

OneDigital Ecosystem

Executive Summary:

- Current inclusion efforts are **fragmented**, with most vulnerable users engaged only as testers, not as ongoing partners.
- An **ecosystem of structured, ongoing user partnership** enables seniors, PWDs, and caregivers to co-create and improve digital services.
- Making **user partnership, cross-agency learning, and adoption tracking** the norm is key to scaling beyond pilots.

Vision:

Inclusion by Design, Belonging by Default: Every Singaporean shapes and thrives in a digital society—together

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Why Inclusive Digitalisation?

Imagine feeling left behind in a world moving too fast, with digital tools that are confusing and frustrating.

A close friend's mother, once independent, became overwhelmed by online services after Parkinson's took hold—simple tasks turned into anxiety and isolation.

Singapore is becoming a super-aged society.
By **2030**, **1 in 4** Singaporeans will be **65** or older.

Digitalisation that excludes puts lives at risk.
We must build systems that empower dignity, connection, and independence. The time to act is now.

Who's Still Left Behind?



Elderly

Adoption is rising (e.g., IMDA, SII), but many still face **cognitive, sensory, or confidence** barriers.



PWDs

Accessibility efforts have improved, but **not all digital services are fully usable** for all needs.



Low-income / less-educated

Device access is better (e.g., NEU PC Plus), but **confidence and skills gaps remain**.



Intersectionality

Many experience two or more barriers, compounding exclusion.

Despite national progress, a significant group still struggles to use digital services independently.

Why Current Efforts Fall Short

- 1 User involvement is growing via pilots, feedback, and testing, **but often on a project or ad hoc basis.**
- 2 Most involvement is as testers, **not full partners or ongoing decision-makers.**
- 3 Projects are typically agency- or service-specific; **good lessons aren't always shared or scaled.**
- 4 Progress is usually measured by reach or launches, **not lived independence or confidence.**

For sustainable inclusion, we need structured, ongoing partnership with excluded groups, and system-wide learning.

OneDigital Ecosystem Flywheel: Turning Partnership into System Habit

A self-reinforcing ecosystem:

Seniors, PWDs, caregivers, and agencies collaborate in a continuous cycle: **co-creating, testing, measuring, and refining** digital services. Each round builds system memory and makes inclusion a habit, not a project.





A Real Example of Co-Creation

Partnership

In Queenstown, a group of seniors and caregivers, including Mdm Lim, work with agency teams to redesign the digital clinic appointment system.

Input

Mdm Lim shares what confuses her and suggests a 'practice mode' for first-timers.

Success

When the updated system goes live, Mdm Lim books her appointment online—successfully, for the first time. She feels proud, having shaped a solution she can now use independently.

Scaling

Her confidence encourages other seniors to try, and feedback from this pilot helps inform how future digital services are designed.

Rollout: Start Local, Scale System Change



Phase 1: Pilot & Learn (Year 1)

Pilots in selected heartland towns (e.g., Queenstown, Bukit Merah), focused on services with the highest need (healthcare, CPF, support access).

- Pilot in heartland towns (e.g., Queenstown, Bukit Merah) with diverse users and essential services.
- Partner with trusted VWOs to establish structured user groups and support digital literacy.
- Use flexible digital platforms for rapid iteration based on real user feedback.
- Collect anonymized, privacy-compliant data on adoption, satisfaction, and confidence.
- Form cross-agency steering committees to align priorities and accelerate decisions.

Key Enablers:

- User Partnership: Active co-creation and validation by structured user groups.
- Cross-Agency Learning: Early coordination and shared pilot outcomes.
- Adoption Tracking: Baseline metrics collected via accessible dashboards.



Phase 2: Expand & Refine (Years 2–3)

- Scale pilots to more regions and services, expanding user groups and outreach.
- Formalize inter-agency collaboration through MOUs and joint governance.
- Secure multi-year funding and train staff in co-creation and user engagement.
- Collaborate with platform owners for system upgrades to support agile feedback integration.
- Build centralized, role-based dashboards with real-time data sharing.

Key Enablers:

- User Partnership: Expanded feedback loops and 'digital buddy' programs.
- Cross-Agency Learning: Formal governance and regular learning forums.
- Adoption Tracking: Standardized, real-time reporting across agencies.



Phase 3: Institutionalize & Sustain (Years 4+)

- Institutionalize user advisory councils with rotating membership for sustained involvement.
- Embed user partnership and inclusion KPIs into agency performance frameworks.
- Maintain national forums for policy updates and knowledge sharing.
- Collaborate with PDPC for compliant data governance.
- Secure long-term funding and governance for ecosystem sustainability.

Key Enablers:

- User Partnership: Embedded as standard agency practice.
- Cross-Agency Learning: Culture of continuous shared improvement.
- Adoption Tracking: Public national inclusion index for transparency and accountability.

Every stage is monitored for adoption, satisfaction, and confidence, not just service launches.

Tracking What Matters: Measurable Progress



Segmented Adoption Dashboards:

Track digital service usage by user groups (seniors, PWDs, caregivers) to identify gaps and trends.

→ % of seniors actively using key services monthly; drop-off rates at critical steps.



User Confidence & Satisfaction Surveys:

Regular, accessible feedback channels capture not just usage but how comfortable and independent users feel.

→ % rating services as “easy to use”;
Net Promoter Score among vulnerable users.



Inclusion KPIs for Agencies & VWOs:

Tie performance metrics to real inclusion outcomes, rewarding efforts that improve access and confidence.

→ Number of co-creation sessions per year; % of services updated based on user feedback.



Public National Inclusion Index:

Transparent reporting of progress fosters accountability and public trust.

→ Composite inclusion score combining adoption, satisfaction, and accessibility compliance.



Stories That Matter:

Amplify personal success stories alongside data to humanize progress and inspire continued improvement.

→ Number of published user stories or testimonials annually.

How This Reflects My Product Practice

What this case shows:

- 1 Designing at the **ecosystem level**, not just the service level — building co-creation, learning, and feedback into the system's core.
- 2 Moving from ad-hoc pilots to **habitual inclusion** — with rhythms that scale and metrics that reflect lived experience.
- 3 Turning fragmented efforts into a **flywheel of shared progress**, across agencies, users, and platform owners.
- 4 Measuring what matters most: **confidence, independence, and the quiet feeling of belonging.**

This is how I approach inclusive design:

Not as a feature — but as a system habit, shaped by structure, care, and real partnership.

 Explore more case studies: [Visit Sena's Portfolio](#)

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