

Accelerating deployment and improving end-user adoption

Best practices session

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Accelerating deployment and improving end-user adoption

Three Challenges

Credential Agent Operators

Manage a simple and efficient project to launch of an MVP on Velocity Network™

Participating Organizations

Provide a simple and efficient onboarding process to become and issuer and/or a relying party on the Velocity Network™

Individuals

Design and deploy great user journeys that ensure a high level of individual uptake

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In each of these we see vast diversity across our ecosystem

Challenge I

Credential Agent Operator | Manage a simple and efficient project to launch of an MVP on Velocity Network™

Credential Agent Operator | Manage a simple and efficient project to launch of an MVP on Velocity Network™ Resources Available

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Issuing & Inspection Testing Plan

Tips and testing flow examples to ensure a smooth user journey and positive user experience.

Ensuring End-to-End Functionality

In order to achieve end-to-end functionality, we need to make sure everything is working before moving on to production. Once development is complete, proper testing is critical to ensure a smooth user journey and a positive user experience.

Deployment Guidelines

Kick-off Meeting

Held January 30, 2023

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S. No.	Category	Task	Owner	Status	27 Feb	6 Mar	13 Mar	20 Mar	27 Mar	3 Apr	10 Apr	17 Apr
1	Project Issue Assessment Results as Verifiable Credentials on Velocity Network											
2	Project Team:											
3	Last Updated: 06 Mar 23											
7	Credential Design	1	Select credential to issue from available supported schemas	Completed								
8		2	Map database fields to credential schema	In-progress								
9		3	Register Assessment on Credentialing	Completed								
10		4	Security review	In-progress								
11	Security and Compliance	5	Compliance review	In-progress								
12		6	Write Terms & Conditions for Issuing disclaimer	In-progress								
13		7	Onboarding Docs	In-progress								
14	Credential Agent	8	Int. Credential Agent	Initial version completed, subject to change								
15		9	Credential Agent Setup/Config - Staging set up	In-progress								
16		10	Deploy Staging Credential Agent on Testnet	Not Started								
17		11	Credential Agent - Promote to Prod	Not Started								
18	Integration and testing	12	Map data flow	In-progress								
19		13	Set up integrated issuing on Testnet (implement API calls and handling of webhooks)	Not Started								
20		14	Test end-to-end issuing flow on Testnet	Not Started								
21		15	Set up production-grade infrastructure	Not Started								
22	Deployment and Testing	16	Deploy Credential Agent on Mainnet	Not Started								
23		17	Test end-to-end issuing flow on Mainnet	Not Started								
24		18	Register organization on Testnet	Completed								
25		19	Register organization on Mainnet	Not Started								
26	Operational Readiness	20	Access & familiarize with Payment & Rewards Hub	Completed								
27		21										

Deploying your use cases on top of Velocity Network™

Why the guidance? Because you are trailblazers

Decentralized

Velocity Network™, the Internet of Careers®, is a blockchain-based decentralized network. As such, the deployment work is a little different than a centralized application. It also serves as an interoperability framework and there are multiple new protocols to follow.

New Use Cases

Verifiable education and career credentials are a new thing. Building effective user journeys, and ways to handle these records haven't been standardized yet.

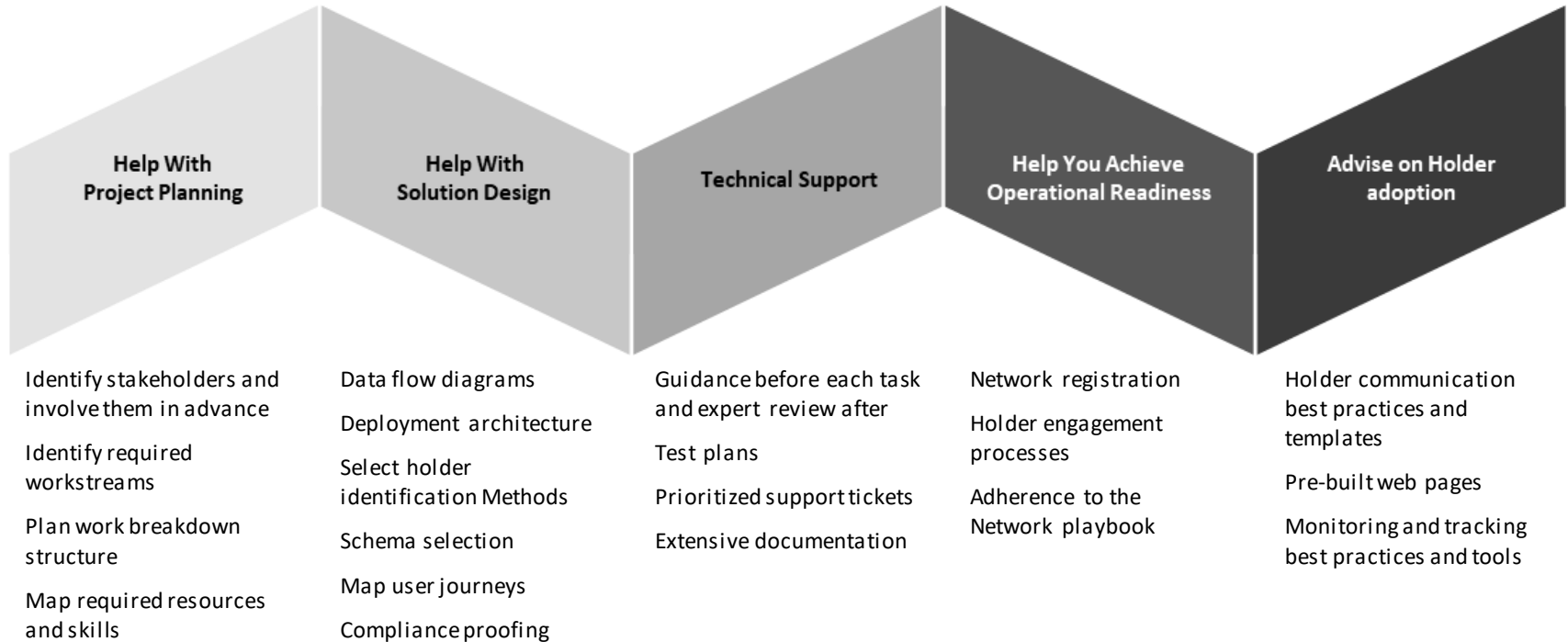
New Concepts

The Network playbook is the result of intensive work by dozens of workforce-tech and ed-tech vendors and industry associations that came together to build a shared, industry-governed Internet of Careers®. Understanding the rules of engagement is key to successful deployment.

Benefit from our experience in dozens of deployments

Surprises are fun! ... not when delivering software

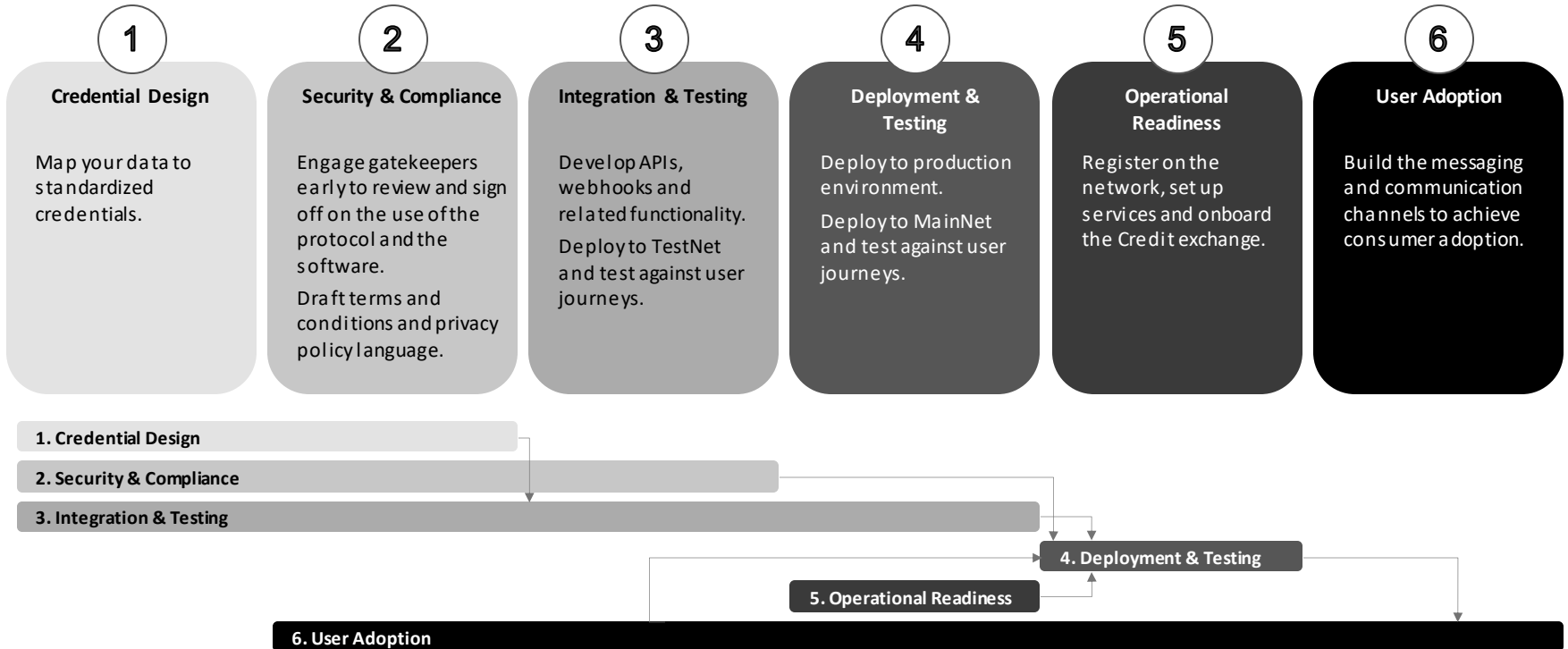
Enabling Participants



Workstreams and WBS

Enablement Methodology

Deployment Workstreams



Work Breakdown Structure

Credential Design

Task	Deliverable	Recommended Skillset	Should Take (Timeline)	Should Take (Work)	How We Can Help	Recommended Accountability
Select credential to issue from available supported schemas	Credentials selected from the schema catalogue that best fits your issuing event and data requirements	Knowledge of your data and what needs to be included in issued credentials	3 days	½ day	<ul style="list-style-type: none"> Guidance on credential selection Review your chosen credential 	Product
Map database fields to credential schema	Completed schema spreadsheet	Familiarity with your database structure	1 week	1 day	<ul style="list-style-type: none"> Template Guidance & review 	Product
Select credential description repository and set up description of your credential	Standardized description of your credential to be outlinked from credential	Explain what the credential stands for	1 week	1 day	<ul style="list-style-type: none"> Guidance on mapping interoperable data Review 	Product

Work Breakdown Structure

Security & Compliance

Task	Deliverable	Recommended Skillset	Should Take (Timeline)	Should Take (Work)	How We Can Help	Recommended Accountability
Security review	Security review approved	<ul style="list-style-type: none"> • Security policies • Understanding of decentralized & P2P networks 	1 week	1 day	<ul style="list-style-type: none"> • Documentation • Q&A 	CISO
Compliance review	Compliance approved	<ul style="list-style-type: none"> • Privacy compliance • Employment regulations 	1 week	1 day	<ul style="list-style-type: none"> • Documentation • Q&A 	Compliance Officer
Write Terms & Conditions	Compliant Terms & Conditions that users will accept before disclosing or receiving credentials	<ul style="list-style-type: none"> • Privacy compliance 	1 week	1 day	<ul style="list-style-type: none"> • Provide example 	Legal

Work Breakdown Structure

Integration & Testing

Task	Deliverable	Recommended Skillset	Should Take (Timeline)	Should Take (Work)	How We Can Help	Recommended Accountability
Map data flow	A document that maps how data flows between your system and the individual via the credential agent	<ul style="list-style-type: none"> • Experience with APIs • Understanding of your data architecture 	1 week	2 days	<ul style="list-style-type: none"> • Provide example • API documentation • Guidance & review 	Product
Deploy Credential Agent on TestNet	Credential Agent is functional in your pre-prod environment(s)	<ul style="list-style-type: none"> • Docker container • Mongo DB 	1 week	3 days	<ul style="list-style-type: none"> • Documentation • Guidance & review • Q&A 	DevOps
Set up integrated issuing on TestNet (implement API calls and handling of webhooks)	Able to issue credentials via integration to your data base	<ul style="list-style-type: none"> • Calling APIs • Receiving data from webhooks 	2 weeks	1 week	<ul style="list-style-type: none"> • Documentation • Guidance • Review your issuing flow 	Product
Test end-to-end issuing flow on TestNet	Entire issuing and user flow has been tested in TestNet	<ul style="list-style-type: none"> • Quality assurance 	1 week	1 day	<ul style="list-style-type: none"> • Advise on testing plan design • Review testing plan 	Product

Work Breakdown Structure

Deployment & Testing

Task	Deliverable	Recommended Skillset	Should Take (Timeline)	Should Take (Work)	How We Can Help	Recommended Accountability
Set up production-grade infrastructure	Requirements met to stand up credential agent in production	<ul style="list-style-type: none"> Implement HTTPS Scale with volume Manage logs Monitor & alert for downtime 	2 weeks	1 week	<ul style="list-style-type: none"> Advise on infrastructure requirements Review 	DevOps
Deploy Credential Agent on MainNet	Credential Agent is functional in your production environment	<ul style="list-style-type: none"> Deploy a docker container in production environment Deploy Mongo in production environment Update network configuration and deploy new domains & certificates 	1 week	2 days	<ul style="list-style-type: none"> Advise on deployment Q&A 	DevOps
Deploy custom integration code into production environment	Able to issue credentials on MainNet	<ul style="list-style-type: none"> Deploy code in production environment 	1 week	1 day	<ul style="list-style-type: none"> Advise on deployment Q&A 	DevOps
Test end-to-end issuing flow on MainNet	Entire issuing and user flow has been tested in MainNet	<ul style="list-style-type: none"> Quality assurance 	1 week	1 day	<ul style="list-style-type: none"> Advise on testing plan design Review testing plan 	QA

Work Breakdown Structure

Operational Readiness

Task	Deliverable	Recommended Skillset	Should Take (Timeline)	Should Take (Work)	How We Can Help	Recommended Accountability
Register organization on TestNet	TestNet secret keys	Ownership over Registrar user account	3 days	½ day	<ul style="list-style-type: none"> Advise on mapping your pre-prod environments on TestNet Guidance & review 	Product
Register organization on MainNet	MainNet secret keys	Ownership over Registrar user account	1 day	½ day	<ul style="list-style-type: none"> Guidance & review 	Product
Access & familiarize with Payment & Rewards Hub	Able to log into P&R Hub and view and track credits	Person who will use Payment & Rewards Hub to track credits	1 day	½ day	Assistance with using P&R Hub and any required troubleshooting	Product

Work Breakdown Structure

User Adoption - building

Task	Deliverable	Recommended Skillset	Should Take (Timeline)	Should Take (Work)	How We Can Help	Recommended Accountability
Map all user touchpoints	User journey map that highlights all places user will encounter verifiable credentials	Understanding of exactly how Velocity will integrate into your product	1 week	½ day	<ul style="list-style-type: none">• Consult on creation of user journey map• Review completed map	Product
Write copy for Velocity touchpoints	<ul style="list-style-type: none">• Copy that will be added to your product to explain verifiable credentials• Email and credential offer communications	Write user-sensitive copy that will be needed so individuals will follow the instructions	1 week	2 days	<ul style="list-style-type: none">• Provide messaging tool kit, templates, pre-built web pages, and examples• Review & edit copy	Product

Work Breakdown Structure

User Adoption - rollout

Task	Deliverable	Recommended Skillset	Should Take (Timeline)	Should Take (Work)	How We Can Help	Recommended Accountability
Enable analytics at every step of the user journey	Able to track user behavior through every step of the process	<ul style="list-style-type: none"> Marketing analytics 	1 week	½ day	<ul style="list-style-type: none"> Guidance on analytics to include Analytics on wallet downloads and signups Review analytics plan 	Marketing
A/B test emails & communications	Identify the most effective messaging to increase click-through and claiming of credentials	<ul style="list-style-type: none"> Marketing analytics Communications & copywriting 	1 month	2 days	<ul style="list-style-type: none"> Messaging tool kit and examples Review & edit copy 	Marketing
Analyze adoption funnel & adjust as needed	Identify a step of the process where users are falling off and make changes to maximize the number of users who claim credentials	<ul style="list-style-type: none"> Marketing analytics 	3 months	1 week	<ul style="list-style-type: none"> Analyze data with you Advise on changes to increase uptake 	Marketing

Deploying your use cases on top of Velocity Network™

Typical Project Roles



Executive Sponsor

A senior executive that is responsible to the organization for the success of the project.



Project Officer

Responsible for orchestrating the work on the different workstreams. Manages timeline tracking and monitoring.



Product

Responsible for overseeing all product-related work that will be done to deploy on Velocity Network.



Developer

Responsible for coding the integration of your database to Velocity Network.



Dev Operations

Responsible for deploying the credential agent in your production environment.



DBA

A database expert who understands your DB structure and can map credential fields appropriately.



Info Sec

Responsible for security oversight and ensuring that Velocity Network deployment passes internal security checks.



Compliance

Responsible for compliance oversight and ensuring that Velocity Network deployment adheres to internal compliance policies.



Quality Assurance

Responsible for building and executing a robust end-to-end testing plan that accounts for the effect of novel technology on user behavior.

Challenge II

Participating Organizations | Provide a simple and efficient onboarding process to become an issuer and/or a relying party on the Velocity Network™

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Resources Available

Step 1/3

Invite Organization

To invite an organization to join Velocity Network™, fill in that organization's information below.

Organization's name (Required) *

OPTIONAL FIELDS

Logo URL

Description

Website URL

Year founded

Location

Business contact email

Technical contact email

Non-profit Organization

CANCEL NEXT >

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Invite Organizations (CAO only)

This feature is only available to organizations that have set up a Credential Agent Operator service.

Credential Agent Operators can use the Network Registrar to invite organizations and shorten organizations' registration process. Invited organizations will receive the invitation via email, which will include a link leading to the Network Registrar and prompting them to complete their registration and add any missing information.

To start, log in and click **INVITATIONS** in the left-side menu and **INVITE CLIENT**.

Fill in the organization's information and click **NEXT**. Only the organization's name is required - the rest is optional and can be added by the organization when they complete the registration process.

Network Registrar
Introduction
Register an Organization
Manage Organization Profile
Add & Manage Services
Invite Organizations (CAO only)

velocity

Instructions for registering as an Issuer on Velocity Network™

- Please make sure you have the following information that you will need to register your organization:
 - Organization name
 - Website URL
 - Logo URL
 - Year founded
 - Address
 - Business contact email
 - Technical contact email
 - Description
 - Service endpoint URL (provided by **Credential Agent Operator**)
- Follow the link in the email you received from Velocity and set your password. You can now access the Velocity Network Registrar.
- Fill in the form that auto-loads when you log into the registrar and click **ADD SERVICE**.

Welcome!

Let's get your organization registered to Velocity Network™. Maxvel. First we need to get some information that will allow other Network participants identify you.

Organization name *

Organization website URL * Logo URL *

Organization incorporation year * Organization residence *

Business contact e-mail * Technical contact e-mail *

Organization description *

Non-profit

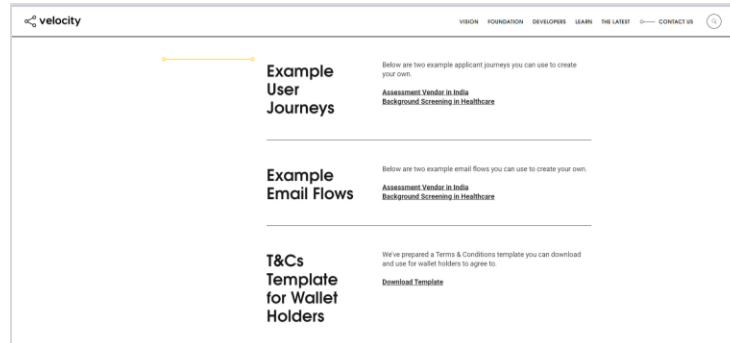
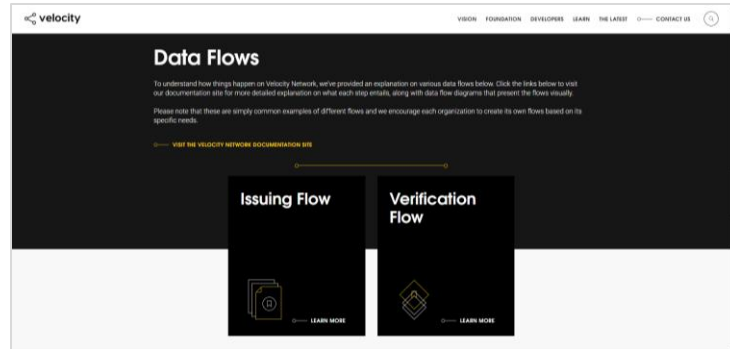
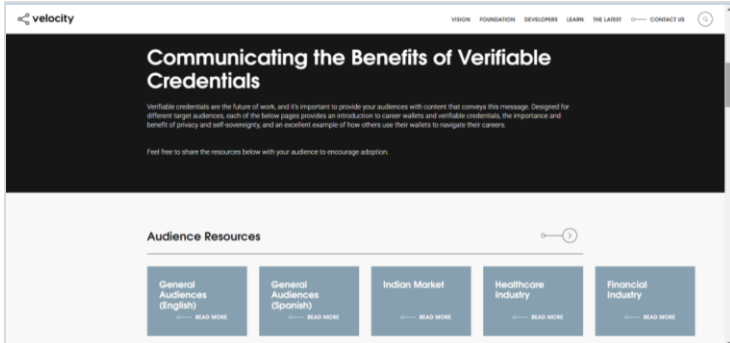
ADD SERVICE

Challenge III

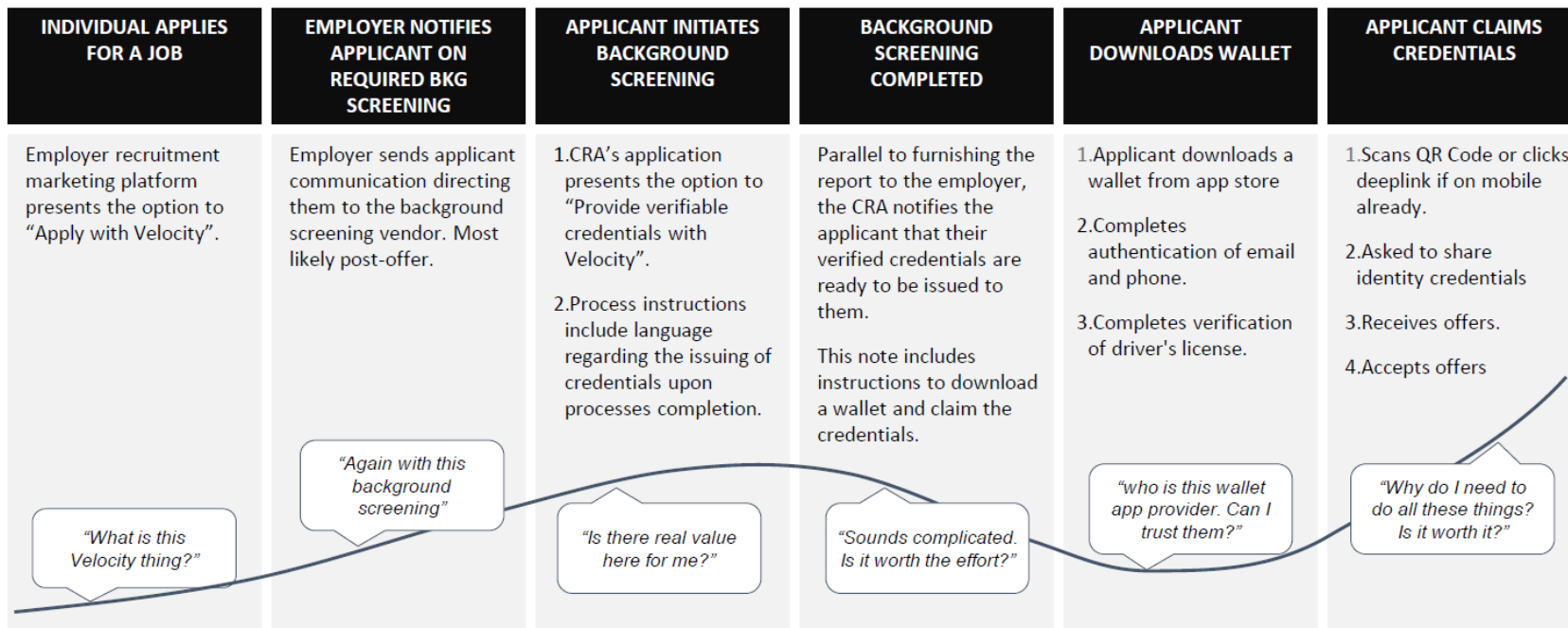
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Resources Available

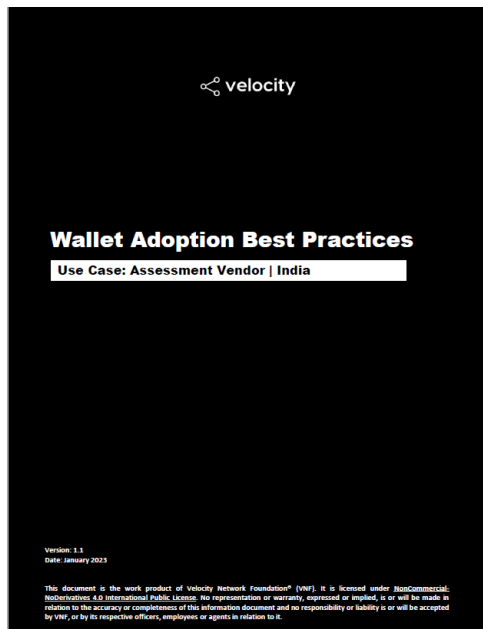


Example User Journey



Consumer Adoption

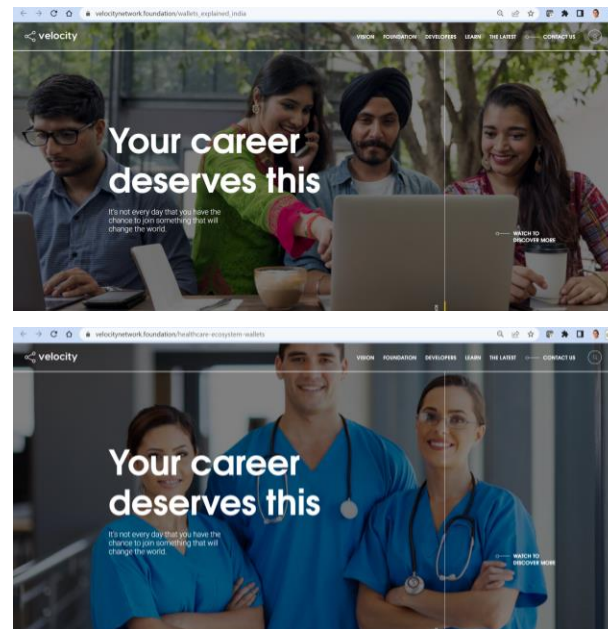
Opensource Resources and Tools



Best practices toolkit – India Assessment



Best practices toolkit – Healthcare Background Screening



Industry specific landing pages published on VNF website for public use

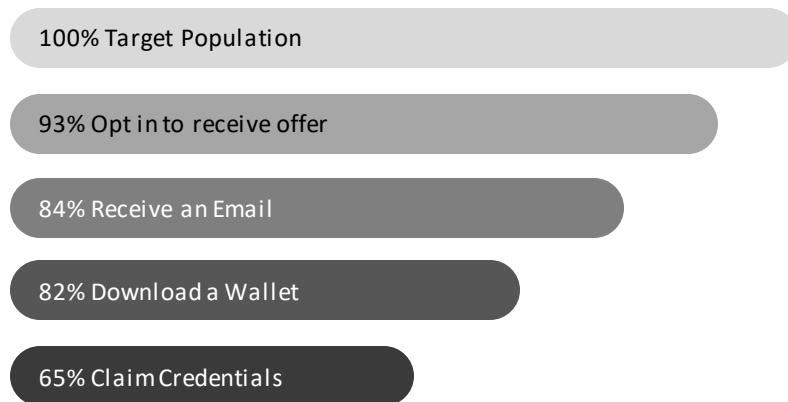
Continuous improvement via measurement

There is little experience to learn from on how individuals react to offers of digital career credentials.

We therefore recommend that organizations put in robust measurement capabilities form the start of their issuing and inspection efforts.

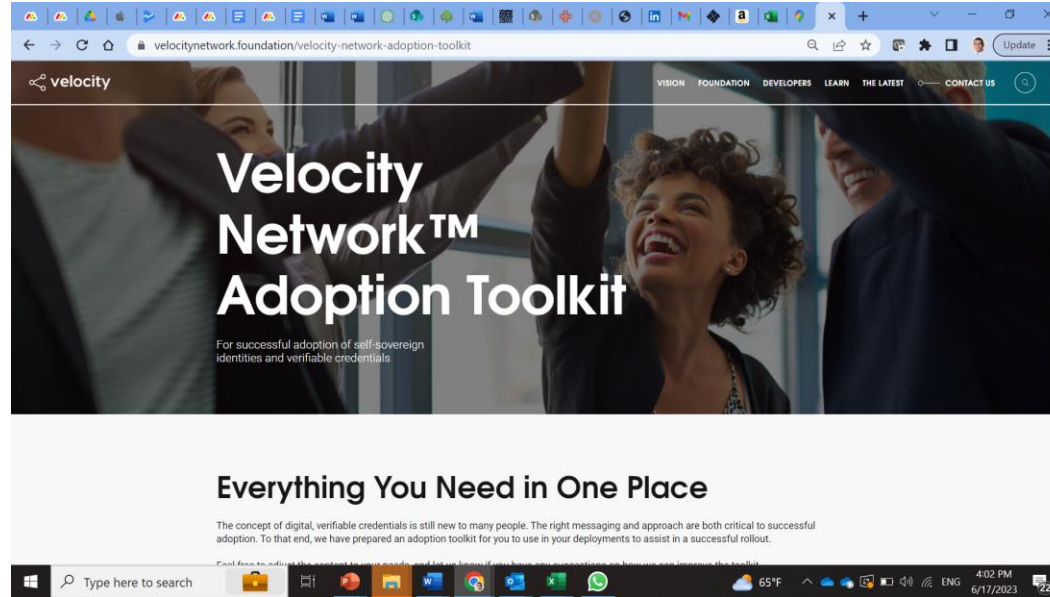
This data should be used to continuously monitor and improve individual credential uptake through experimentation.

Example funnel



Lowering the barrier to entry and improving adoption

Everything you need is available on the VNF Website



Please utilize available resources, contribute your best practices to the community and let us know what additional resources you need.

Thank you for listening.

Presenter Name

Title

Organization

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