



CAPSTONE2020 PWA-Starter-Kit (Alpha) Checklist Audit

Citizen Services' OCIO-ES IMB

<https://bcgov.github.io/CITZ-IMB-playbook>

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Executive Overview

The IMB Modern Application Playbook Checklist was applied to the Capstone2020 PWA Starter-Kit PoC project and received a cumulative score of **85.45%**.

The project demonstrated a high degree of compliancy but areas for improvement were also identified particularly concerning change management and roadmap development.

Purpose

This document is a tool that can be used along with the Modern Application Playbook to aid teams in preparing for transitioning of their solutions from ideation, project approval through development and into lifecycle support and sustainment.

This document will be reviewed annually and updated based on user feedback and experience gained in transitioning projects.




Feedback is welcomed and should be submitted [here](#).

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Play 1 – 88.6%


Ideate Solutions That Meet the Needs of Business

	Step 1: Promote Innovation from Within	Comment
✓	Is the business mandate understood?	<i>The Capstone2020 PWA Starter-Kit started was developed in partnership with the CITZ-IMB.</i>
✓	Are the needs of the user understood?	
None	Has any bias been detected?	<i>The Capstone team proposed a number of ideas and chose the one that best met the business requirement to bring forward.</i>
✓	Is creativity encouraged?	
✓	Are team collaboration activities encouraged?	
✓	Are visualizations used to convey ideas?	
✓	Are many ideas being generated?	
✓	Are peer reviews being used?	
100%		
	Step 2: Engage Your Stakeholders	Comment
✓	Are wireframes and prototypes being generated?	<i>As part of the proposal a wireframe was designed using Figma and stakeholder meetings were held. (Initially) Personas were designed.</i>
✓	Is feedback being solicited?	
✓	Are persona's being use to tell user stories?	
✓	Are stakeholders reviewing and prioritizing the user stories?	
100%		
	Step 3: Proposal Presentation	Comment
✓	Prepared for pre-inception work	<i>The Pre-inception sessions were held. "Pitch" presentations prepared and presented. Approval to proceed was granted.</i>
✗	Has a product roadmap been developed	
✓	Has Business Unit approval been granted	
66%		

Play 2 – 70%





Successfully Navigate the Project Intake Process

☒	Step 1: Obtain Business Unit Endorsement	Comment
✓	Is the project initiation process being followed?	<p><i>A formal “Project Initiation Process” was followed to gain initial approval to proceed.</i></p> <p><i>As this was a POC no BC/CC or OpModel were required.</i></p> <p><i>“DefinitionOfDone” was discussed but not codified</i></p>
✗	Has a business/concept case been developed?	
✓	Is there a senior business consultant working on the project?	
✗	Has an operating model been developed?	
?	Has “done” been defined?	
✓	Has a sustainment lifecycle been defined that will help clarify who will operate and maintain the product?	
50%		
☒	Step 2: Follow the Ministry IM/IT Project Intake Process	Comment
✓	Have the project initiation steps been followed?	<p><i>A formal “Project Intake Document” was prepared and submitted for review.</i></p> <p><i>The project was registered in the Project tracking System.</i></p> <p><i>Architects were involved but did not go through the ARB.</i></p>
✓	Has the project been registered in the ministry project tracking system	
?	Has the project proposal been introduced to the project review board?	
?	Has the project proposal been introduced in the architecture review board?	
60%		
☒	Step 3: Determine Project Resourcing	Comment
✓	Has resourcing been considered for this proposal?	<p><i>Resourcing was assigned. 3 College developers, a PO, a TA from IMB.</i></p> <p><i>Normally a signed agreement with College would be required due to COVID that was not established</i></p>
?	Is a partnership agreement or memorandum of understanding required?	
70%		

	Step 4: Provide Regular Updates	Comment
✓	Are reporting updates scheduled at appropriate times for the class of project being considered?	<i>The project followed formal SCUM ceremonies.</i>
✓ 100%	Are project updates being published in the ministry project tracking system?	
		<i>Weekly project updates were entered into caPPM.</i>

Play 3 – 85.25%

Building Your Team

	Step 1: Go Agile	Comment
✓	Is the project using an agile methodology?	<i>Team members have taken Agile training .</i>
✓	Have team members and stakeholders taken agile training?	
100%		
	Step 2: Augment your team with experience	Comment
✓	Have all roles been identified for the project?	<i>Roles were assigned prior to Sprint0 “College Capstone” equiv to a CwU. No PIA/STRA rep on team. .</i>
?	Is a security and privacy officer part of the team?	
✓	Has a product owner been identified?	
?	Have CodeWithUS and SprintWithUS been considered to augment the team makeup?	
75%		
	Step 3: Introduction to the Product Vision	Comment
✓	Have all team roles been defined and allocated?	
✓	Does the team understand the approval process for signing off on deliverables?	
✓	Has the product owner presented the solution vision to the team?	
✓	Does the client understand the risks involved (if any)?	
✓	Does the team have a list and understanding of the tooling they require?	
✓	Has a reporting strategy for communicating progress to stakeholders been identified?	
✓	Has the Project Inception Agenda been created?	
100%		
	Step 4: Project Inception	Comment
✓	Have the teams’ values been created and displayed?	<i>Discussions and an informal consensus.</i>
✓	Has a team agreement been mutually agreed upon?	
✓	Has the “way of working” been identified?	
?	Has a common “definition of done” been agreed upon?	
✓	Has virtual/physical team space been agreed upon?	<i>BCDevExchange</i>
✓	Has the development environment been defined and procured?	<i>Initial work was done but this evolved over the course of the project.</i>
✓	Has an initial backlog of requirements/stories/features been created?	
?	Have the user stories been prioritized?	
✗	Has acceptance criteria for each story been defined?	
70%		

Play 4 – 81.5%

Ready, Refine, Sprint...

	Step 1: Develop a Release Plan	Comment
✓	Has the (initial) backlog been refined?	<i>A release schedule was developed as part of the Product plan. The technology base provided an initial list of dependencies. A backlog was created and refined over time.</i>
✓	Has the product release schedule been defined?	
✓	Have all dependencies been documented?	
100%		
	Step 2: Develop Your Conceptual Architecture	Comment
	Have the system architecture, components and relationships been developed and documented?	<i>This was very “organic” an in hindsight we could have done a better job in this area.</i>
70%	<i>Yes for the environment, could have been better for the solution.</i>	
	Step 3: Adhere to Modern Application Principles	Comment
✓	Is the project cloud-based or cloud ready?	yes
✓	Is the solution conforming to the 12 factors application methodology ?	
100%		
	Step 4: Set up Your Technical Infrastructure	Comment
✓	Does the team have IDs and access rights to all required systems?	<i>GitHub, OpenShift, IDIR</i>
✓	Has the team communication channel been defined and set up (ex: MS-teams/ Rocketchat/ Slack)?	<i>Team used all three + eMail</i>
✓	Has the documentation repository been created and setup, all team members are aware of the structure?	<i>Confluence was not used but should have been.</i>
✓	Have the technical environments been setup and tested?	Yes
90%	<i>An alternative for doc was used: GoogleDocs</i>	
	Step 5: Identify Your Development Workflow Processes	Comment
✓	Has the development workflow been documented?	<i>Was a requirement for the pipeline</i>
100%		
	Step 6: Set Up, Document, and Implement Your Tooling (Code Repository, Pipelines, Automation)	Comment
✓	Does the team have access to and know how to publish to the code repository?	

✓	Does the team have a shared understanding of the code delivery process?	
✓	Has the product delivery manager verified all processes?	
?	Has an application security framework review occurred?	<i>Requires more work to understand</i>
75%		
☒	Step 7: Educate Your Business Stakeholders	Comment
✓	Are the business stakeholders regularly updated on the project's status, budget and features?	<i>Yes as part of the weekly caPPM requirement</i>
?	Are change management processes being followed?	<i>Informally yes, none were documented (should have been)</i>
50%		
☒	Step 8: Now Sprint...	Comment
✓	Has Sprint 0 occurred, and is the team able to start working?	
✓	Are sprint ceremonies being followed and documented for review?	
✓	With each sprint, is the Scrum master looking for opportunities to improve the team's efficiency?	
100%		
☒	Step 9: Conduct Code Reviews	Comment
✓	Are the code review results posted for all to review?	
?	Is there a need to modify coding standards?	<i>AirBnB guide as "standard"</i>
?	Do the automated code testing processes reduce the need for manual reviews? Are the logs being read?	<i>Manual review was conducted. Lack of formal test scripts.</i>
40%	<i>Identified as an area for improvement</i>	
☒	Step 10: Complete User Acceptance Testing and Remediate Defects	Comment
?	Are the tests being maintained? Reviewed? What is the % of pass to failure? What is the process to remediate defects? What is the mean time to remediation?	<i>The PoC had regular demos and all remediation was done within the same dev sprint.</i>
60%		
☒	Step 11: Deploy and Promote Through Your Environments	Comment
✓	How many pull requests are occurring during a sprint? Is this related to package/feature sizes?	<i>In all there were 66 PRs</i>
?	How often are the environment logs being reviewed?	<i>The DevOps Specialist did review informally</i>
75%	<i>Area for improvement: Would require a formal process</i>	
☒	Step 12: Demonstrate Your Products Frequently and Obtain User Feedback	Comment

✓	How often are product & feature demos being held? How many features are deprecated as a result of feedback from demos? How many features are changed as a result of demos?	<i>Was done at the predetermined scheduled dates.</i>
100%		
☒	Step 13: Monitor and Measure the Development Process	Comment
✓	Is the rate (velocity) of development keeping up with expectations?	<i>Exceeded expectations</i>
✓	Is the deployment pipeline being monitored and measured regularly?	
100%		

Play 5 – 83.3%

Transition to Operations

☒	Step 1: Review the Memorandum of Understanding	Comment
✓	Are changes required?	<i>The team met their obligations, as stated there was no formal MoU</i>
✓	Are commitments being upheld?	
100%		
☒	Step 2: Complete Knowledge Transfer	Comment
✓	Does a knowledge transfer plan exist? How often has it been reviewed? Are changes required?	<i>The documentation was codeveloped with the Ops team. Education was ongoing.</i>
✓	Do roles exist to inherit the body of work?	
✓	Is there an education plan for the staff receiving the work?	
100%		
☒	Step 3: Validate Operations Processes	Comment
✓	Does the transition document include a “rebuild/install” document?	<i>documented</i>
✓	Has a clean build on a different local environment been validated? Does it match the documentation?	<i>performed</i>
✗	Has the change management plan and processes been reviewed?	<i>needed</i>
?	Have all the operations processes been validated? Deficiencies identified and a remediation plan initiated?	<i>partially</i>
50%		

- Review the [IMB Application Transition Checklist](#)

Play 6 – 92.8%

Continuous Product Improvement

☒	Step 1: Incorporate Feedback	Comment
✓	How frequently is product usability being reviewed with end users and stakeholders?	<i>As a PoC the project has yielded insights and areas for enhancements</i>
✓	How is feedback being categorized?	
✓	What percentage of feedback is actioned?	

?	As a result of feedback being incorporated into the product do you see greater adoption ? Usage? User satisfaction?	<i>have been identified and documented</i>
?	Are the target metrics being met? Can some be deprecated? Others added?	
70%		
☒	Step 2: Maintain Product Vision	Comment
✓	How frequently are the stakeholders being asked to reaffirm the product vision?	<i>weekly</i>
✓	What is on the Kanban? How big is the backlog? How often is backlog grooming occurring? Are there any noticeable trends?	<i>Trello , weekly, high % of commitments were delivered on time with minimal features left on the backlog</i>
100%		
☒	Step 3: Conduct Process Improvement Reviews	Comment
✓	What is the typical size of tasks? What is the optimal size for the team to maintain its velocity?	<i>As a PoC this was a learning experiment, metrics could be designed for future. Features were deprecated, others proposed and implemented.</i>
✓	Based on code reviews and analysis of user flow through the solution are there any features that can be deprecated?	
100%		
☒	Step 4: Prioritize Bugs and New Feature Requests	Comment
✓	What is the current bug count?	<i>none</i>
✓	Has the defect log been reviewed? Are the types of bugs being lowered? In what modules do they most frequently occur?	<i>ServiceWorker initially, this was remediated</i>
✓	How long does it take to remedy identified issues/bugs?	<i>Typically within a sprint</i>
100%		
☒	Step 5: Ongoing Code/Build/Deploy/Release Management	Comment
?	Are code reviews identifying fewer issues?	<i>Many of these steps have been 'tested' with the PoC.</i>
✓	When was the documentation last reviewed?	
✓	Has the image build timing been reviewed can it be optimized?	
✓	Has the release roll back plan been validated?	
?	Has the STRA/PIA been reviewed for updates based on platform updates or feature changes?	
✓	Has a dependencies test been conducted?	
80%		
☒	Step 6: Skills Retention Requires a Plan	Comment
✓	Does the project have a roles-based succession plan?	

✓	Is there an opportunity to onboard temporary assignment or co-ops?	<i>Currently internal within IMB</i>
✓	Do team members communicate their skill-enhancement activities through lunch time learning or webinars or other channels?	
100%		
☒	Step 7: Communicate Your Success	Comment
✓	What blogs, newsletters, webinars do the team use to inform the community and potential stakeholders?	<i>Have used Yammer as a channel.</i>
100%		

Play 7 – 88.75%

Sustainment Lifecycle

☒	Step 1: Maintain a Happy User	Comment
✓	Has a product review been undertaken that affirms goals and objectives are being met from both the end user and the business' perspectives?	<i>Mid term of the development cycle a comparison was made with cnn.com and many of the features we have implemented are also implemented there, we seemed to have arrived at the same target organically.</i>
✓	Has a market survey of similar products been conducted? How does this solution compare?	
✓	Based on user and stakeholder feedback and available analytics are there any features that are desired are there features that can be deprecated?	
✗	Review product roadmap & release schedule, prioritize new feature opportunities.	
75%		
☒	Step 2: Maintain Product Funding	Comment
✓	Have the current budget assumptions been affirmed?	<i>Other than OpEx there were no direct charges.</i>
✓	Are there opportunities to lower costs?	
100%		
☒	Step 3: Maintain Vendor/Partner Relationships	Comment
?	Are there changes to existing vendor/partnership agreements? Do they impact the product roadmap?	<i>Dependency is the BCDevExchange platform and BCGov GitHub</i>
?	Are there any changes to licensing that impact the product roadmap?	
?	Are there any changes to platform support agreements that could impact the product roadmaps?	
N/A		
☒	Step 4: Continuously Improve Overall Lifecycle	Comment

✓	List what process reviews have been done and where improvements where identified	<i>Partially provided in the documentation</i>
✓	List improvement experiments undertaken and describe lessons learned	
90%		
☒	Step 5: Maintain Product Integrity & Quality	Comment
?	Reviewed defect log for improvement opportunities	<i>No current defects identified</i>
✓	Reviewed platform release cadence aligned with product releases for possible feature impacts	<i>OpenShift 4.xx, Jenkins...</i>
90%		