DYNAMICS 365 SALES PROCESS LIFE CYCLE

Dynamics CRM Sales process is a streamlined business process to generate potential sales opportunity for the business. Here we will discuss how the sales method works and the life cycle of a sales process in Dynamics 365 CRM.

Dynamics CRM Sales Life Cycle Include:

- Lead Capture
- Account Creation
- Contact setup
- Opportunity management
- Product Catalog
- Quote Management
- Order Management
- Invoice management
- Sales Business Process

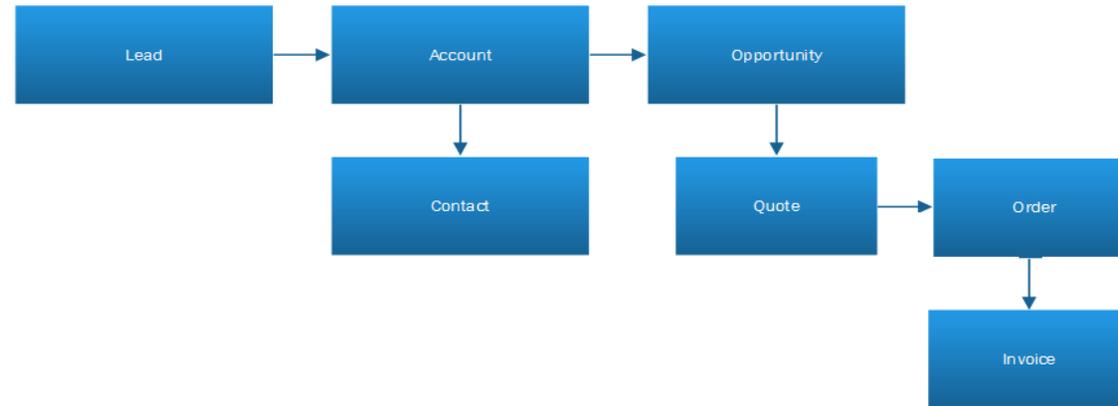
As a Microsoft Partner, we offer support for Microsoft Dynamics 365 Sales and Customer Service business applications.

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A typical Dynamics CRM Sales process starts with a Lead. A lead represents any person or the organization that the company might have the potential to do the business with.

Lead Capture

The Lead is a prospective customer of a product or service, created when an individual or business shows interest and provides contact information for communication purpose. Businesses capture leads through advertising, trade shows, direct mailings, and other marketing campaigns.

The Salesperson enters the data in Lead entity available in Dynamics 365. Lead only requires the Lead Name (First name & Last Name) and the Topic describing the Lead to create the entry in the system.

E.g.: TOPIC: 100 Laptop for the Z Company Name: Robert Clay

After the Lead creation in the system the salesperson performs follow up activities by sending emails, appointments, and phone calls etc. to capture more information about the Lead and to proceed with the next process of Lead Qualification. Dynamics 365 stores these records as activities in a system.

Leads can be Qualified/ Disqualified. All Qualified Leads automatically create the default contact and the opportunity record in the system. When the Lead gets Disqualified, the system stops the sales method. But system store this information for future campaigns.

Some organization does not follow this Lead creation method rather they directly use the creation of opportunity record in the system to start the sales life cycle so honestly, it depends how they want to organize their sales data. Lead is an Out-of-the-box entity which allows storing lead information so company can use it or skip it depending on it business requirement.



Account Creation

Accounts are the organizations with which user have a relationship. Since Microsoft Dynamics 365 is a CRM solution, this is where customers would reside in the database. However, the accounts can carry other types of records including the prospects, vendors, business partners, and other organizations that interact with the company. Generally, the business stores customer information in contact record and vendor data in Account.

Contact Setup

Contacts are individual people with whom organization have the relationship generally the customers or contacts of customers. Often contacts are related to an account, but certain organizations and businesses may serve or sell to individual consumers, and so most of the contacts will not be under accounts.

The Contacts integrate with the contacts in Microsoft Outlook, so it is important to understand that when fields on the contact record are updated, that change may synchronize to the Outlook for 1 or more users depending on the synchronization settings.

Opportunity Management

Opportunities in Microsoft are the core record type in the Dynamics CRM Sales process used by the sales team. opportunities represent the potential sale for a particular customer. The creation of the opportunity includes this potential sale to the sales pipeline and therefore puts it on the radar of the sales manager who may be holding the team responsible for the progress of opportunities.

In addition to making the pipeline, opportunities give permission to the organizations to track the success of marketing efforts by tracking the sales back to the original lead source and source campaign. In the same way, when the opportunity is lost, lost reasons and competitors can be tracked. When the customer agrees with the quotation then the opportunity gets WON and the Order is placed. When a customer disagrees the Quotation pricing then the Opportunity becomes Lost by stopping the Sales life cycle.



Product Catalog

It is a very important concept in Dynamics 365. Product configuration can be done with Pricing data, Discount List, Unit Group. Usually, organizations store products in the ERP system and then sync with CRM to use it in Quotation and Opportunity.

Quote Management

Quote contains the products, or the customer of the service interested in and asked for the price. After the customer review, he/she agrees to continue to place the order. Quotation contains the product or the service items with defined price list, discount list etc.

Order Management

The order is a confirmation of a sale that to be invoiced and placed for further proceeding for logistics. An opportunity converted into order if it is won.

Invoice Management

The invoices are generated in the system after an order is placed successfully. Payments are being collected with the ERP system.

Sales Business Process

Every business follows some business process to capture the sales data and close a sale. Using the Business Process Flow business can define the process flow so that the sales user will just follow the guided process without any confusion. For example, sale can be closed by following the stages like propose, develop, close which is an Out-of-the-box sample Business process flow. Custom business process flow can be defined as per our sales process life cycle.



Sales Performance

Gamification
Reports and dashboards
Power BI integration

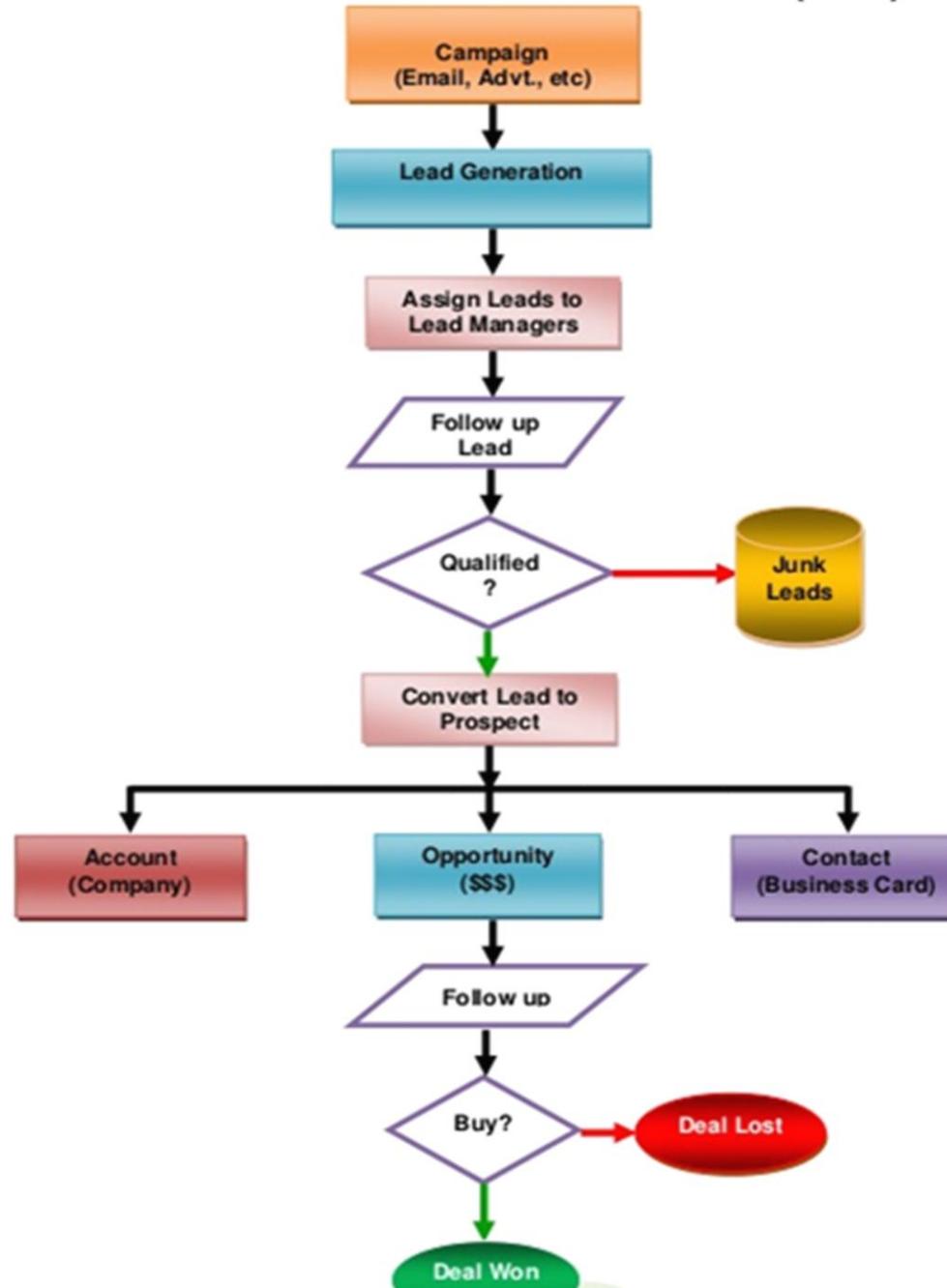
Relationship Selling

Data synchronization
Embedded sales navigator insights
Power BI integration

Sales Execution

Sales Automation
Standard Forecasting
Guided Sales Process

Sales Flowchart – New Business (B2B)



DYNAMICS 365 SALES PRICING

Sales	Price for user's first Dynamics 365 app	Price for user's subsequent qualifying Dynamics 365 app
<u>Sales Professional</u>	₹ 4,295 Per user/month	₹ 1,320 Per user/month
<u>Sales Enterprise</u>	₹ 6,280 Per user/month	₹ 1,320 Per user/month
<u>Customer Insights</u>	From ₹ 99,155.30 Per tenant/month	
<u>Microsoft Relationship Sales</u>		From ₹ 8,052.95 Per user/month
<u>Sales Insights</u> ⁵		₹ 3,305 Per user/month
<u>Forms Pro</u> ³		₹ 6,610 ⁴ Per 2,000 survey responses per tenant/month

DYNAMICS 365 SALES PLANS

	Dynamics 365 Sales Professional	Dynamics 365 Sales Enterprise	Microsoft Relationship Sales
Dynamics 365 Sales			
Unlimited users	●	●	●
Sales execution			
Forecasting		●	●
Lead and opportunity management	●	●	●
Marketing lists and quick campaigns	●	●	●
Products, price lists, and product bundles	●	●	●
Quotes, orders, and invoices	●	●	●
CPQ and data enrichment solution discovery	●	●	●
Live org charts	●	●	●
Sales playbooks		●	●
Business card scanner ²	Add-on	●	●
Competitors, sales goals, and territory management		●	●
Product taxonomy, relationships, and hierarchies	●	●	●
Cases	●	●	●
Partner relationship management		●	●

	Dynamics 365 Sales Professional	Dynamics 365 Sales Enterprise	Microsoft Relationship Sales
Microsoft Office 365 integration			
Outlook	●	●	●
Exchange	●	●	●
Excel	●	●	●
Teams	●	●	●
OneDrive / SharePoint	●	●	●
OneNote	●	●	●
Gamification		●	●
Knowledge management		●	●
Reporting and analysis			
Export to Excel, advanced analytics with separate Power BI license	●	●	●
Real-time sales reports and dashboards	●	●	●
Portals		●	●

Customization and extensibility³

Application customizations	Limited	●	●
Custom applications ⁴ (Power Apps)		●	●
Workflow automation ⁵ (Power Automate)		●	●

LinkedIn Sales Navigator

Embedded Sales Navigator in Dynamics 365 Sales			●
Activity sync from Sales Navigator			●
Accounts, leads, and contacts saved to Sales Navigator			●
PointDrive			●

Conversation intelligence

Call transcription		○	○
Keyword, sentiment, and emotion analysis		○	○
Competitive products and brand analysis		○	○
Pipeline analysis		○	○
Seller behavior and top seller analysis		○	○
Coaching tools		○	○
Personalized seller dashboards		○	○



	Dynamics 365 Sales Professional	Dynamics 365 Sales Enterprise	Microsoft Relationship Sales
Dynamics 365 Sales Insights¹			
○ Dynamics 365 Sales Insights available as an add-on			
Contextual insights			
Assistant (base cards)		●	●
Assistant (within Dynamics 365 Sales)		●	●
Email intelligence (email engagement and email capture)		●	●
Predictive forecasting		○	○
Pipeline intelligence		○	○
Predictive scoring		○	○
Relationship analytics		○	○
Connection insights (who knows whom and talking points)		○	○
Notes analysis		○	○
Assistant (custom cards)		○	○
Assistant customization		○	○

PREDEFINED SECURITY ROLES FOR SALES

Security roles control users access to data through a set of access levels and permissions. The combination of access levels and permissions that are included in a specific security role defines users access to data and their interactions with that data.

The predefined security roles for Sales include permissions and access levels that the default sales personas will need. For example, the Sales Manager and Salesperson security roles can be associated with the respective users in your organization. As a system administrator, you can verify the permissions and access levels granted for each role and modify it to suit your needs.

Security roles	Who needs it?	Access granted
<i>Sales Manager</i>	Users who manage a team of sellers and are responsible for the team's performance. They are also responsible for creating and managing product SKUs, setting sales targets, and projecting sales forecasts.	Access to product management, sales management, sales forecasting, and goal management.
<i>Salesperson</i>	Sellers who work on opportunities, quotes, orders, and invoices.	Access to everything from lead to order – Lead, Opportunities, Quote, Order, Invoice. Create accounts and contacts, and track goals
<i>Sales team member</i>	Users who don't need the full capabilities of an enterprise application. These users will have a dedicated license, use a dedicated app, and get the Sales Team member security role to support their scenario. More information: Sales Team Member app for users with Team Member license .	Access to the Sales Team Member App. Read access to contacts, accounts, leads, and opportunities. Add notes and activities, such as tasks.
<i>Vice President of Sales</i>	Users who typically manage the sales organization for several business units or the entire organization.	Same permissions as the Sales Manager, except that their scope of access is broader.
<i>Forecast Manager</i>	Sales manager or an equivalent role who is responsible for configuring forecasts in the organization.	Configure, clone, deactivate, adjust, or delete a forecast.
<i>Forecast user</i>	Any user in the organization who needs access to the forecast data for tracking and analysis	View forecast and drill-down forecast data
<i>Forecast Appuser</i>	System security role. Do not assign this role to any users.	Internal role used by Dynamics 365 to perform certain forecasting operations.
<i>Playbook Manager</i>	Sales manager or an equivalent role that creates playbooks for the organization.	Create playbook categories and playbook templates, and add documents to the playbook template.

<i>Playbook User</i>	Sales representatives who use playbooks while working on a record	Launch playbooks in the context of an entity, mark a playbook as completed, and track playbook activities.
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ASSIGN SECURITY ROLES TO USERS

Associate one or more security roles to a user depending on their roles and responsibilities. For example, if a Sales manager is also responsible for enforcing best practices for Playbooks, assign the Sales Manager and Playbook Manager security roles to that user.

Follow these steps:

- In the Sales Hub app, select the Settings icon in the top-right corner, and select Advanced Settings.
- Select Settings in the Business Management interface, and go to Security under System.
- Select Users, and then select the user account.
- Select Manage Roles, and choose the roles that you want to assign to the user.
- Notify the user and have them check their permissions.

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.

Common Data Service

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.

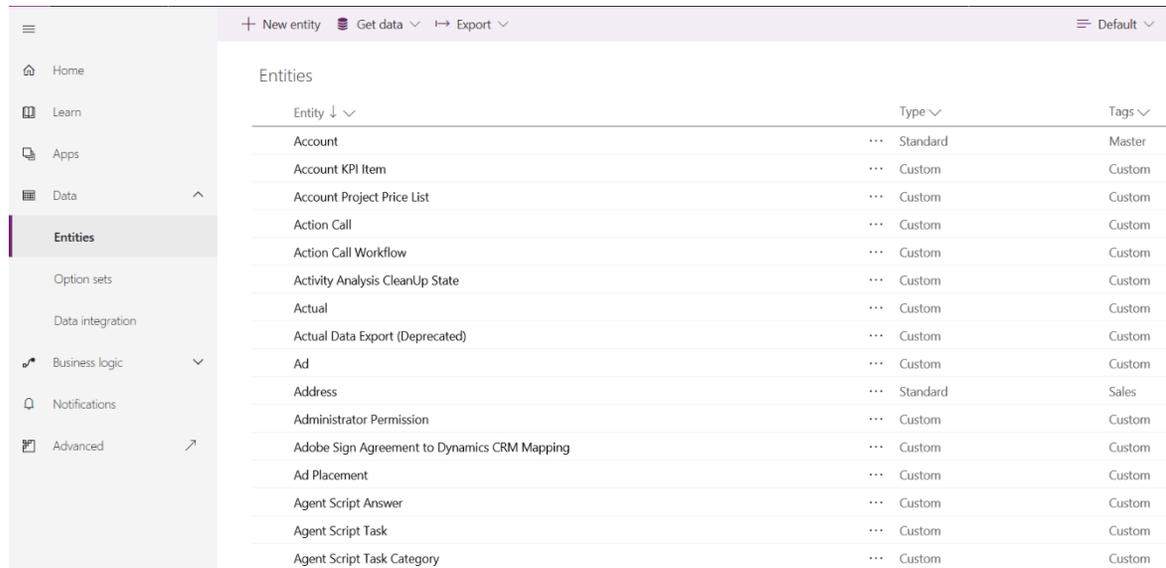


Model Driven Apps

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:



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.

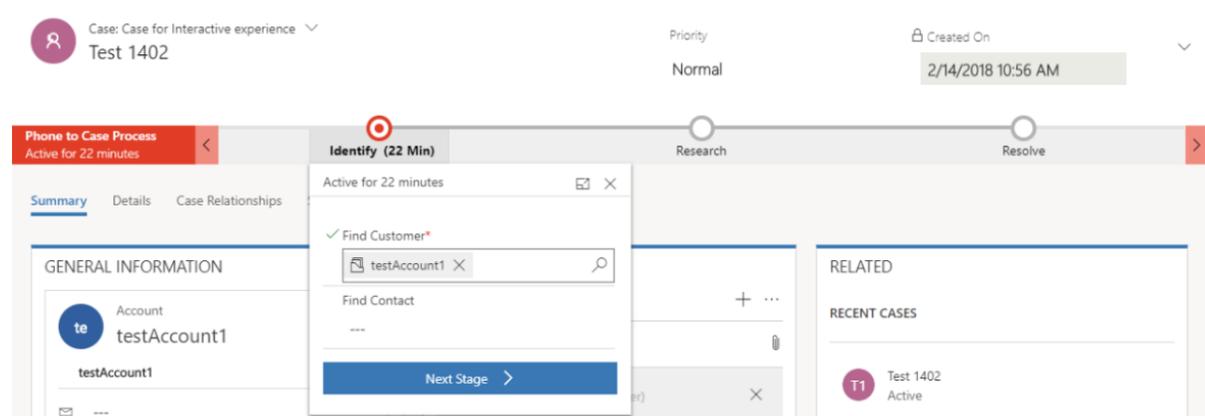
These workflows can be used to connect Microsoft services to third-party apps and programs, without the need for complex custom integrations.

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:

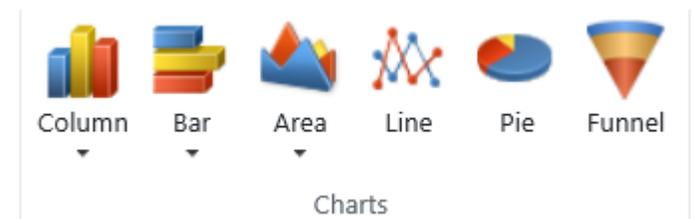
Charts are available for all views on CRM. There are 2 types of charts: system and personal.

- **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**

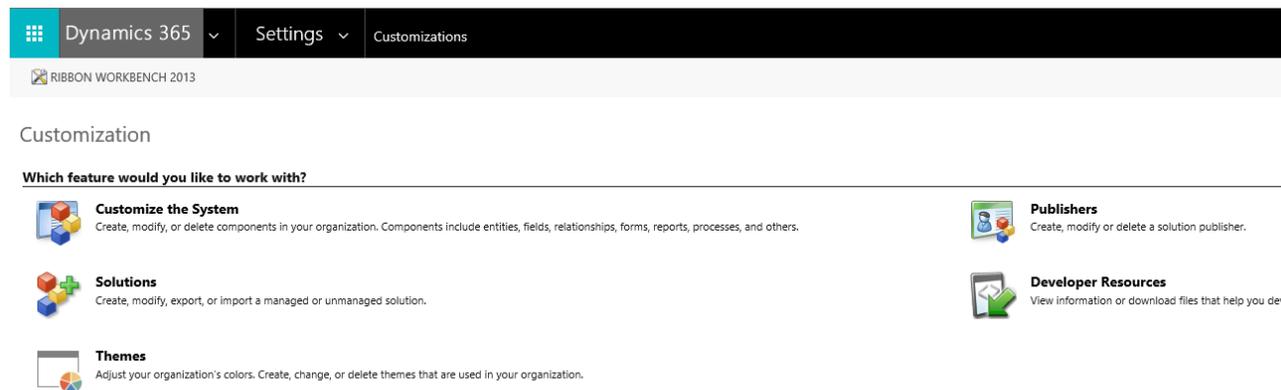
These are the views that come with the application. Custom views that an organization creates are also public views. One of these public views can be defined as a default view. When a user selects an entity by clicking on it in the navigation pane, the default view is what gets displayed.

- **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.



The screenshot shows the Dynamics 365 ribbon workbench interface. At the top, there is a navigation bar with 'Dynamics 365', 'Settings', and 'Customizations' tabs. Below this is a 'RIBBON WORKBENCH 2013' header. The main content area is titled 'Customization' and features a question: 'Which feature would you like to work with?'. Below this question are five options, each with an icon and a brief description:

- Customize the System**: Create, modify, or delete components in your organization. Components include entities, fields, relationships, forms, reports, processes, and others.
- Publishers**: Create, modify or delete a solution publisher.
- Solutions**: Create, modify, export, or import a managed or unmanaged solution.
- Themes**: Adjust your organization's colors. Create, change, or delete themes that are used in your organization.
- Developer Resources**: View information or download files that help you dev.

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)

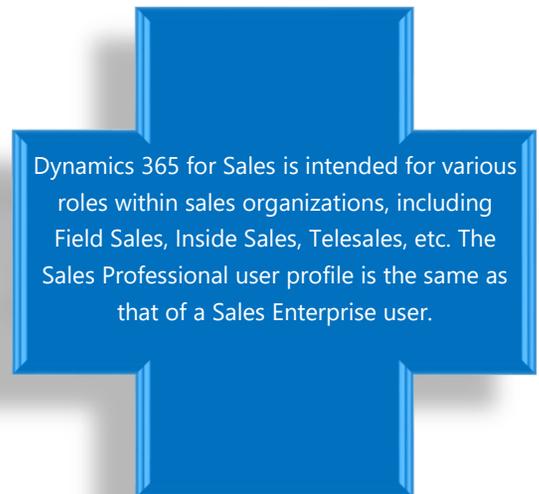
SOAP Web Service

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.

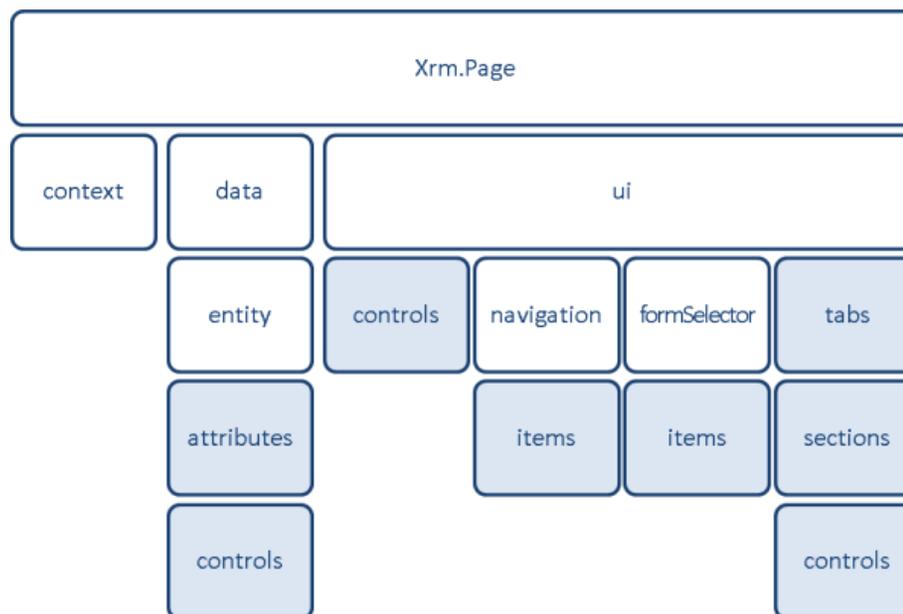
Web Resources

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.

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 behavior 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 Sales area available in a web browser interface, embedded directly in Microsoft Outlook or mobile apps, it can help the organization gain a 360-degree view of critical business development processes, maximize revenue opportunities, and more effectively collaborate across pursuit teams.

Dynamics 365 Sales is an easy, agile and integrated CRM solution that enables you and your employees to make well-founded decisions, increase your turnover and provide a superior service to your customers.

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.

