Microsoft Dynamics AX 2012

Core ERP Features and Business Processes
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Introduction to Microsoft Dynamics AX

Microsoft Dynamics AX is an ERP platform for medium enterprise and global organizations that helps people to work effectively, manage change, and compete globally. Microsoft Dynamics AX works like and with familiar Microsoft software and is a solution that automates and streamlines business processes in a way that can help you drive and sustain profitable growth.

Accounts Payable

Use Accounts payable to track vendor invoices and outgoing expenditures. You can enter vendor invoices manually or receive them electronically through a service, or your vendor can enter the invoices by using a vendor portal. After the invoices are entered or received, you can review and approve the invoices by using an invoice approval journal or the Vendor invoice form. You can use invoice matching, vendor invoice policies, and workflow to automate the review process so that invoices that meet certain criteria are automatically approved, and the remaining invoices are flagged for review by an authorized user.

After vendor invoices are approved, you can pay vendors. If your organization includes multiple legal entities, you can use centralized payments to pay all invoices from a single legal entity. Multiple payment formats are supported. These include checks, promissory notes, and Single Euro Payments Area (SEPA) electronic payments. You can settle invoices with payments or credit.
notes by using the Settle open transactions form. To view vendor information, use the All vendors list page and related forms.

Accounts Receivable

Use Accounts receivable to track customer invoices and incoming payments. You can create customer invoices that are based on sales orders or packing slips. You can also enter free text invoices that are not related to sales orders. You can receive payments by using several different payment types. These include bills of exchange, cash, checks, credit cards, and electronic payments. If your organization includes multiple legal entities, you can use centralized payments to record payments in a single legal entity on behalf of the other legal entities.

Use the Settle open transactions form to settle invoices with payments or credit notes. You can also enter payments and settle them in the Enter customer payments form. To view customer information, use the All customers list page and related forms. You can manage overdue balances, calculate interest, and generate collection letters by using the Collections list page and related forms.
General Ledger

Use General ledger to define and manage the legal entity’s financial records. The general ledger is a register of debit and credit entries. These entries are classified using the accounts that are listed in a chart of accounts.

You can allocate, or distribute, monetary amounts to one or more accounts or account and dimension combinations based on allocation rules. There are two types of allocations: fixed and variable. You can also settle transactions between ledger accounts and revalue currency amounts. At the end of a fiscal year, you must generate closing transactions and prepare your accounts for the next fiscal year.
You can use the consolidation functionality to combine the financial results for several subsidiary legal entities into results for a single, consolidated organization. The subsidiaries can be in the same Microsoft Dynamics AX database or in separate databases.

You can use the tools for forecasting cash flow and currency requirements to estimate your legal entity’s future cash needs. You can then calculate, view, and print forecasts of the cash flow. You can also calculate and display currency requirements.

Budgeting

Use Budgeting to set up, create, and view budgets. Budgeting can include budget control, which you can use to monitor the budget funds that are available for planned and actual purchases and expenditures. You can create budget register entries for the original budget, budget transfers, and budget revisions. You can also create budget register entries for encumbrances and pre-encumbrances for purchases and planned expenditures. Budget register entries can be
created automatically when budgets are transferred to the general ledger from other modules, such as Project management and accounting or Fixed assets.

You can determine which financial dimensions from the chart of accounts are available for basic budgeting and budget control. When you configure budget control, you define budget intervals, budget cycle time spans, budget thresholds, budget managers, budget groups, and the calculation that is used to check for available budget funds. The available budget funds can be verified when source documents and accounting journals are entered. You can view the status and history of budget register entries, budget control statistics, actual versus budgeted amounts, budget details, and budget funds available.
Cost Accounting

Cost accounting is the process of tracking, recording, and analyzing costs associated with the products or activities of an organization. It can include tracking and managing costs for inventory, manufacturing products, finished goods and overhead.

With Microsoft Dynamics AX, you can use the following different costing methods:

1. Normal costing
2. Standard costing
3. Absorption costing

There are settings on production orders that influence how production estimates and production costing will be performed, and the inventory movement valuations.

The following production entities are used to calculate costs:

- BOM calculations are used to determine the raw material items used to create a finished product, and to add up or roll up the total material costs.
- Routes provide the operations, labor, and resources required to produce a given product, and are used to calculate labor costs and manufacturing overhead.
- The costing sheet is used to build cost groups.

Fixed Assets

Fixed assets are items of value, such as buildings, vehicles, land, and equipment, which are owned by an individual or corporation. You can set up and enter acquisition information for fixed asset records, and then manage fixed assets by depreciating them and setting a capitalization threshold to determine depreciation. You can calculate adjustments to the fixed assets, and also dispose of them.

When you use General ledger with Fixed assets, you can view the current value of all fixed assets. The way in which fixed assets are handled must correspond to both international
accounting standards and the accounting legislation in each country/region. Requirements might include rules for recording acquisition and disposal transactions, depreciation, lifetimes, and write-ups and write-downs of fixed assets. The Fixed assets functionality incorporates many of these standards and rules.

![Fixed assets diagram]

**Cash and Bank Management**

You can use Cash and bank management to maintain the legal entity’s bank accounts and the financial instruments that are associated with those bank accounts. These instruments include deposit slips, checks, bills of exchange, and promissory notes. You can also reconcile bank statements and print bank data on standard reports.
Procurement and Sourcing

In Procurement and sourcing, you create purchasing policies to control the purchasing process. You identify suppliers, onboard suppliers as new vendors, maintain vendor information, create agreements with your vendors, order items and services, maintain purchase orders, and confirm receipt of products. After vendor transactions are processed through Accounts payable, you can also analyze spending and vendor performance.
Human Resources

The talents and efforts of the people in your company or organization are among your most valuable assets. Human resources for Microsoft Dynamics AX helps to fulfill the potential of your workers, while minimizing the cost and complexity of administering worker and organizational information.

You can use Human resources to complete the following tasks:

- Administer organizational structures, including formal and informal hierarchies and position management.
- Maintain comprehensive worker information from the day that they first apply for a job to the day that they retire.
- Define organizational benefit plans and options, enroll workers in benefits, assign dependent coverage, and designate beneficiaries.
- Control absenteeism by establishing, communicating, and monitoring absence policies. This includes approval procedures and centralized or self-registration.
- Implement and track profile-based clock in and clock out registrations for workers, enable workers to register work time for specific activities, and generate pay information that can be exported to a payroll system.
- Manage worker competencies to identify and effectively deploy the right people for the right tasks.
- Review performance levels through discussions, and then outline steps for improvement by creating and implementing goals for workers.
- Set up, deliver, and analyze training courses that include agendas, sessions, and tracks, together with demographic information about participants.
• Administer recruitment initiatives, such as web advertisements, web applications and screening, developments, applicants and applications, and correspondence with candidates.

Sales and Marketing

Use Sales and marketing to focus on sales personnel and the sales organization. The main focus is direct, person-to-person contact with customers. Sales and marketing also makes it easy for a salesperson to create quotations, create and follow up on marketing initiatives, and report on the activities and sales of workers and customers.

You can use Sales and marketing to obtain, store, and use various kinds of data in the sales flow. This data includes the original sales initiative, future follow-up action, and additional sales. You can also obtain selected customer data through Enterprise Portal for Microsoft Dynamics AX.
By using Sales and marketing, you can do the following:

- Create records for the address book, and create prospects, leads, and opportunities.
- Manage the sales performance of sales personnel, sales units, and companies.
- Create and run a group of activities.
- Store electronic correspondence.
- Store transactions and data for sales and marketing.
- Create marketing campaigns.
- Sell products in online marketplaces and online stores.
Travel and Expense

Use Travel and expense management to create an integrated workflow where you can store payment method information, import credit card transactions, and track the money that employees are spending when they incur expenses for your business. You can also define expense policies and automate the reimbursement of travel expenses.
The administrative work in Travel and expense management is performed in the Microsoft Dynamics AX client. Expense reports and cash advance requests are made in Enterprise Portal for Microsoft Dynamics AX.

Project Management and Accounting

Use Project management and accounting to plan, create, manage, control and complete projects for your organization. Customer-focused projects can be set up on a time and materials or fixed-price basis. You can also use the module to manage costs for internal and investment projects.

You can create project quotations that can be converted to projects. You create project contracts with one or more funding sources that will be invoiced for project costs and fees. Funding sources can include customers, internal organizations, and grants. A project contract
can have one or more projects assigned to it. Each project that you create can have one or more subprojects and activities that comprise the project work structure.

For flexible project planning, you can integrate the project management and accounting module with Microsoft Project Server.

You can create and monitor project budgets for cost control. Employees and contractors can enter project timesheets and expense reports to record project-related time and expenses.

You can create service industry-focused projects that consist primarily of worker services by drawing on features such as contract management, quotations, budgeting, project policies, project parameters, and categories.

You can assign attributes for project skills and experience to workers. You can also search for and assign workers to a project based on worker skills and availability, or based on the requirements for a project.

You can assign indirect costs, define the calculations for indirect cost amounts, and allocate indirect costs to a project. Indirect costs are calculated based on worker hours that are added to a project.

You can record invoiced amounts that are retained by a customer until the progress on a project reaches an agreed-upon stage. You can also retain a percentage of vendor invoices until you confirm the quality of work by a vendor who is a subcontractor on a project, or until you receive payment from a customer or other funding source.

You can set up billing rules that track progress on a project, and define when and how to calculate customer invoice amounts for advances, project milestones, completed units, amounts retained by customers, and administrative fees.

Project managers can view reports that provide project details and analyze project financials from a variety of perspectives.
Inventory and Warehouse Management

You can use Inventory and warehouse management for inbound and outbound operations, quality assurance, warehouse activities, and inventory control.

From the **Arrival overview** form you can keep track of expected items and you can use arrival journals to register receipts. After items have arrived in the inbound dock, you can use pallet transports to guide the flow through the warehouse to the picking or the bulk location areas.

You can set up quality inspection and quarantine of products as an automated process by using quality associations or you can manually set products on hold in various stages of the order process cycle.
Process shipments for complete orders, parts of orders or a consolidation of multiple orders and create picking routes or pallet transports based on the contents of the shipment. You can use picking lists and output orders to ship items to production or to the distribution channels.

Product Information Management

Use Product information management to define and create products and product variants. Products of the types Item and Service are used in the sales, purchase, and operational processes in Microsoft Dynamics AX 2012. When products have been defined and created, you can authorize the products for use by releasing the products to individual legal entities.
When you have defined a product master in Product information management, you can create product variants manually or you can use configuration technologies such as the Product Builder and the Product configurator to configure the product variants.

You can also use the **Product models** form to build product models and attach item numbers to the product models.

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**Master Planning**

Use Master planning to perform the following business processes:

- You can run forecast scheduling to calculate gross requirements for forecasted demand.
- You can run master scheduling to calculate net requirements for items to fulfill actual demand.
You can process the action messages and futures messages that are generated during master scheduling. You can use this information to modify planned orders.

You can process planned orders and kanbans.

**Production Control**

Use Production control to manage and track production activities. These activities include the following:

- Schedule production
- Track material and route consumption
- Register production feedback
- Track inventory transactions
- Track production costs

Production control functionality is a key component in mixed mode manufacturing. Production control provides the opportunity to manage your production activities by using multiple methods. These methods include using the following:

- Production orders
- Kanbans for lean manufacturing
- Batch orders for process industries

You can register production feedback by using manufacturing execution.

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Service Management

Use **Service management** to establish service agreements and service subscriptions, handle service orders and customer inquiries, and to manage and analyze the delivery of services to customers. You can use service agreements to define the resources that are used in a typical
service visit. You can also use service agreements to view how those resources are invoiced to the customer. A service agreement can also include a service level agreement that specifies standard response times, and offers tools to record the actual time.

You can create service orders to manage information about scheduled and unscheduled visits by a service technician to a customer site. Service orders include information such as:

1. The hours of work that the service technician will perform
2. The type of service or repair
3. The item to repair, including details about the symptoms and diagnosis
4. Any expenses and fees related to the service or repair

Customers can submit service requests through the Internet by using the Enterprise Portal. You can receive, process, and dispatch these requests. After you have created a service order, you can use service stages to monitor progress and specify rules that control what actions are enabled in each stage. When a service order is complete, you can sign off on the order to confirm that it is complete, and then post the order to start the invoice process.

Use the reporting tools to monitor service order margins and subscription transactions, and print work descriptions and work receipts.
Public Sector

Use the following Public sector functionality to meet the rules, regulations, and reporting requirements for organizations that serve the public:

- Fund accounting, derived financial hierarchies, and posting definitions for accounts receivable and the general ledger
- Preliminary budgets, apportionments, and commitments
- Billing codes, billing classifications, trading partner codes, and custom fields for free text invoices
- General ledger year-end processing, which includes encumbrances and commitments on purchase orders
- Electronic payments to vendors, signature pages for payment reports, and invoice payment holds

Retail

Retail is an integrated solution that is designed for Microsoft Dynamics AX. You can use Microsoft Dynamics AX to manage a retail business from the head office to the stores.

Retail includes the following programs:

- The Retail module in Microsoft Dynamics AX.
- Microsoft Dynamics AX for Retail POS – The point of sale (POS) program for the registers in the stores.
- **Commerce Data Exchange: Synch Service** – The program that periodically sends transaction information between the head office and the stores.

- **Commerce Data Exchange: Real-time Service** – The program that sends real-time information between the head office and the stores.

- **Microsoft Dynamics AX Commerce Runtime** delivers multi-channel commerce capability that has uniform extensibility. It facilitates business processing between the head office and online stores and between the head office and retail (brick-and-mortar) stores.

Use Retail to configure and manage stores, online stores and online marketplaces, registers, retail products, retail product catalogs and other information. You can also use this module to generate reports, perform inquiries, and complete other day-to-day business processes.
About Merit Solutions

Merit Solutions is a focused-strategy business process consulting and IT services company with a goal of being the very best at helping clients automate, grow, and transform their business using enterprise technology solutions. Our services include everything from business process mapping and engineering to systems evaluation, sourcing, implementation, integration, and validation. Our preference has always been to be deep, not wide, in what we do for clients, and to provide an overwhelming value for cost relationship that makes it easy for them to use our services repeatedly.

Our clients are medium to global enterprise businesses that want to leverage Microsoft Dynamics and surrounding technologies to standardize business processes and eliminate risk - and then continuously improve their business. With more than 800 clients representing over a dozen industries spread worldwide, our longevity and success within the Microsoft technology is proven.

Contact Merit Solutions to learn how we can help you drive the business, process, and technology changes required to achieve your strategic vision and goals.

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