Upgrading to Dynamics 365 for Finance and Operations

The four things you really need to know
The days of long product life cycles, where nothing materially changes for 2-3 years, are gone. And as we move into a cloud-based world, Dynamics 365 for Finance and Operations is a game-changer for Microsoft technology partners and our customers alike.

But time and time again we tend to collate and relay this information on without thinking about who needs it the most. There are many amazing blogs and whitepapers out there, but even experienced consultants struggle to decipher them.

So how can we expect our clients to work out what is happening, and more importantly, what path they should take?

This document will steer you around the information overload. The facts will be presented in a way that is easy to understand, gets you excited, reduces confusion, and at the same time gives you the knowledge you need to start your Dynamics 365 for Finance and Operations journey.
What Are My Options, and Why Are They Important?
For people on Dynamics AX 2009 or 2012-R2, mainstream support ended in October 2018. For Dynamics AX 2012 R3, mainstream support will end in 2021.

So if you have not already started down the path towards Dynamics 365 for Finance and Operations, now’s the time to start thinking about it. Extended support for both AX 2009 and 2012-R2 is still available until 2021, and for R3 it will be available until 2023.

Most of you (and in particular those with ERPs that have been live for a number of years) get support from technology partners. So, the ending of mainstream support from Microsoft may have no real impact. But as time progresses, we confidently predict it will become harder and harder to get quick and skilled support for aging, outdated versions.
Put simply, Dynamics AX is now the Finance and Operations portion of the Dynamics 365 solution.

Dynamics 365 brings together a range of core Microsoft business products into a single offering. It has significantly improved integration and interoperability. But the technology changes and the underlying platform are even more important: the entire solution, including Finance and Operations, is now available as a true software as a service (SaaS) solution.
What Does This Mean?

Well, for a start, you can throw out your aging servers and let Microsoft manage everything. You can pay as you go. You can get continual updates. And, as long as you have a decent Internet connection, you can access the system from anywhere.

This has major implications for everything from licensing, to development, to implementation and much more. But never fear, for those that cannot adopt the SaaS model, Microsoft also offers an on-premise option.
Cloud vs On-Premise: Surely One’s Better

There is no easy answer to this question, as every business has its own set of unique operating conditions. But it is a big decision, not to be made lightly. Work with your technology partner to determine which path to take. We have listed some of the pros and cons to help you get a feel for which option would better suit your business. There are also some business-critical factors that can be non-negotiable so those could, in essence, make the decision for you.
Cloud

Pros

• No local server hardware is required to run Dynamics 365
• Scalability – can easily increase or decrease user count, size and performance as required
• Completely managed environments – from disaster recovery to continual updates
• Moves capital expenditure to operating expenditure
• Predictable and known monthly costs
• Always on the latest version

Cons

• Business data is held outside of your company’s network
• You have less control of the infrastructure
• Relies heavily on network and bandwidth. If the internet goes down, then so does your access to Dynamics 365
On-Premise

Pros

• Makes use of existing infrastructure investments
• More control – of both the servers themselves and your data
• Not reliant on the internet and bandwidth for core functions
• Easier to integrate with certain 3rd party systems, particularly real-time manufacturing and operational systems

Cons

• Requires expensive infrastructure
• Hard to scale up and down as required
• Requires expertise to setup and maintain
• Loses certain advanced offerings
The Upgrade Options: More Choices!

When planning an upgrade, you need to choose between two very distinct options:

- **Technical Upgrade** – utilizes technical tools to convert your data and customizations to the latest version.
- **Reimplementation** – starts with a fresh installation and only migrates the data and code you need/want.

These options are different from each other, and both have advantages and disadvantages. Neither option is a clear winner for most clients. It comes down to what is right for you. Both options are expensive, so it is important you take the time to work through the benefits and drawbacks of each.

Most important of all, leverage your partner’s knowledge to ensure you make the right decision for your business and situation.
Reimplementation or Technical Upgrade
First, Find Out if You Have a System That Can Take an Upgrade

You have made the decision to move to Dynamics 365 for Finance and Operations. And we have established that there are two main strategies. To re-cap:

- **Technical upgrade** - The data and modifications on your current Dynamics AX environment are converted into a new Dynamics 365 for Finance and Operations environment.
- **Reimplementation** - Selected data and modifications on your current Dynamics AX environment are migrated into a new Dynamics 365 for Finance and Operations environment.

These are two very different approaches. Which do you choose?

Because Dynamics 365 for Finance and Operations was based on Dynamics AX R3 CU8, any version that came after that should be safe. Microsoft has released tools for upgrading data from Dynamics AX 2009, but not code. So, this would still need a reimplementation as it only covers master data, open transactions, opening balances and configuration, not historical transactional data. But it should significantly reduce the data migration aspect, which is not recommended without the right tools.
Here Are Some Practical Scenarios to Consider

How long ago was my original implementation?

Les miDirect upgrades aren’t possible on older versions like Axapta 3 or Dynamics AX 4. It will take multiple jumps to get to Dynamics 365 for finance and Operations, so upgrading is complicated and the cost may be prohibitive.

What does my business look like right now?

Perhaps after going live with Dynamics AX your business went in a completely different direction. Or was acquired by another company. Or maybe you sold off part of the business. In cases like these, it may not make sense to take the entire solution and move it forward to the latest version. It might be more advantageous to start with a clean slate.

Is my Dynamics AX environment modified?

Dynamics AX was a wonderfully easy system to customize. And your partner would have advised you to adopt the standard best practice for your modified processes. We’ve seen some truly amazing customizations with fantastic outputs that can be upgraded relatively easily. However, if your Dynamics AX environment is heavily modified with non-standard processes, then reimplementation may still be the more logical option. Take this opportunity to think critically about your processes and how close they are to standard. Can you rebuild the required enhancement in a way that’s in line with best practice and then upgrade? Or will you still need to re-implement?
Do I have an ISV solution as part of my base product?

Microsoft acquired and assimilated many independent software vendor (ISV) solutions into the core Dynamics AX product. Examples include Ebec’s Lean Manufacturing, and Blue Horseshoe’s WAX and TRAX.

Microsoft rewrote a lot of the ISV functionality making it impossible to simply move the code forward. Businesses using Dynamics AX 2009 or older will have to drop the ISV layer and remap their processes and data to the new code. We’ve never seen this achieved before, and we are extremely reluctant to suggest it. Reimplementing onto a fresh install of Dynamics 365 for Finance and Operations seems the most logical choice.

Do I want to change my mind about previous setup and configuration decisions?

An ERP implementation is a large and complex beast. Even with the right information, partner and time frames, it’s still possible to end up with a system that isn’t quite what you thought it would be. Financial dimensions, for example, can go through multiple iterations of design and build until you settle on the final setup. But don’t worry, you don’t need a DeLorean to rectify this. By reimplementing you can change core decisions and create a solution that’s a much better fit for your business. And as you’ve already used a version of Dynamics AX, your knowledge of the ramifications of each decision puts you miles ahead.

Let’s go into some details to give you a better idea of which approach is the right one for your business.
Reimplementation

Reimplementing basically means firing up a clean version of Dynamics 365 for Finance and Operations and migrating the data and modifications you require.

If you are used to system implementations, you know what to expect. And be assured, migrating data and modifications from one Dynamics AX system to another is much easier than when a completely different ERP is involved. And Microsoft provides some clever and helpful tools. Reimplementation gives you a chance to review, rationalize and cleanse your data, so you only bring across what you need. However, moving transactional data is nearly impossible, so you won’t have your history in the new version. Your opening balances will map across just like they would have during your original implementation.

Reporting can bridge the gap between the old data and the new, but this needs to be factored in and planned for. Just be prepared for the fact you won’t have seamless reporting across both the old and new data.
Pros of reimplementation

• Gives you a fantastic opportunity to take a good, hard look at processes and remove or rework bad ones.

• Your chance to remove redundant modifications. Each new Dynamics release gives you greater functionality, reducing the need to modify the system.

• You can redesign data to better reflect your business. It’s a common theme: either the system wasn’t configured ideally to begin with, or the business changed over time and past decisions no longer fit. Now you can change things like the chart of accounts, financial dimensions, product structures and so on.

Cons of reimplementation

• Key users and subject-matter experts need to invest time in design workshops, user acceptance, end-user training and more. Backfilling temporarily vacated roles is recommended, or the project has a high chance of failure or dragging on. Which usually leads to substandard outcomes.

• Possible loss of transactional data. While a positive for some, it makes life harder for businesses that rely heavily on this function. Being unable to make quick inquiries on past orders, old item codes, lost sales and so on can be a big drawback.

• Typically, this approach takes consulting power to redesign processes, configure the new system, unit test, write specifications and so on.
Upgrade

Upgrading is a more technical process. Using a series of tools and scripts, the data, codes and modifications in your current Dynamics AX environment are converted into a new Dynamics 365 environment.

The conversion itself only takes a single weekend, but there are several practice sessions before doing it for real. You need to run full regression testing because you can’t take anything for granted. The conversion tools are incredibly smart, but they won’t cater for every possible configuration of a Dynamics AX environment. You need to carry out user acceptance testing for each business process to ensure the data and customizations are working. This is where a good Dynamics 365 partner can make the difference between success and failure, as they’ll help find and resolve issues where the scripts haven’t worked correctly.
Pros of upgrade

• Usually faster and less time consuming than reimplementing, this option favours businesses where time or money is the biggest issue.

• The business has less change to absorb. The upgraded system should look and feel familiar and require less training than a reimplemention.

• Lower resource investment, which is particularly important for businesses where backfilling is a problem (e.g. niche skills sets or the location limits getting temporary staff in).

Cons of upgrade

• Historical baggage is inherited by the new system.

• There’s no opportunity to rationalize data and processes.

• Requires an extremely robust and repeatable process. Because most businesses can’t afford to shut down for a week while IT upgrades its software, a lot of technical activity is focused over the cut-over weekend, leaving little room for error. A good AX partner will have a robust cut-over plan that allows rolling back in the case of failure, but this can result in multiple cut-over weekends which can be disruptive and expensive.

• Given the young age of Dynamics AX 2012 R3, the number of businesses that can upgrade directly is small. And as their implementation will be relatively recent, the motivation and reasons to upgrade will be low. There’d need to be a compelling reason to shift again so soon.
To Summarize

But for businesses on Dynamics AX 2009 or older, it’s definitely time to start looking at what Dynamics 365 for Finance and Operations can offer from a technology perspective: cloud-based, incredibly tight office integration, operating from any device, part of Dynamics 365 total solution and so on. There’s also the functional perspective including access to out-of-the-box verticals such as Process Manufacturing, Lean Manufacturing and Retail.
“Next-Next-Next, It’s That Easy, Right?”
“Next-Next-Next, It’s That Easy, Right?”

The most common (and logical) questions we are asked are ‘how long will it take?’ and more importantly, ‘how much will it cost?’

Unfortunately, some form of discovery is needed up front before we can give an answer. Just like a builder asked to estimate the time and costs of renovating a house, even if the owner can describe the building size, number of rooms, house type, etc., an on-site inspection is essential before a realistic estimate can be made.

Even putting it in a range is challenging, as influencing factors include:
- Company size
- Number of users
- Business/industry complexity geographical spread
- 3rd party solutions
- EDI and other integrations
- Wireless warehousing
- Your ability to backfill key user roles
- The appetite for change within the business
- Executive buy-in and direction
- Preferred approach e.g. re-implement or upgrade

So to make the time and costs clear from the outset, your Microsoft Partner will create a map which details the complexities of your current solution, and then produce a future-state map of the new version. This demonstrates how all the parts of the new solution integrate, and gives a great visual blueprint to refer back to throughout the project.

We have always found solution maps on the project wall well viewed and under discussion.
The Devil Is In the Details

While we draw our client upgrades done and our knowledge of the architectural changes in Dynamics 365 for Finance and Operations for each new project, it is important to remember that there will always be unknowns.

You should always factor in contingencies (in terms of time and budget) into any planned upgrade. That way you will not be caught out part-way through the project when those unknowns rear their ugly heads.

Another thing to factor into a Dynamics 365 Finance and Operations upgrade is the code sealing. Microsoft are ‘sealing off’ the application code over the next year, which means existing customization must be rewritten as an ‘extension’, rather than using the old method of ‘overlaying’.

As this document is more business-level than technical, we will not expand here. However, there are some great blogs out there that dive into the technical details, and your Microsoft Partner can explain further if required. The point is, careful planning and execution is required to deliver an upgraded system that conforms to Dynamics 365’s new architectural principles.
Why Even Bother Upgrading?
The Importance of a Unified Vision

This series has given you a high-level overview of the benefits of Dynamics 365 for Finance and Operations, and practical advice on upgrading your existing environment or reimplementing onto a clean one.

An upgrade or reimplementation is costly, time consuming and disruptive for any business. Obviously you want to be absolutely certain that the effort involved in completing the project is justified and that the benefits significantly outweigh the costs. Obviously. Yes?

However, we have seen upgrade projects where the reasoning was not clearly defined. Or even if it had been, it was not front of mind and referred to regularly during the process.

We have also seen completed projects where no one thought to measure back against the original objectives. Even when those outcomes are as simple as getting back to a supported version, or making use of wireless warehousing functionality to reduce inventory errors by 25% and increase picking speed by 30%.

If your reasons for upgrading are sound and there is a sensible and achievable ROI, then it’s worth your time, cost and effort. In this post, we will outline some of the common reasons behind an upgrade to get you thinking clearly about your own.
Upgrading to Get Better Technical or Functional Support

1. Technical

The annual Microsoft software maintenance payment lets you log support calls with Microsoft and gives you access to hot-fixes as they are released.

Hot-fixes that enable Dynamics AX to work on newer versions of server software or resolve security flaws can be crucial.

We’ve all seen the disruptive power of modern cyber-security attacks, most notably the WannaCry hack. Although this exploited a Windows rather than Dynamics AX flaw, it highlights the importance of being up to date. Microsoft only supports a particular version for so long. Then it expects customers to move to a newer version.

On Dynamics 365 for Finance and Operations, these platform updates can be easily applied by Microsoft.

<table>
<thead>
<tr>
<th>Products Release</th>
<th>Lifecycle Start Date</th>
<th>Mainstream Support End Date</th>
<th>Extended Support End Date</th>
<th>Service Pack Support End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamics AX 2009</td>
<td>2008-08-14</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>2011-01-11</td>
</tr>
<tr>
<td>Dynamics AX 2009 Service Pack 1</td>
<td>2008-11-03</td>
<td>2018-10-09</td>
<td>2021-10-12</td>
<td></td>
</tr>
<tr>
<td>Dynamics AX 2012</td>
<td>2011-09-25</td>
<td>2018-10-09</td>
<td>2021-10-12</td>
<td></td>
</tr>
<tr>
<td>Dynamics AX 2012 R2</td>
<td>2013-02-19</td>
<td>2018-10-09</td>
<td>2021-10-12</td>
<td></td>
</tr>
<tr>
<td>Dynamics AX 2012 R3</td>
<td>2014-08-01</td>
<td>2021-10-12</td>
<td>2023-01-10</td>
<td></td>
</tr>
</tbody>
</table>

Microsoft product life cycle publication dated October 2019.
For an updated list visit: https://support.microsoft.com/en-ca/lifecycle/search/640

2. Functional

As each new system version is released, it is only natural that a consultant’s knowledge of previous ones begins to fade. They are living and breathing the latest version.

The changes between V4, 2009, 2012 and Dynamics 365 for Finance and Operations are vast. Not only from the user experience perspective, but in terms of technology and functionality as well. This may not be a strong enough justification to upgrade in itself, but it certainly forms part of the reasoning.

Using old versions is a constraint on your business operations, making it much harder to get fast, quality support and effective project work done on your existing system.
Upgrading for Technological Advantage

Moving to the cloud is probably the biggest technological reason for upgrading to Dynamics 365 for Finance and Operations. This one change opens up a host of opportunities:

There are no servers to purchase and manage - Microsoft provides and manages everything you need to run Dynamics 365 for Finance and Operations optimally. This takes a huge amount of stress off your business. You can leverage from the incredible economies of scale within Microsoft data centers around the world, and there is no need for second guessing when it comes to your infrastructure configuration.

Simple integration - Now that Dynamics 365 for Finance and Operations is in Azure it can leverage off the entire Microsoft stack. Integration may not require the writing of even a single line of code. By utilizing the common data model alongside apps such as Flow, Power BI and Power Apps, connecting data from various software has never been simpler.

Scalability - If your business has natural or predictable peaks, Azure lets you scale up and down as required with the click of a button. You can view your user numbers and Azure environment accordingly, only paying for increased sizing when you need it.

Anytime/anywhere - There are no barriers to accessing Dynamics 365 for Finance and Operations in the cloud, unlike your internal network. As long as users have an Internet connection, a web browser and the right privileges, they can log into Dynamics AX from any device, anywhere in the world.

Evolutionary not revolutionary - The days of major releases every 3-4 years, requiring your entire ERP to go through a major overhaul, are long gone.

Predictable platform and application releases mean Dynamics 365 for Finance and Operations continually evolves, getting better and better, without the need for huge upgrade projects. You do need to factor in the overhead of testing and applying the new release. But it can still be scheduled for whenever you’re ready within a set time period. And because the system is now enhanced via extensions, rather than using over layering, updates can be applied without the fear of breaking the core system.
Upgrading to Drive or Enable Change

As mentioned in previous posts in this series, a reimplementation is a great opportunity to re-engineer your process and your data to give you a clean slate to work with.

You can also correct a configuration or master data setup that came about because of a bad decision or a fundamental change in your business since implementation. Remember, an upgrade does not allow this, because data is upgraded just as it is.
Microsoft’s investment in Dynamics 365 is massive, and it shows in the amount of new functionality each new version brings. Obviously not all of it will be immediately relevant to your business, but having more visibility, more automation and more control can add real value.

Here are our top 5 Dynamics 365 for Finance and Operations functions:

1. **Mobile Workspaces**
   Dynamics 365 for Finance and Operations can be viewed directly on a mobile device via a browser, but the challenge with small devices is the amount of screen real estate available. So mobile workspaces use formats that are easy to view on a small screen, and provide simple triggers for particular actions. And you can create your own customised mobile workspaces over and above the out-of-the-box ones. You simply create a new workspace title, click on the parts of the system in the browser you want to add, or click on an action. The system works out what needs to be done and creates the corresponding mobile workspace content. A very powerful tool.

2. **Task Recorder (on steroids)**
   Previous versions let users hit the record button and then carry out a process. The system then exported the screens, menu paths and steps into a Word document. But in Dynamics 365 for Finance and Operations, task recordings can be played back as a live demonstration, or even better, as a live assistance/training tool. New users can be guided step by step with business-specific instructions. The system stops users going off track, and pushes them back to the prescribed steps.
3. Power BI

Reporting is the end result of all the processes and inputs going into any ERP, bringing meaning to every interaction with the system. You can’t recognize the true value of everyone’s hard work without reporting. Power BI is Microsoft’s premier reporting platform and can take data from a variety of data sources: from Dynamics 365 itself, all the way down to Excel sheets. You can view data on your network or in the cloud, and see reports via your web browser or mobile app. Reports and tiles can even be embedded directly into Dynamics 365 or SharePoint with a few clicks of the mouse, no techie knowledge required.

Microsoft has a bunch of very useful out-of-the-box content packages for Dynamics 365 to get you started, from warehouse performance, to cost management, to production performance.

4. Prospect To Cash Integration

The common data model makes integration between Dynamics 365 for Finance and Operations and other solutions much simpler than with previous versions.

• Maintaining accounts in Dynamics 365 for Sales and syncing them to Dynamics 365 for Finance and Operations as customers.
• Maintaining contacts in Dynamics 365 for Sales and syncing them to Dynamics 365 for Finance and Operations.
• Maintaining products in Dynamics 365 for Finance and Operations and syncing them to Dynamics 365 for Sales.
• Creating quotes in Dynamics 365 for Sales and syncing them to Dynamics 365 for Finance and Operations.
• Generating sales orders in Dynamics 365 for Sales for existing products and syncing them to Dynamics 365 for Finance and Operations.
• Generating invoices in Dynamics 365 for Finance and Operations and syncing them to Dynamics 365 for Sales.

5. Company Copy

If you have more than one company inside Dynamics, especially if you have created at least one new one, you know this is no easy feat. But given that the system knows which tables are defined as configuration vs transactional, why can we not have a copy company button? Well, you are in luck! Microsoft released a mechanism to template a company’s entire setup with an option to copy and create a whole new company. “As new companies are needed, users will be able to save time and potential errors by copying an existing legal entity’s setup to the new company. This will allow the on-boarding of a new location to be quick and consistent with the company’s golden template design.”
Before upgrading or replatforming your ERP, there are many questions, concerns and considerations that need to be addressed. Thinkmax has a team of highly qualified experts that can help put everything into perspective for your business based on your current situation and vision for growth.

For all things Microsoft Dynamics 365, leverage our knowledge and expertise as a gold partner, and status in the exclusive Microsoft Inner Circle ensuring we have the insight and foresight into the most innovative cloud solutions.

Contact Thinkmax now and tell us your needs and concerns.

To get started on your digital transformation, contact:
info@thinkmax.com
1.855.219.1475
About Thinkmax

Leveraging advanced industry and technical expertise with leading-edge technologies, Thinkmax implements efficient and innovative solutions, streamlining business processes, unifying digital experiences, and accelerating transformative change.

With offices in Canada and the US and partnerships with world-leading organizations, Thinkmax’s human-centric, hands-on approach and proven methodology build sustainable solutions and enduring relationships for ongoing success.

For more information visit:

www.thinkmax.com