Microsoft

FastTrack
for Dynamics 365

Solution Blueprint Workshop
Key Findings and Recommendations

Amreek Singh
FastTrack Solution Architect

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Key Findings and Recommendations

Agenda

Program Strategy

Test Strategy

Business Process Strategy

Application Strategy

Data Strategy

Integration Strategy

Intelligence Strategy

Security Strategy

ALM Strategy

Environment & Capacity Strategy

This deck summarizes the default key findings & recommendations for SBR topics

Program Strategy   Goals and Objectives

Recommendations

Unclear or Unmeasurable Goals and Objectives:
Do you have Cleary defined goals and objectives for the project?

Having clearly documented and measurable objectives, that have been agreed upon by the business stake holders is a critical tool for scoping and implementing your solution.

Recommendations:
- It is recommended that a clear set of objectives with KPIs be developed and approved by business stake holders.
- It is recommended that the scope and prioritization of the solution be validated against these objectives.
- It is recommended that these objectives be used to evaluate change requests. Change requests that delay achieving core objectives without supporting other key objectives can be de-prioritized.
- It is recommended that these objectives be used to evaluate the use of extensions in the solution versus functional or procedural workarounds. Investing in application extensions that do not support key objectives should be avoided where possible.
- It is recommended that, where possible, KPIs that are attached to implementation objectives be included in business acceptance of the solution.

Program Strategy   Governance and Methodology

Recommendations

No defined software methodology/lifecycle or methodology is not clear to the implementation team
Do you have clear methodology or lifecycle for the project and implementation is clear about it?

The project should have a clearly defined methodology, and all project team members should have a clear understanding of the methodology. Lack of a clear project methodology introduces project risk that can ultimately cause project delays, scope creep, budget overages, failed implementations, poor user adoption.

Recommendations:
- It is recommended that the project team define and document a clear implementation methodology.
- It is recommended to train all implementation team members from both the customer and partner on the methodology, governance processes, and tools that are used to track project progress and support the methodology and governance.

No status reporting procedure for implementation
Do you have formal project status reporting procedure?

When there is no formal process for reporting status for the implementation it brings a variety of risks to the project including a potential for slip in project timeline and budget. Additionally, without a status report the larger project team is unable to identify risk from other team members activities, decision, and so on.

Recommendations:
- It is recommended that the project report status on a regular basis (weekly) with the following minimum characteristics:
- There is a single unified status report that represents the overall status of the implementation team
- The status is jointly owned and supported by all parties in the implementation
- It should track progress, resource consumption, risk, issues and key decisions.

Program Strategy   Governance and Methodology- Contd.

Recommendations

Absence of issues and risk logs:

Do you have an issue and risk log?

A central issue and risk log is important for visibility and accountability.

Recommendations:
- It is recommended that there be a single risks and issues log that is maintained for the project and that it is reviewed at regular status meetings.
- It is recommended that issue resolution and risk mitigation actions have clear assignment and are actively managed to completion.

Absence of Architecture Review process:

Do you have an architecture review process?

The absence of architecture review process can lead to difference in understanding of the solution, suboptimal design which limits the future benefits of the system.

Recommendations:
- It is recommended that the implementation team include an architecture review board comprised of architects from the customer and partner side that jointly understand and agree on the architecture of the solution.

Program Strategy   Training & Adoption Strategy and Support Options

Recommendations

<u>Training and adoption strategy:</u>
Do you have a training strategy?

It is critical to project success that a detailed training and adoption strategy is put in place.

<u>Recommendations:</u>
The plan should include multiple elements and should consider each of the following:

- Content and tools to be used for training
- Environments and logistics for conducting training
- Project timeline considerations for the training delivery and content development
- It is recommended to watch the following TechTalk Series: <u>TechTalk Series: Training Plans and Content - Microsoft Dynamics Blog</u>

<u>Support options not considered:</u>
Do you have a proper support plan?

<u>Recommendations:</u>
It is critical to review support options well in advance of go-live It is important when you are creating your support strategy to consider the following:

- Ending partner support too early can put project success at risk, as hyper care will be essential for first month end close.
- Compare subscription and premium support plans and select one that includes a response SLA that suits your business.
- Consider a support plan from the partner that will augment the support services offered from Microsoft.
- Consider how each of your ISV solutions will be supported. A support plan from your ISV may be necessary.
- Document and implement support processes before they are needed for first use.

Program Strategy   Stakeholder

Recommendations

Customers and partners stakeholders are not identified
Have you identified stakeholder with responsibilities?

Successful projects are usually the result of careful planning and the talent and collaboration of a project's team members. Projects can't move forward without each of its key team members. It should be clear who those members are and what roles they play.

Recommendations:
- It is recommended to identify all customer and partner stakeholders. Project sponsor, product owner, project manager, IT Administrator, Change Manager, Data Migration and test leads are some of the import roles for a successful projects.
- It is recommended that the customer form a steering committee that involves executives from the affected areas of the business along with representatives from the implementation partner and Microsoft.

Program Strategy   Solution Scope

Recommendations

<u>Project Timeline</u>
Do you have a detailed project schedule?

Understanding the solution scope is important to understand if the recommended solution is enough detail to enabled stakeholders to understand which new business capabilities the solution will deliver. The lack of clarity in the scope of the business functions is one of the major challenges.

<u>Recommendations:</u>
- It is recommended that the customer and partner work to clarify and document the scope of the solution including at a minimum:
  - Business Process Scope.
  - Application Component / Module Scope.
  - Gap / Extension Scope (As known).
  - Interface Scope.
  - Data Migration Scope.
  - Business Intelligence Scope.
  - Testing Scope.
  - Training Scope.
  - Rollout Scope.
  - Support / Transition to Long Term Operations Scope.
- It is recommended to revise project plan details and timelines to make sure that timelines are realistic.
- It is recommended to define an alternate Go-Live date and plan in case the first date is not met.
- It is recommended to consider reducing the scope or split the project in phases, determining, and setting proper expectations. Dividing the project in smaller phases also allows improving the system functionalities and user experience before additional rollouts.

Program Strategy Solution Scope

<u>Gaps</u>

Do you have gaps identified and documented?

Have you compared the gaps against the product roadmap?

<u>Recommendations:</u>

- It is recommended to clearly document each gap and the proposed solution for each gap in a Business Requirements Document (BRD) or Functional Design Document (FDD), for example. The top 3-5 key gaps along with their proposed solution should be reviewed with the FastTrack architect.
- It is recommended that a clear training strategy is in place for end users affected by features that are not being implemented or manual work arounds that are put into place due to the lack of availability of a road map feature.
- It is recommended that a strong change management governance process in place for roadmap features in the event the feature is not available at the time of go-live.
- It is recommended that test cases are in place for the work arounds or alternative solutions related to any roadmap feature.

Test Strategy

Test Plan/Strategy

Recommendations

<u>Test strategy</u>

Do you have a test strategy defined and approved?

The process of testing the solution thoroughly is critical to the success of the implementation. Failure to test properly throughout the implementation may result in failures in the later stages of the implementation that may delay the go live. Failure to test properly prior to go live may result in a failed go live or subsequent impact to the business resulting from defects that are found in production.

<u>Recommendations:</u>

- It is recommended to go through Testing strategy chapter from D365 Implementation guide. Click on the below link to download the implementation guide. https://aka.ms/D365ImplementationGuide
- It is recommended that business process owners within the business be engaged in testing the system in early detailed rounds to ensure completeness and accuracy of the system.
- It is recommended that at minimum, user acceptance test be conducted with each group of users that may have variations on process requirements.
- It is recommended that test scripts be created for each requirement captured and that those test scripts be written by the owners of the requirement. Additional scripts should be created for each individual process and for the end-to-end process that connects one or more individual processes.
- It is recommended that a set of process tests be created to cover the various execution paths of the business processes.
- It is recommended that these process tests be executed on the final codebase, with the final configuration set, with security configured, and with migrated data prior to Go-Live.
- It is recommended that user acceptance testing will be executed on the final codebase, with the final configuration set, with security configured, and with migrated data prior to go-live.
- It is recommended that user acceptance testing will include representatives from the user community encompassing the breadth of personas that will use the system.
  It is recommended to consider using Azure DevOps to track the test scripts and execution of tests so there can be a link between the requirements, development, bugs, and so on.
- It is recommended to solicit the business requirements from the business users and use the information to define and document the performance goals.
- It is recommended to document the major workloads expected to happen in production during a day (typical day, and exceptional peak scenarios) to visualize and optimize the concurrent workloads (for example, an import and export of the same data happening at the same time would be separated to minimize the risk of deadlocks)

Business Process Strategy   Business Process Flows and Power Automate

Plan to use Business Process Flows and Power Automate to extend workflows
Are you using Business Process Flows and Power Automate flows to extend the workflow functionality for your business processes ?

When you use Power Automate to extend workflow it is critical to ensure that a good testing strategy is in place for each Power Automate flow. Additionally, considerations for the Application Lifecycle Management (ALM) of the flows needs to be considered. For example, how will the Power Automate flow be moved from Test to Prod? A good governance and monitoring process should also be in place for the Power Automate components of your business processes.

Recommendations:
- It is recommended to define a clear monitoring and administration approach for Power Automate flows.
- It is recommended to define a clear testing strategy for each Power Automate flow in the overall workflow design and testing approach.
- It is recommended to define a clear ALM and environment strategy for each Power Automate flow.

Business Process Strategy   Mobile Access Strategy

Mobile Device Requirements and Offline Mode Requirements:
Do you have a mobile device requirements ?
Do you have business processes for mobiles that require offline mode ?

Recommendations:
- It is recommended that requirements for each process required on the mobile device is tracked separately from the business requirement for the standard web interface. Each requirement should have test cases for the mobile and web interface experience.
- It is recommended to carefully analyze the offline capability requirements against the offline capabilities of each mobile application. Use the following resources for more information:
- https://docs.microsoft.com/en-us/dynamics365/mobile-app/mobile-offline-capabilities
- It is recommended to consider developing Power Apps when additional offline mode capabilities are required. Use the following resources for more information:
- https://docs.microsoft.com/en-us/powerapps/maker/canvas-apps/offline-apps
- https://docs.microsoft.com/en-us/powerapps/mobile/work-in-offline-mode

Business Process Strategy   Localization Strategy

Recommendations

Detailed gap analysis for localizations:

Do you have any localizations planned for any specific region/country ?

When there are specific country/regions and localizations planned for the implementation, it is important to validate the detailed business requirements against the solution. The Microsoft localizations may not support all business requirements for your implementation and assuming that the requirements can be met because a country is supported can lead to missed requirements, gaps, and failed UAT testing which can lead to project delays and budget overages.

Recommendations:

- It is recommended to validate the business requirements against the solution as soon as possible because Microsoft does not support all scenarios.

Application Lifecycle Management Strategy ALM Governance & Build/Release Management

Solution Management and Automation of Build and Package Deployments:
What solution types are being deployed on various environments ?
Is the Build Process Automated ?
Is Package Deployment automated through DevOps Release Management ?

Ensure that all necessary instances are created and support the Dev, Test, Training activities and one instance is ready for Production.
The customer/partner should review the Application Lifecycle Management Tech Talk for best practices.
Application Lifecycle Management | July 13, 2020 - Microsoft Dynamics Blog

Recommendations:

- It is recommended to deploy Unmanaged solutions in Dev and Managed in Test/Prod.
- It is recommended that Dev Ops should be implemented with all code in source control.
- It is recommended that Release process should be as automated as possible to reduce manual work and avoid mistakes.
- It is recommended to start investing in automated regression testing.

Environment & Capacity Strategy

Environment for Performance & Integration Testing

Recommendations

Environment for Performance testing:
Have you assessed the environment needed for performance testing and if necessary, planned its procurement activities ?

Performance testing can't be performed on PRODUCTION, make sure to assess the environment to be used to execute your performance testing scenarios.

Recommendations:

- Scaling is dependent on capacities and licenses assigned to an environment. Work with your FT architect to make sure performance testing environment is scaled accordingly.

Environment & Capacity Strategy   Bandwidth & Latency considerations

Recommendations

<u>Bandwidth availability and latency for all locations:</u>
Have you done the bandwidth availability check for all locations?
Have you done the latency check for all locations?

Understanding the bandwidth requirements and available capacity for each network location accessing the solution is critical to ensuring the performance and usability of the application. Bandwidth shortages can result in degradation of system performance and reduced usability of the application. In extreme cases, lack of bandwidth may render the application unusable.

Individual workloads are affected by high latency in different ways. It is critical to test system operations for users with latency that is near to or exceeding the latency thresholds published for Dynamics 365. Excessive latency can have a significant effect on user experience and if high enough may make the service unusable.

Excessive latency can have a significant effect on user experience and if high enough may make the service unusable. It is critical to ensure that latency is within the published thresholds. Resolving high latency may involve changes to the location that the service is deployed in, changes or enhancements to WAN or LAN network architectures, or optimization of interfaces and processes. Latency problems that are detected late in the implementation may cause delays to Go-Live.

Recommendations:
- It is recommended that the implementation team review the network requirements described in **Verify network capacity and throughput for clients - Power Platform | Microsoft Docs**
- It is recommended that the implementation team choose the Azure region that provides the best latency for the end users to deploy the Dynamics 365 instance. Please note that Dynamics 365 might not be available in all regions; check https://dynamics.microsoft.com/en-us/geographic-availability/ for the latest information.
- It is recommended that the implementation team consider the use of dedicated networks (e.g., Azure ExpressRoute) as opposed to public internet access.
- It is recommended that the implementation team consider optimization of internal network infrastructure to reduce excess latency incurred locally.
- It is recommended that some level of acceptance testing be conducted from each location to ensure that end users experience is acceptable given the latency for that location

Application Strategy

Recommendations

Application Architecture diagram:

Is there a diagram of Application Architecture ?

Architecture diagrams are used to describe what you are building, how stakeholders interact with it and where constraints lie. When you display information visually, you can see the ecosystem at a glance and how the components interact, and this type of diagram can help create consistency and communication of the solution at a high-level before detailed designs are put in place. This helps to ensure that the downstream processes and design consider the entire ecosystem and vision for the solution.

Recommendations:

- It is recommended to create an architecture diagram that outlines all components in the eco-system and details how the components interact and the stakeholders for each component.

Application Selections Finalization:

Has the selection of Applications and Technologies been finalized ?

Determination of the applications and technologies that will comprise the application architecture is critical to the stabilization of dependent scope and design including key areas such as integration, data migration, business intelligence and deployment. Until the core application architecture is stabilized there are risks of significant scope changes that can impact budgets and timelines.

Recommendations:

- It is recommended that outstanding questions and issues that are blocking the finalization of the application architecture be prioritized and resolved as quickly as possible.
- It is recommended that the application architecture be finalized, and component technologies be acquired for the preproduction environments as quickly as possible.

Application Strategy

Recommendations

<u>Identification of Gap Requirements:</u>
Have gaps in apps been identified that could possibly not meet the business requirements ?

Best efforts should always be made to use standard capabilities to facilitate the business process in the solution. Consideration should be given to minor changes in the business process and/or work arounds that can be supported within the software before application extensions are made.

<u>Recommendations:</u>
- It is recommended that investment in application extensions be evaluated to determine the value they will provide the business versus the cost of process changes.
- It is recommended that investment in application extensions be evaluated and prioritized based on their impact to key solution objectives and KPIs.
- It is recommended that the alternatives and workarounds that were considered prior to designing extensions be documented as part of the project artifacts.
- It is recommended that the implementation team review key application extension designs with the Microsoft FastTrack team as part of a Gap Design Workshop.

<u>Licensing requirements not documented:</u>
Do you have documentation or a list of required licenses for all components ?

The project team has not yet analyzed what kind, and how many licenses are needed for the initial rollout. It is important to ensure that licensing is covered in the project planning so that you can assess the impact to the project budget.

<u>Recommendations:</u>
- It is recommended to analyze and document the required licenses for the initial rollout including any external components for the project.

Application Strategy

ISVs and Add-Ons

Selection of ISV Solutions:

Which ISV Solutions are being implemented ?

For each gap the project team identified the best ISV solution. There are 5 or more ISV solutions planned in the implementation scope. The unique combination of ISV solutions comes with need for proper testing and regression testing later on. The addition of ISVs can complicate your release, update, and testing processes. Each additional ISV you add, or extensions on top of ISVs, will require additional effort to coordinate the procurement, deployment, and testing of updated versions.

Recommendations:

- It is recommended to avoid introducing large number/ multiple complex ISV solutions, if possible, as this would introduce the risk of overlaps or even contradictions of code and functionality.
- It is recommended to plan your update processes well in advance and coordinate these activities with each ISV. Effort will be required to ensure you can obtain an updated version from your ISV(s) with enough time to regression test your full solution. Specifically, note the expiration date of your current release in LCS today, plan your deployment and testing schedule, and contact your ISV(s) today to coordinate this schedule.

Application Strategy

ISVs and Add-Ons – Cont'd..

Recommendations

Support Model for ISV Solutions:
What is the ISV support model ?

ISV solutions can play a key role in delivering specific functionality allowing customer to quickly adopt the readymade solution rather than customizing from scratch. The support model throughout the project and post go-live should be considered. Additionally, a clear strategy for dealing with product or feature deprecations should be in place. The customer should have a clear understanding of the update policy. The customer should have contractual terms covering scenarios with each ISV that covers scenarios such as the ISV ceases to operate, gets acquired or situations where they need to provide ownership of code/intellectual property.

Recommendations:
- It is recommended to have a clear support strategy in place with each ISV solution provider that outlines the support process during and after the implementation.
- It is recommended to define the update strategy with each ISV and plan the updates with the business and project activities. This applies during and after the project.
- It is recommended that detailed contracts are in place with each ISV.

Application Strategy ISVs and Add-Ons – Cont'd..

Recommendations

<u>Customizations on top of ISV Solutions:</u>
Will customizations be required on top of ISV solutions ?

Best efforts should always be made to use standard capabilities to facilitate the business process in the solution, regardless of whether the capabilities provided by Microsoft or a third parties. Extending the application introduces the risk of duplication or conflict with future releases and application extensions that may inhibit the adoption of new capabilities. Consideration should be given to minor changes in the business process and/or work arounds that can be supported within the software before application extensions are made. Each additional ISV you add, or extensions on top of ISVs, will require additional effort to coordinate the procurement, deployment, and testing of updated versions.

<u>Recommendations:</u>
- It is recommended that investment in application extensions be evaluated to determine the value they will provide the business versus the cost of process changes.
- It is recommended that investment in application extensions be evaluated and prioritized based on their impact to key solution objectives and KPIs.
- It is recommended that the alternatives and workarounds that were considered prior to designing extensions be documented as part of the project artifacts
- It is recommended that the implementation team review key application extension designs with the ISV prior to implementation.
- It is recommended to plan your update processes well in advance and coordinate these activities with each ISV. Effort will be required to ensure you can obtain an updated version from your ISV(s) with enough time to regression test your full solution. Specifically, note the expiration date of your current release in LCS today, plan your deployment and testing schedule, and contact your ISV(s) today to coordinate this schedule.

Data Strategy

Recommendations

Data Migration:

Do you have a Data Migration strategy?

Has the data migration scope been clearly documented for the implementation project ?

The implementation team should have a clear definition of what data entities will be migrated to the new solution and where they will come from. The catalog should include all master and transactional data migrations needed for the implementation. The catalog should have details about the volume of data expected to be migrated and the high-level approach. Business process owners should be assigned to each data point to be migrated. It is also important to consider data migration needs beyond Dynamics 365 applications. These may include integrated systems that must be updated to reflect changes in master data IDs, chart of accounts or other data changes that must occur during your cutover. The catalog should also outline any quality standards, transformations, or mapping that is required for the data migration.

Recommendations:

- It is recommended to create a data migration catalog, including all master and transactional data migrations needed. Gather and document data entities and volumes following process-driven approach in the current project phase.
- The implementation team should have a clearly defined set of actions and responsible parties for each of the following:
  - ✓ Identifying source data to migrate
  - ✓ Identifying target entities for migration
  - ✓ Mapping source to target
  - ✓ Testing and validating the migration
  - ✓ Executing data cleanup
  - ✓ Executing data transformation
- It is recommended to develop test plans for each data migration and transformation, and then incorporate these tasks into your cutover plan and practice them during your UAT build.
- It is NOT recommended to import historical data into Dynamics 365 and to use a data warehouse for maintaining legacy and historical data.

Data Strategy

Migration – Attachments/Documents

Recommendations

SharePoint Online for Documents/Attachments: :
Are you planning to use SharePoint Online to store documents/attachments ?

There is a plan to leverage SharePoint Online for some or all document/attachments. While the access to the attachments is limited from within the user interface in Dynamics, users may be able to access and browse documents from the SharePoint Online library directly. The security of the library must be configured in SharePoint directly. Additionally, document retention policies can be directly setup in SharePoint which may remove a document from the SharePoint library; however, the document reference and link will remain in Dynamics 365 causing broken links and references to exist.

Recommendations:
- It is recommended to carefully consider and test the security of the SharePoint online library.
- It is recommended to carefully consider the document retention policies in SharePoint.

Azure BLOB Online for Documents/Attachments: :
Are you planning to use Azure BLOB storage to store documents/attachments ?

There is a plan to leverage Azure Blob Storage for some or all document handling attachments. It is important consider security, file types, and sizes of files that will be allowed. Files can be very large and make the database grow quickly. Evaluate the estimate growth and determine if additional Azure Blob file storage capacity is needed.

Recommendations:
- It is recommended to consider the file type carefully consider the security and access for files that are added to records.
- It is recommended to carefully consider the file types and sizes of files that will be allowed.
- It is recommended to evaluate the estimated storage capacity required and purchase additional capacity if required.

Integration Strategy

Scope and Approach

Recommendations

Scope and Approach: :

Is the integration scope clearly defined and the responsibilities are assigned?

When the project team is not able to clearly define the scope and responsibilities for the integrations, there is increased risk to the project timeline, budget, and scope. When the responsibilities are not clearly defined, this can lead to missed deadlines, requirements, or testing.

Recommendations:

- It is recommended that the action be taken to define integrations at the individual interface level.
- Each interface should have some of the following characteristics defined:
  Entity, direction relative to Dynamics 365, mode, volume, frequency, interface pattern.
- It is recommended to define clear responsibilities and ownership for each phase of the development, middleware, external components, and so on for each integration.
- It is recommended that the business process owners from the customer are responsible for validating the design and requirements for each interface.
- Use Async patterns as a best practice.
- Real-time or near real-time integrations can introduce risk related to performance and data integrity.
- It is recommended that the architecture for any synchronous interfaces include the design of a mechanism to deal with outages in the Dynamics 365 service.
- It is recommended that solutions that have external components with a synchronous dependency on Dynamics 365 maintain a Microsoft update schedule that will allow them to take advantage of reduced or zero downtime updates
- In integration scenarios where volume of data is critical, it is recommended to be cognizant of:
  - Service Protection API Limits- Service Protection API Limits (Microsoft Dataverse) - Power Apps | Microsoft Docs
  - Entitlement limits - Requests limits and allocations - Power Platform | Microsoft Docs
  - Consider use of Retry-After options (to send requests in event of API Limit errors).
  - Also consider API limits for the other components involved in the integration such as Logic Apps or Power Automate.

Monitoring

Recommendations

<u>Monitoring the system: :</u>
What are you doing for monitoring the system?

It is important to monitor the system to avoid downtime. It is also important for the customer to understand the service maintenance and service updates process. Consider Application Insights, a feature of Azure Monitor, is an extensible Application Performance Management (APM) service for developers and DevOps. professionals.

<u>Recommendations:</u>

- It is recommended to consider the use of Azure App Insights as a tool to help monitor performance and use of your Dynamics 365 applications.
- [Preview: Overview of integration with Application Insights - Power Platform | Microsoft Docs](#)
- [Analyze telemetry of a canvas app using Application Insights - Power Apps | Microsoft Docs](#)
- Use App Insights to monitor page views and performance of Power Apps portals.
- Integrate your solution integration with App Insights.
- Use Microsoft 365 for monitoring service health and receive maintenance updates
  [How do I check my online service health? - Power Platform | Microsoft Docs](#)

Security Strategy

Recommendations

<u>Overview of security strategy, specific legal or compliance requirements:</u>
How are you planning to implement your overall Security Strategy ?
Are there any specific legal or compliance requirements or compliance requirements for encryption, back-up and data retention ?

Unable to provide an overview of the security strategy for the implementation might lead to project delays and implementation issues.

<u>Recommendations:</u>

- It is recommended to have a high-level design of the security principles that will be used, and to create a high-level description of the scope of security requirements at an early stage as these when retrofitted into the overall architecture could potentially conflict with other feature designs, native capabilities, or even introduce technical issues.
- It is recommended to consult with compliance and audit stakeholders and gather their requirements as early as possible to ensure the solution complies with your rules and regulation
- Even though, there are no specific legal and/or compliance certification requirements, it is recommended to review following links that provide insight on how Microsoft is compliant with a number of legal, security and industry-specific requirements.
  - https://docs.microsoft.com/power-platform/admin/wp-compliance-data-privacy
  - https://docs.microsoft.com/dynamics365/get-started/gdpr
  - http://www.microsoft.com/trustcenter
  - https://servicetrust.microsoft.com/ComplianceManager

Security Strategy

Role based security, Identity, Authentication, Monitoring and Management

Recommendations

<u>Overview of security roles, previleges, access levels, access to Dynamics 365, Authentication providers, AAD groups, control security to Azure components, security considerations for integration accounts:</u>

Are all security roles, previleges identified ?

Did you copy standard roles before assigning or have you created roles from scratch or have you assigned previleges directly to security roles ?

What users are assigned to System Administrator role ?

How are you planning for Service Account/Integration Identity/Administrator Accounts ?

How are you limiting access to Dynamics 365 ?

How are you planning to control security in Azure SQL, Azure Data Lake, Azure Synapse Link for Dataverse and Power BI ?

Do you plan to use AAD groups ?

Are you planning to implement database logging ?

<u>Recommendations:</u>

- It is recommended to document the personas relevant to each requirement and business process to facilitate the assignment of roles that allow users to perform required tasks.
- It is important to note that changes in scope or other factors during implementation may result in role assignment that results in license consumption that differs from presales estimates.
- It is recommended to create copies of standard roles and use these copies of standard roles to facilitate assignment of roles to users that enable them to complete required tasks. With those assignments in place, then proceed to methodically restrict specific roles to the extents necessary. It is further recommended to complete this process before creating custom security roles.
- It is recommended to be extremely mindful of assigning users System Administrator role as enabling full rights to all users puts your data and processes at risk
- It is recommended to identify required system accounts and integration account identities and ensure that these accounts are managed in accordance with organizational security policies and application requirements.

Security Strategy

Recommendations

Recommendations:

- For Dynamics 365 Customer Engagement apps and Dataverse:
- Server-to-server (S2S) authentication allows secure and seamless communication between applications and services.
- Learn more on application users and non-interactive user accounts
- It is recommended to confirm the requirements for Conditional Access as soon as possible as this may require some infrastructure setup. (e.g., using Azure Active Directory (AAD) Conditional Access (CA) for IP whitelisting requires clients with non-static IP addresses to use a VPN across an access point that is safe listed in CA.)
- It's also recommended that you review Conditional Access scenarios for Dynamics 365 apps, below links are a good start point:
- Azure AD Conditional Access documentation
- Block access by location with Azure AD Conditional Access
- Once data is in external stores, Dynamics security permissions are not applied and customers need to apply their own security mechanism for reporting. Hence, it is recommended to have a data management strategy for all data that is stored outside of a core application. This strategy should include security requirements (encryption, access controls, row level, PII) as well as data residency and retention requirements.
- It is recommended to judiciously make use of database logging and should be limited to specific data elements where an auditable record of changes to specific tables that contain sensitive information is explicitly needed. Poorly planned database logging can have adverse effect of application usage as it drastically impacts the performance due to rapid growth of log tables in database.
- Limit log entries, and help improve performance by selecting specific fields to log instead of whole tables, and avoid logging on transactional tables.
- Create a plan for how long you will retain logged data, and how you will archive or delete data.

Intelligence Strategy

Recommendations

Requirements for reporting and approach/strategy followed to meet them :
What are the reporting needs and how the data would be captured ?
Are you planning to use SSRS reports ?
Are you planning to use Power BI ?

A good reporting and BI strategy will outline the reporting needs and how the data for the reports will be captured, reported on, and analyzed. The plan should include details about reports in a form of statistical data, visual charts, or standard textual context and the team has identified of the data is internal or external to the Dynamics 365 system.

Excessive use of SSRS reports may be time consuming and costly to develop and do not take advantage of many improved reporting features that are available with the Dynamics 365 platform.

Recommendations:

- It is recommended to have a plan that details out how the data will be captured, analyzed and displayed.
- It is recommended to consider whether the analyzed data would be displayed in statistical format, or visual charts or standard textual context.
- It is recommended to identify the data sources, whether they are internal or external to Dynamics 365 CE.
- It is recommended that all the reports generated by the system do not impact the stability and performance, while providing insights to Business Decision Makers.
- It should be good option to consider SSRS reports where reporting requirements are related to external facing documents.
- It is recommended to use Configurable business documents or ISV solution if your requirements are to utilize custom fonts in SSRS reports as SSRS reports do not support custom fonts.
- It is not recommended to use SSRS reports when working with large dataset and complex calculations. Power BI can be considered as an alternative option here.
- While planning for Power BI dashboards and reports, it is recommended to ensure that the strategy used for connecting to data is carefully planned.
- It is recommended to define the strategy that will be used for extracting/retrieving data for reporting early in the project. Consider whether the data will be exported to BYOD or an On-Premise Database, Azure Data Lake
- It is recommended to document the approach for mashing up the data , when data mash ups across applications are required for reports.

Intelligence Strategy

Artificial Intelligence

Recommendations

AI requirements and demand for forecasting strategy to meet the business requirements for reporting:
Are there business requirements that require AI models as a component of the reporting solution and forecasting strategy ?

When there are AI requirements for your project, depending on your approach, specialty skills may be required, additional Azure resources and licenses may be required, and so on.

Recommendations:

- When you plan to use the AI Builder to meet the AI requirements for reporting, it is recommended to note that many of the built in AI models have limitations or pre-requisites that must be met in order to use the model. It is critical that you analyze the business requirements against these pre-requisites and limitations.
- When you plan to use Azure Machine Learning to meet the AI requirements for reporting, it is recommended to consider the following:
    - Azure infrastructure required to support the AI models.
    - How the AI data will be processed from computation standpoint.
    - Which AI compute technique will be followed viz. Spark, DSVM, Batch AI, ACS, or IoT Edge etc.
    - What will be the data layer viz. Cosmos DB, Azure SQL, or a Data Lake.
    - Document the non-functional requirements for the AI models that are planned.
    - Carefully analyze and purchase the correct licensing required for your solution