

## Omnichannel vs Custom dev Comparison

At the outset, though implementation of a Microsoft Omnichannel solution will provide many capabilities out of the box and promises to do so within the desired timeframe, it could still lead to less than desirable outcomes such as

- Vendor lock in
- Encapsulation of useful business services into proprietary API
- Limitations to integrating with other backend CRMs
- Deviation from VA.gov web brand consolidation strategy

Below is an assessment across various comparison axes:

Considerations	Details	Omnichannel	Custom dev
Consistency with VA.gov strategy	<p>Solution should aim to create a single "front door" for Veterans to access VA services.</p> <p>VA's internal org chart should be invisible to customers; Veterans should be provided the same information about their situation regardless of whether they use a digital tool or a different customer support channel, there should be a single source of truth —one version of content, one version of a tool.</p>	<p><b>Challenging but possible.</b></p> <p>We would have to decide between not using some Omnichannel features (FAQs, Knowledge Base, etc.) or moving most/all content over to Omnichannel.</p> <p>Would potentially create confusion for Veterans, as it could mean either creating one home for medical secure messaging and a different one for customer support messaging, including customer support about VHA topics.</p> <p>Current roadmap talks about a mobile SDK, but at present, it doesn't seem like it would be easy to present the same set of messages and a continuous experience across web and mobile — and so a</p>	<p><b>Works with VA.gov</b> brand, consistency and authority strategy by default. Teams can use the VA Design Library, and collaborate with other VA product teams to create a cohesive experience.</p> <p>High-quality shared service(s) that handles communication with CRM software would allow for seamless cross-platform experience (web, mobile, etc) and a single Veteran-facing tool for communicating with the VA via text.</p>

		<p>good amount of custom development would be necessary to make it work.</p> <p>It may be deployed on a subdomain of VA.gov.</p>	
Consistency with Digital Platform Strategy approach	DPS advocates for use of low-code tools only in non-differentiated spaces	Our understanding is that DEPO and OCTO view the flagship veteran experience as a differentiator, meaning that a low-code approach would not be recommended.	<b>Custom development offers the control and flexibility to tailor this experience and continue to evolve this as VA.gov Digital Modernization vision evolves</b>
Ability to modify/maintain	<p>Solution should be flexible enough for modifications and maintenance.</p> <p>Attention to customization, production support, version control (to aid in archive-ability/auditability) and automated testing should be considered.</p>	<ol style="list-style-type: none"> <li><b>1. How much can be customized in the omnichannel experience?</b></li> <li><b>2. Are automated tests and version control supported when changes are made?</b></li> <li><b>3. What/who would be required to make changes given it's not part of the VA.gov centralized codebase?</b></li> </ol> <p>In previous work with Microsoft's Health Bot Service and Bot Framework, there was no way to track incremental changes. The team wrote additional automated scripts to promote</p>	<p>Developing a solution on VA.gov leverages existing infrastructure and automated tests with VSP. All custom code written is in version control and contributes to the established automated testing suite and centralized code repositories.</p>

		changes between environments. Regarding customizability, it was a compromise between some styles that could be overridden and some components that could not be changed for the use case.	
Accessibility	Solution should conform to 508 compliance as required by federal government websites. Under Section 508, agencies must give disabled employees and members of the public access to information comparable to the access available to others.	<p>Microsoft supports 508 compliance in all its products with HTML5 and this focus is engrained in the beginning with the development of products. The current VPAT for Dynamics Portals can be found <a href="#">here</a>.</p> <p>In previous work with Microsoft's Health Bot Service and Bot Framework, there were several key accessibility issues that could not be fixed by the team. These issues needed to be filed as specific requests for the Microsoft product team to handle. We have seen there is usually a longer turn-around time for these product releases as opposed to bug fixes on custom code.</p>	<p>Development on VA.gov uses the VA Design Library and Forms Library (automated and exploratory testing for accessibility, browser &amp; devices support).</p> <p>Accessibility testing occurs as part of the software development lifecycle. The team works with VA accessibility SMEs and the VSP team to use their triaging process for addressing accessibility issues of different levels.</p>
Rollout risk (deployability)	Solution should allow us to avoid the risk of deploying all at once (big bang).	<b>1. Can Omnichannel support phased roll-out or will everything need to be released at once following a big</b>	Allows for phased roll-out. During this transition period, Veterans would have access to the new experience sooner, even though behind the

		<p><b>bang approach?</b></p>	<p>scenes, their inquiries would be routed to two possible backend systems. Each inquiry will be routed to either the old Oracle system or the new PATS-R CRM, depending on which line of business their inquiry is associated with.</p> <p>This is valuable for both getting feedback from the users sooner, as well as validating our path to production strategy earlier without risk to existing system functions.</p> <p>The TW team has been exploring Robotic Process Automation as a way to send data from the new forms to existing Oracle Inquiry forms and is available to demo the prototype.</p>
Capabilities/Features matrix	Integration with VA.gov authentication	Dynamics Portals can integrate with the open OAuth protocol which includes authentication providers such as VA PIV, VA Active Directory, DS Logon, ID.me, DOD CAC.	It will leverage the VA.gov sign in mechanism. Once the GI Bill account management system is deprecated as part of Oracle, there will be one fewer account for a Veteran to manage.

	Sub-domain on VA.gov	<p>With the portal implementation, it is important:</p> <ul style="list-style-type: none"> <li>• To ensure there is smooth hand-off between VA.gov and sub-domain on VA</li> <li>• Possibly there are additional ATO considerations</li> <li>• Implications of hosting the MS PowerApps User Portal on subdomain:</li> </ul> <p>Information Architecture (IA Content) strives for VA.gov web brand consolidation. Best practice guidelines discourage any more additional subdomains to be hosted</p> <ol style="list-style-type: none"> <li>1. Subdomain URLs are indexed at a lower frequency and will impact SEO and search ranking</li> <li>2. <a href="#">IA Content</a> - custom vanity URL will not be created to maintain VA.gov brand, consistency, and authority</li> <li>3. <a href="#">Redirects</a></li> </ol> <p>Overall Build vs. Buy strategy: Given OIT and DEPO are looking to avoid building any additional sub-domains where possible, this will be a deviation</p>	Will be integrated with the main VA.gov domain, making it a seamless experience for the end user.
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	Secure Messaging	<p>Dynamics Portals can be configured to support various types of secure two-way messaging features that are also tied to authenticated users as well as user profiles for review of two-way communications.</p>	<p>MVP can be built using existing VA.gov functionality (i.e. <a href="#">Claims Status Tracker</a>) which can be modified to fit two-way messaging. Can support attachment and VA.gov profiles.</p> <p>Given this is an existing pattern on VA.gov, it is fairly straightforward to include a new interface for an authenticated user to view their messages and respond to it. This is however dependent on the availability of PATS-R APIs to allow for integration with the Front End and VA.gov.</p> <p>Could integrate with a Secure Messaging shared service in the future to create an even more integrated experience.</p> <p>It would be aligned with the product roadmap for improving VA.gov user profile and having an action oriented dashboard, that gives user a</p>
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			centralized view of their interactions with VA.
	Reporting/Analytics  (also Qualitative feedback for customers - TBD)	<p>Google Analytics can be introduced to Dynamics 365 Portals using the Google Analytics tracking code which is simply placed within the webpage code.</p> <p>There might still be additional scripting required to track events from within the portal controls: Some examples: -How many users dropped off when prompted with a login screen - Which inquiry topic was chosen by the user, etc.</p> <p>It is likely that many finer user interaction details are captured within Microsoft database such as AppInsights, and we will need to pull data from multiple sources to achieve a consolidated view of the metrics</p>	Given the code would be integrated with VA.gov, the team would work with VSP Analytics SMEs to ensure tracking of appropriate metrics. Building the solution in-house allows us to have more control over the components and what we track where and when.
	Chatbot	Dynamics 365 Portals have a Virtual Agent for Customer Service capability.	In collaboration with Luciana, not identified as MVP
	Responsive design	Dynamics 365 Portals uses the Bootstrap frontend framework. Bootstrap can be used to help site layouts dynamically adjust to devices that have different screen sizes,	Built into the VA.gov Form Library, and has a tooling supporting a comprehensive suite of browsers and devices. This will allow us to be in alignment

		such as phones and tablets.	with existing design principles on VA.gov and ensure a consistent experience for the end users.
	FAQ management	Omnichannel portal has the capability to host a FAQ system - that has FAQ content, allows for searching through the content, presenting popular categories upfront to the user. It is suspected that this capability will not be immediately relevant in the context of VA.gov	Resources & Support (formerly Learning Center) has been recently launched and is aimed towards consolidating all the multiple sources available to the veteran and family members
Cost	Solution should consider licensing, customization, other maintenance and support costs.	<ul style="list-style-type: none"> <li>- Implementation cost</li> <li>- Licensing cost</li> <li>- Ongoing maintenance costs</li> <li>- Deployment costs</li> </ul> For auditability and legal compliance, the data hosted in the Microsoft Dynamics portal will need to be	If the solution is built on VA.gov, no additional licensing is needed. There is some cost to cover the development team that will continue to support and maintain this new system, but the code will be centralized in existing repositories.