

# Recap of the Singapore Study Visit

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Acting General Manager

20 June 2024

# AGENDA



- Visit Itinerary
- Highlight of Singapore Digitalization Strategies
- INSIGHT & Adoption



# Industry Digital Plan for Social Services

2021 – 2024

## Infrastructure · Big Data · Ecosystem

Industry Digital Plan for Social Services 2021 – 2024

From the three strategic directions, SSAs are guided to advance their digitalisation journey across the following five focus areas:

 <p><b>Secure, Integrated Solutions and Infrastructure</b></p> <p><i>As the first step to uplift the sector's digital maturity, SSAs should adopt foundational solutions that help to improve organisational productivity, thereby diverting time savings to tasks that more directly impact client outcomes.</i></p> <p><b>Goal: 80% of SSAs adopt three or more foundational solutions</b></p>	 <p><b>Enhanced Service User Experience</b></p> <p><i>There needs to be a deliberate effort to leverage technology to enhance service delivery across all touchpoints – be it by increasing access to services via a digital option, or improving engagement via service delivery technology solutions.</i></p> <p><b>Goal: 80% of services are tech-enabled</b></p>	 <p><b>Connected Community and Partnerships</b></p> <p><i>Resources can be better optimised by tapping into collaborations, thereby enhancing the sustainability of digitalisation efforts. Better solutions could also be co-created from such partnerships.</i></p> <p><b>Goal: 30 digital collaboration projects in people, private and public sectors</b></p>
 <p><b>Data Proficiency</b></p> <p><i>SSAs should work towards being a data-driven organisation to enhance operations and service planning by having the necessary data strategy and systems in place.</i></p> <p><b>Goal: 30% of SSAs use data to enhance operations and service planning</b></p>		
 <p><b>Digital Talent and Leadership</b></p> <p><i>To optimise the value of technology, adoption of solutions must be accompanied by the needed literacy and competency, as well as an agile and data-driven culture.</i></p> <p><b>Goal: 80% of SSAs have staff capable of using technology</b></p>		

Industry Digital Plan for Social Services 2021 – 2024

The IDPSS serves as a guide to help SSAs achieve their digitalisation goals through structured step-by-step guidance in the following areas:



### Navigating the Digital Roadmap

Provide SSAs with a tailored Digital Roadmap to move forward in their digitalisation journey



### Improving Organisational Effectiveness

Strengthen SSAs in 5 focus areas to achieve organisational effectiveness using the Digital Roadmap, Foundational Solutions Guide and Digital Skills Guide



### Enhancing Service User Experience

Guide SSAs in adopting technology solutions according to types of services rendered and user needs



### Developing Sector Connectivity

Leverage a suite of technology platforms and enablers to support SSAs in connecting and delivering services seamlessly



# Itinerary and Themes



Day	Agenda
Day 1	<ol style="list-style-type: none"><li>1. Sector Connectivity: Strengthening Social Service Delivery via System Connectivity and Data Governance<ul style="list-style-type: none"><li>• MSF Systems Overview (social services digital Infrastructure)</li><li>• <a href="#">SSNet</a> roadmap and 2.0 Enhancement</li><li>• Data Security Instructions (DSI) Implementation</li></ul></li></ol>
Day 2	<ol style="list-style-type: none"><li>1. Digital Maturity: Digital Acceleration Index (DAI) Study</li><li>2. Govt Funding Schemes for SS Digitalisation<ul style="list-style-type: none"><li>• <a href="#">Tech-and-GO! funding scheme</a></li><li>• <a href="#">Pre-Scoped consultancy</a></li></ul></li><li>3. Data Proficiency<ul style="list-style-type: none"><li>• <a href="#">Better Data-Driven Charities (BDDC) Templates</a></li></ul></li><li>4. Data Proficiency &amp; Governance: Providing Insights of Research Studies to the Public<ul style="list-style-type: none"><li>• Quality of Life (QoL): Creating interactive dashboards</li></ul></li><li>5. Enhanced Service User Experience: Transforming Service Delivery with Digitalisation</li></ol>
Day 3	<ol style="list-style-type: none"><li>1. Foundational Solutions: Building a Digital Foundation</li><li>2. Foundational Solutions: 1 – 2 NGO Sharing</li></ol>



# Singapore Tour: Industry Digital Plan for Social Services (March 2024)

## Day 1

**Sector Connectivity: Strengthening Social Service Delivery via System Connectivity and Data Governance**

**Total 30 participants include 20 participants from 13 NGOs and 2 from SWD**

**Ministry of Social and Family Development (MSF)**



新加坡考察團－社會服務數碼轉型  
新加坡考察團－社會服務數碼轉型

Esa MASOOD, Deputy Secretary, MSF  
Hoi Wai CHUA, Chief Executive, HKCSS





# Singapore Tour: Industry Digital Plan for Social Services (March 2024)

## Day 2

1. Digital Maturity: Digital Acceleration Index (DAI) Study
2. Govt Funding Schemes for SS Digitalisation
3. Data Proficiency
4. Data Proficiency & Governance: Providing Insights of Research Studies to the Public
5. Enhanced Service User Experience: Transforming Service Delivery with Digitalisation



Li San TAN, CEO, NCSS





# Singapore Tour: Industry Digital Plan for Social Services (March 2024)

## Day 3

1. Foundational Solutions: Building a Digital Foundation
2. Foundational Solutions: 1 – 2 NGO Sharing



Raymond TAN,  
Assistant Director,  
IT Services  
Department, FYCS







# Highlight of Singapore Digitalization Strategies

# Strategic Role in Digitalization

## Ministry of Social and Family Development (MSF)

STRENGTHENING SOCIAL SERVICE DELIVERY VIA:

- SYSTEM CONNECTIVITY
- DATA GOVERNANCE

## The Nation Council of Social Service (NCSS)

Accelerating digitalization across Singapore's social service sector

- Digital Acceleration Index (DAI)
- Social Services Digitalisation Playbook (Roadmap)
- Tech-and-GO! (Fund)
- Pre-scoped service delivery tech
- Consultancy & Coaching
- Social Service Data Standards

## Social Services Agency (SSA)

- How Technology Improves Productivity and Efficiency
- Implementation of Technology Enabled Therapy Programmes





# Ministry of Social and Family Development

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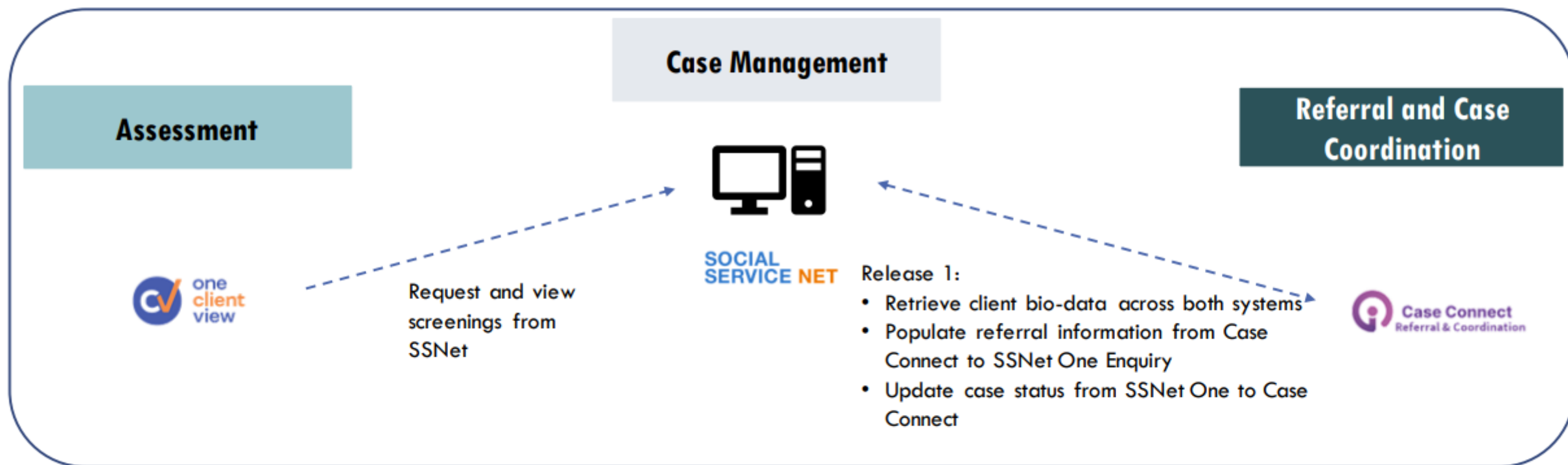
(MSF)





# IMPROVED SERVICE JOURNEY

Caseworkers are able to access OneCV screenings via SSNet, and no longer need to perform double data entry on both SSNet and Case Connect.



Enable more seamless workflows and reduce  
duplicative data entry across systems.

# ONE CLIENT VIEW

**OneCV pulls data from different agencies beyond MSF services and schemes.** Users can find out other assistance that the client is on, to reduce the number of documents that the client needs to submit, tailor assistance and/or refer their clients to other support expeditiously.

*Real-time basic demographic and family information available*

**Thomson Low**  
55600000  
Client has given OneCV consent through Ministry of Social and Family Development 1 on 30 Dec 2020.

**Client's Profile**  
Registered Address  
Block 14, Coral Road, #09-474, Coral Building, 322757  
Residential Status  
Own  
Date of Birth  
08 August 1981  
Gender  
Male

**Immediate Family Members**  
Father  
S00001108  
Wiam  
Mother  
S0000112F  
Prya

**Recent Searches**  
These officers performed a search of this client in the past 3 months.

Agency Team	Officer Name	Officer Email	Date
Ministry of Social and Family Development 1 MSF Team 1	Jason Tan	UAT_1 frontlineofficer1@msof.gov.sg	26 Dec 2020
Ministry of Social and Family Development 1 MSF Team 1	Jason Tan	UAT_1 frontlineofficer1@msof.gov.sg	29 Dec 2020
Ministry of Social and Family Development 2 MSF Team 2	Jason Tan	UAT_2 frontlineofficer1@msof.gov.sg	29 Dec 2020

← BACK TO BASIC INFORMATION

**Request More Information**  
Tell us what you would like to find out about your client.

ALL SUB-DOMAINS FAVOURITED SUB-DOMAINS

Search Agency, Domain or Sub-Domain

Filter Agency Domain

Agency	Domain	Sub-Domain	Favourite
<input type="checkbox"/> Central Provident Fund Board (CPF)	Source of Income/Savings	Silver Support Scheme	<input type="checkbox"/>
<input type="checkbox"/> Central Provident Fund Board (CPF)	Source of Income/Savings	CPF Account Details	<input type="checkbox"/>
<input type="checkbox"/> Central Provident Fund Board (CPF)	Source of Income/Savings	Dependents Protection Scheme	<input type="checkbox"/>
<input type="checkbox"/> Housing and Development Board (HDB)	Housing	Home Ownership	<input type="checkbox"/>
<input type="checkbox"/> Housing and Development Board (HDB)	Housing	Rental Housing	<input type="checkbox"/>
<input type="checkbox"/> Immigration and Checkpoints Authority (ICA)	Demographics	Basic Demographics	<input type="checkbox"/>
<input type="checkbox"/> Immigration and Checkpoints Authority (ICA)	Demographics	Long Term Visitor Pass	<input type="checkbox"/>
<input type="checkbox"/> Inland Revenue Authority of Singapore (IRAS)	Source of Income/Savings	Income	<input type="checkbox"/>
<input type="checkbox"/> Inland Revenue Authority of Singapore (IRAS)	Housing	Private Dwelling	<input type="checkbox"/>
<input type="checkbox"/> Ministry of Education (MOE)	Education	Schooling Records	<input type="checkbox"/>

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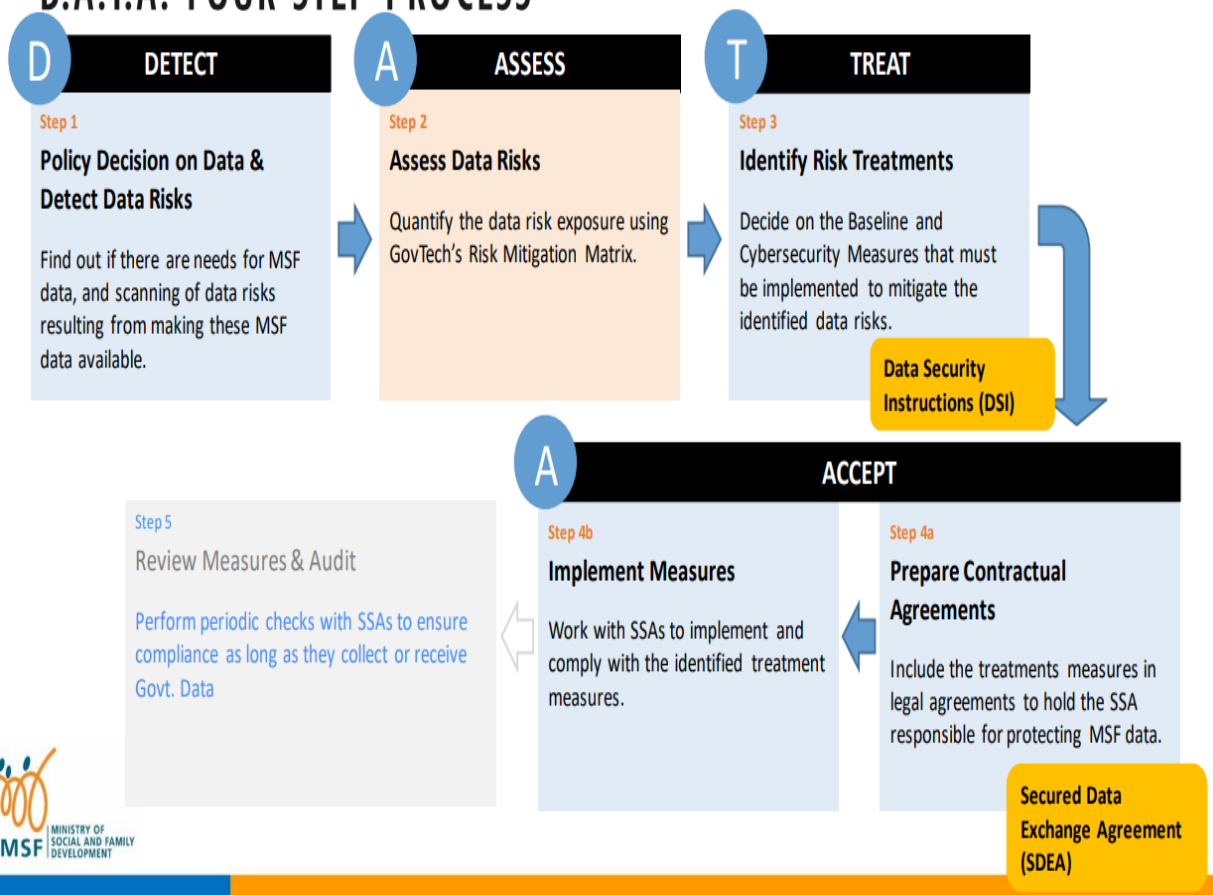
*Personal and case-level information from agencies added to OneCV progressively. Over 400 data fields from 18 agencies are currently available.*



*Data to be pulled together under various domains, with tiered access for different users.*

# Data Governance

## TIERED DATA GOVERNANCE FRAMEWORK - D.A.T.A. FOUR STEP PROCESS



## BUILDING STRONG DATA GOVERNANCE

Our initiatives strengthen data sharing to facilitate ops and service delivery while balancing risk exposure, compliance costs and productivity.



### Principles of Data Control

Defines what constitutes MSF data, data that is collected by SSAs on behalf of MSF, and/or data is legally disclosed to the SSAs through formal agreements. The principles form the basis to operationalise the TDGF and DSI.



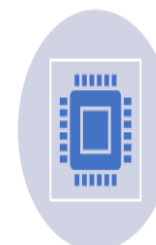
### Secured Data Exchange Agreement ("SDEA") [work-in-progress]

This agreement will be signed by all SSAs that MSF shares data with regularly. The SDEA, which includes the Data Risk Treatment Plan and DSI clauses, will be valid for 3 years.



### Tiered Data Governance Framework ("TDGF")

A risk-managed framework of Detecting, Assessing, Treating and Accepting Risks to enable SSAs to manage identified risks according to their risk profile.



**Data Security Instructions ("DSI")**  
TDGF is incorporated into the revised DSI. With SSAs' complying with the revised DSI, MSF can then facilitate wider data sharing.



# Panel study is also conducted to complement administrative data for complex social issues

Pathways and Trajectories of Households in Singapore (PATHS) panel **allows tracking of the same households across time**, and effectively captures information on **complex issues faced by low-to-middle income households** that cannot be gleaned through administrative data e.g.,:

## EMPLOYMENT & FINANCES

**Self-employment/ platform work:**  
which is more prevalent among  
lower-income groups

**Considerations** for  
employment/training decisions

Perceptions on and sufficiency of  
**Government assistance**



## FAMILY

**Lived experiences:**  
familial responsibilities  
caregiving  
arrangements

**Family relationships**

**Family resilience**



## CHILDREN

**Development:** cognitive  
and behavioural  
functioning

**Preschool preferences  
and attendance**

**Educational aspirations**



# The Nation Council of Social Service

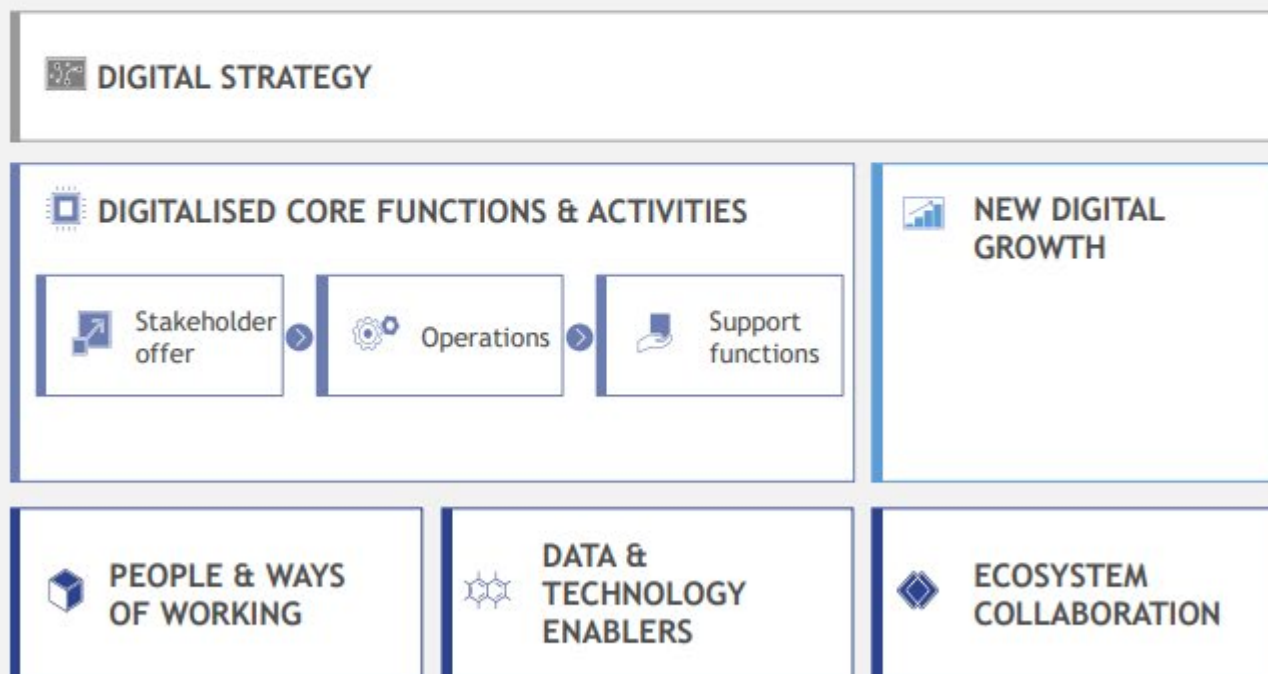
NCSS



# Digital Acceleration Index (DAI) a globally leading assessment

Holistic framework comprising 6 building blocks and 33 dimensions to identify current state of digitalisation and interventions needed towards improvement

## 6 key building blocks of digital transformation



## Four maturity stages



## DAI score

Digital maturity (0-100)		
92-100	Leader	
83-91		
75-82		
66-74	Performer	
58-65		
50-57		
42-49	Literate	
34-41		
25-33		
18-24	Starter	
9-17		
0-8		



# SG social service sector is at Digital Starter Level in 2023

22

## DIGITAL STRATEGY

Vision

34

Ambition

24

Awareness

24

Roadmap

31

## DIGITALISED SERVICE DELIVERY & OPERATIONS

### Stakeholder offer & engagement

E2E stakeholder journeys 15

Programme development 14

Outreach &amp; marketing 17

Personalisation 14

### Operations

Service delivery 17

Fundraising 36

Volunteer management 27

Procurement 17

### Support functions

Corporate/support functions 26

Reporting &amp; submissions 27

## DIGITAL INNOVATION

New digital services 21

Pilot projects &amp; prototyping 19

## PEOPLE & WAYS OF WORKING

Leadership &amp; culture 20

Organisation &amp; governance 21

Skills &amp; people 17

Agile ways of working 13

Virtual teaming 37

## DATA & TECHNOLOGY

Data strategy 29

Data governance 23

Artificial intelligence 6

Digital &amp; data platforms 28

Future-ready IT function 20

Internet of things 14

Cybersecurity 22

Cloud adoption 45

Extended reality 9

Robotics &amp; automation 13

## ECOSYSTEM COLLABORATION

Digital ecosystem partnerships 25

Digital ecosystem operating model 12

DAI score

Digital starter (Level 1)

0-8 9-17 18-24

Digital literate (Level 2)

25-33 34-41 42-49

Digital performer (Level 3)

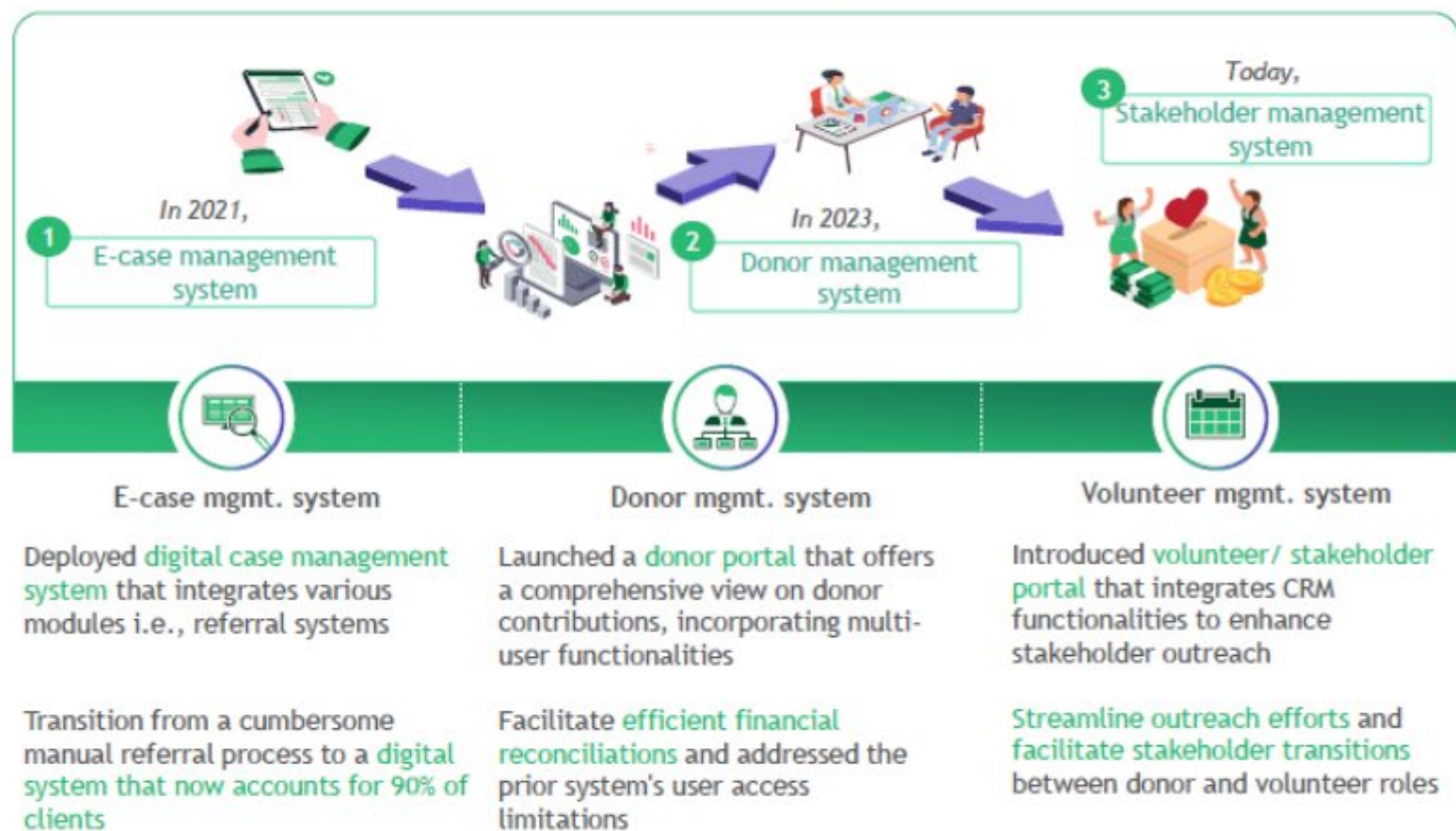
50-57 58-65 66-74

Digital leader (Level 4)

75-82 83-91 92-100

Source: 2023 Non-Profit DAI Survey, BCG analysis

## Case study: SSA 1 successfully deployed CMS & DMS and streamlined manual processes



### Where we need support:

- **Digital upskilling**  
Uneven adoption of new tools, impacting service delivery and client management
- **Lack of bandwidth**  
Frontline staff very stretched and unable to keep pace with the increased workload due to the implementation of new programs
- **Digital culture shift**  
Challenges adapting to the digital landscape, with some social workers resistant to new digital tools and processes

*"We have heavy workload and limited bandwidth which makes digital adoption and change management challenging."*

## 4 common success factors



### Digitalisation high on the leadership agenda

- Leaders actively championing the digital transformation, ensuring that it is part of the organisation's strategy & roadmap



### Clear link between digitalisation & business outcomes

- Clear articulation of how technology enables them to achieve their strategic outcomes, to convince stakeholders along the journey



### Dedicated team with the right skills & capabilities

- Team empowered with the right capabilities to drive the transformation, enabling clear accountability & ownership



### Close collaboration between technology & business

- Technology & business teams work as partners from the get-go, to ensure buy-in from the ground & eventual utilisation of the tool(s)

How can we  
**replicate these  
success factors**  
across the  
broader social  
services sector?



# SSA Digital Roadmap

## Summary of 5 Focus Areas

Based on your SSA Digital Roadmap Assessment, your SSA may have checked off the activities in a non-sequential manner across the 3 stages and 5 Focus Areas. It is important to note that this digital roadmap is a guide for your digitalisation journey, and not an inflexible checklist. You should consider the scale, needs and requirements of your agency in using this roadmap.



## FOCUS AREAS



### Secure, Integrated Solutions and Infrastructure

## 1 FOUNDATION

- ☐ Review processes and implement foundational and integration-ready solutions
- ☐ Adhere to cybersecurity and data protection baseline requirements
- ☐ Conduct cybersecurity risk, IT risk and data protection compliance assessments
- ☐ Develop an IT incident response and recovery plan

## 2 INTERMEDIATE

- ☐ Integrate new and existing systems
- ☐ Conduct regular cybersecurity, data protection and IT audits

## 3 ADVANCED

- ☐ Adopt business process monitoring solutions to uncover process improvements opportunities



### Enhanced Service User Experience

- ☐ Streamline processes and implement foundational service delivery technology
- ☐ Capture relevant data on service users and service delivery within each agency programme

- ☐ Enhance processes and implement advanced service delivery technology
- ☐ Enable a holistic view of service users within the organisation
- ☐ Derive insights through analysis of service user data to enhance the service user journey

- ☐ Apply human-centred design methodology to improve service for service users
- ☐ Collaborate with other SSAs and ecosystem partners to deliver integrated services



### Connected Community and Partnerships

- ☐ Learn from peers and subject matter experts in the social service community
- ☐ Collaborate with Corporates and Institutes of Higher Learning (IHLs) through CSR-related internships and digitalisation projects
- ☐ Leverage online platforms of ecosystem partners to access digital services, donations, payments etc

- ☐ Develop mid-to-long term ecosystem partnerships with commitment from partners to devote digitalisation resources to an SSA for a specific period of time

- ☐ Connect with other SSAs with similar use cases and needs to explore and develop new technology solutions



### Data Proficiency

- ☐ Digitise data and centralise data repository
- ☐ Establish agency-wide data management policies and procedures

- ☐ Utilise data discovery / visualisation tools to derive insights
- ☐ Develop a data strategy plan

- ☐ Utilise advanced analytics to enhance service delivery and service planning
- ☐ Support service integration and referrals by sharing data with other SSAs and ecosystem partners



### Digital Talent and Leadership

- ☐ Appoint digital lead and form IT / digitalisation workgroup and board sub-committee
- ☐ Acquire workforce digital skills according to roles

- ☐ Develop a digital strategy plan

- ☐ Build digital-first culture throughout the organisation



## Past efforts were centrally-driven and focused on manpower reduction and productivity gains, particularly with manpower intensive programmes and professions with shortages

FY14 to FY20

Moderate manpower demand  
and improve operational  
efficiency

via centrally-led projects such as **Tech Booster** and **Back-to-Basics\***, that increase tech adoption and process/job redesign for larger SSAs



FY20 to FY21

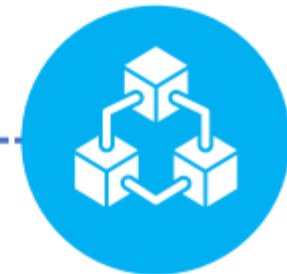
Improve digitalisation baseline  
and increase service resilience  
via the Tech-and-GO! Hub,  
introduction of pre-scoped/green lane  
IT solutions, and an Industry Digital  
Plan for Social Services



FY22 to FY24

Uplift digital maturity from one  
level to the next with a focus  
on service delivery and  
efficiency

via pilot and pre-scoped service  
delivery tech, and data and systems  
standardisation



\***Tech Booster** targets manpower-intensive MSF-funded Homes/Centres; **Back-to-Basics** focuses on use cases of Therapists, Social Workers & Youth Workers.

# Tech-and-GO! (FY22 – FY24)



## Start Digital

*funds pre-scoped & green lane solutions  
<Fast Track>*



## Go Digital

*funds non-pre-scoped or large-scale corporate function solutions*



## Grow Digital

*funds non-pre-scoped or large-scale service delivery tech solutions*

### Desired Outcome

Build **digital foundation** for efficient & resilient operations

Strengthen **integrated automation** for optimal productivity & security

Enhance svc user experience thru **person-centred & integrated digital services**

### Tech Subsidy

3-year funding Up to **80% capped at \$150k** per SSA (80:50:50)

3-year funding Up to **80% capped at \$300k** per project (80:50:50)

3-year funding Up to **80% capped at \$450k** per project (80:50:50)

### Consultancy/ Coaching Subsidy

Up to **80% capped at \$50k** per project

Up to **80% capped at \$100k** per project

Up to **80% capped at \$150k** per project

# New Scheme & Initiatives for FY22-24

## Strategy Areas

## Initiatives (I) / Schemes (S)

## KPIs

**Tech**

**TNG (S)**

**People &  
Know-how**

**TNG – Consultancy &  
Coaching (S)**

**Sectoral  
Guide &  
Innovation**

**DAI (I)**

**Industry Digital Plan (I)**

**Social Service Data Standards (I)**

**Tech Innovation &  
Experimentation (I)**

### Overall Scheme Level

- a. 20% improvement in DAI score;
- b. 180 SSAs benefitted; and
- c. 70% of SSAs had achieved at least 20% productivity gain and 70% client/staff satisfaction

### Individual Project Level for Schemes\*

- a. 20% Productivity and/or
- b. 70% client/staff satisfaction
- c. 4 years to breakeven



To further **increase adoption**, **proven tech solutions** were green-laned and support provided under Start Digital

## Pre-scoped Vs. Green Lane Solutions

Pre-scoped vs. Green Lane Solutions

### Pre-scoped IT Solutions

- Pre-scoped IT solutions from **pre-approved vendors**.
- Infocomm Media Development Authority (IMDA) is currently the government agency that appoint vendors for pre-scoped IT solutions that are applicable to agencies.

VS.

### Green Lane Solutions

- **No pre-approved vendors.**  
Agencies are free to choose whichever vendor fits their project requirements.
- As IMDA pre-approved IT solutions are targeted at Small and Medium Enterprises, Green Lane Solutions supplement in availing more SSAs and Charities-centric solutions to the sector, where NCSS pre-determines the supportable scope and maximum funding cap per solution.



Screening of vendors and/or solutions by Government



Baseline Norm cost is established



Light touch processing (i.e. single quotation)



List continuously updated according to demand

**Go Digital***funds non-pre-scoped or large-scale corporate function solutions*

# Our SSAs are not homogenous and thus some may need bespoke solutions for greater integration and economies of scale

**Enterprise solutions***Relevant for all social service agencies.***Office productivity****Corporate functions****Stakeholder management****Cybersecurity & governance****Data & reporting****Cost competitiveness through comparative quotations****More rigorous assessment to ensure prudence and usage****Inclusion of Breakeven Return on Investment as a KPI****Grater integration, connectivity and economies of scale**





# Voluntary Children's Home – XYZ(Sound Sensor x SMART Cameras) – \$100,000 equivalent in time saved per home per annum and scaled across 14 homes

**Synopsis:** NCSS implemented non-intrusive sound sensors with SMART cameras to reduce the number of incidents and investigation time within the home. The technology was scaled to 13 other MSF-funded homes/centres (Disability, Welfare and Children's homes).

## Issue

### INCIDENT DETECTION & RESPONSE

- Current homes are fitted with analog cameras which are inaccurate, leading to undetected incidents which result in increased risk to residents and staff.

## Solution

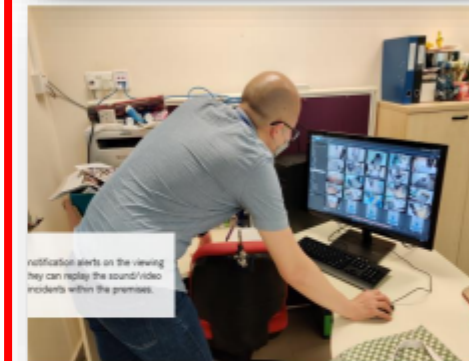
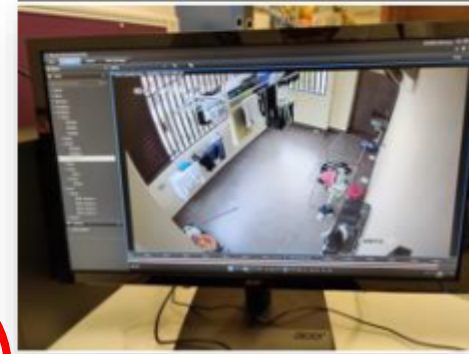
### EMERGENCY SOUND SENSORS (SOUND EYE) WITH SMART CCTV CAMERAS

- A non-intrusive sound sensor is integrated with SMART CCTV to add an additional layer of detection for incidents, and to trigger automated alerts to staff.

## Impact

### PRODUCTIVITY & SCALING

- 99% reduction in staff time to detect and respond to incidents (average reduction in other homes is about 75%)
- Annual time savings equivalent to \$400,000 (average time savings across other homes is about \$100,000.)



# While progress has been made, our schemes can be simpler, more sustainable and holistic

## Key Considerations

## Principles



### Simplicity vs comprehensiveness

#### User Centricity

While having many schemes address the myriad of needs in the sector, scheme and design architecture can be made simpler and more user-centric to drive further adoption and effectiveness.



### Sustainability of Solutions

#### Off-the-shelf over customisation

As manpower and funding are constant constraints, we are pushing for more off-the-shelf solutions (i.e. plug and play), for greater sustainability of solutions in the long run.



### Holistic Impact Assessment

#### Beyond Productivity to Client Outcomes

As technology is an enabler of better services and more effective organisations, we need to evolve our metrics to be more inclusive of impact beyond manpower and time savings.



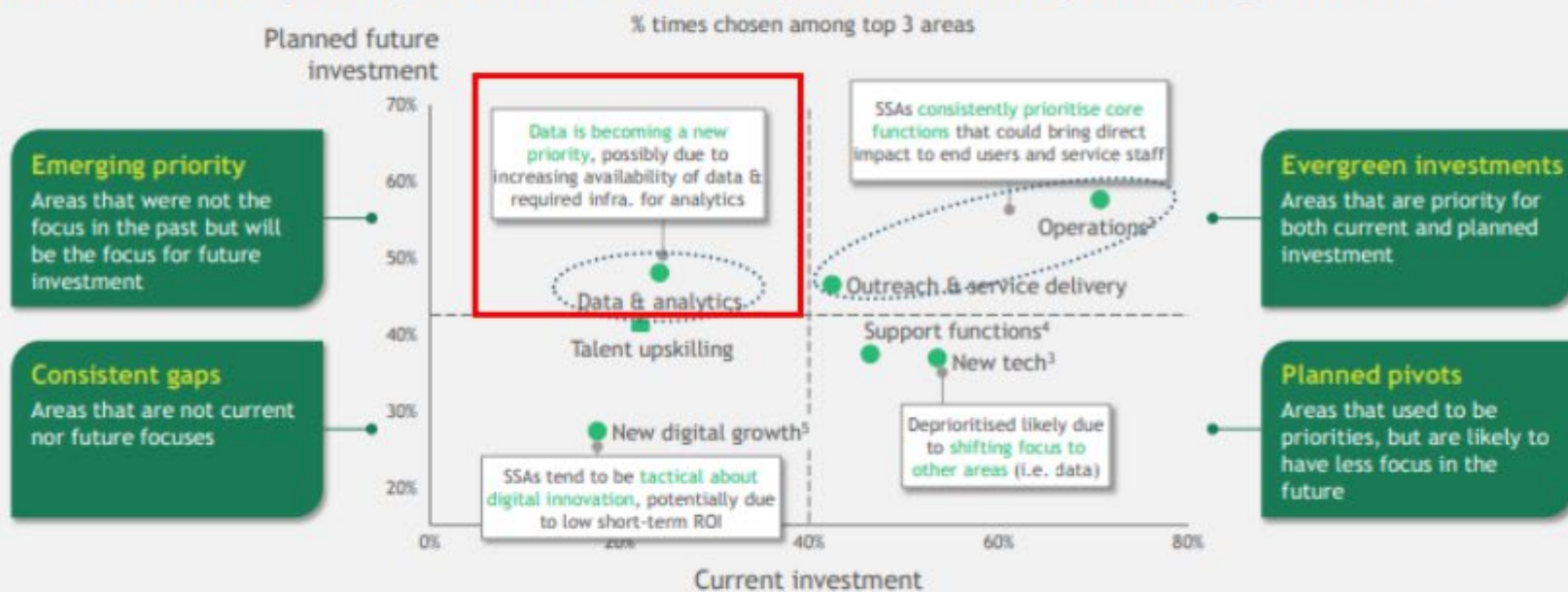
# **Uplifting the sector's data proficiency: Better Data Driven Charities (BDDC)**

NCSS Sector Digital Transformation

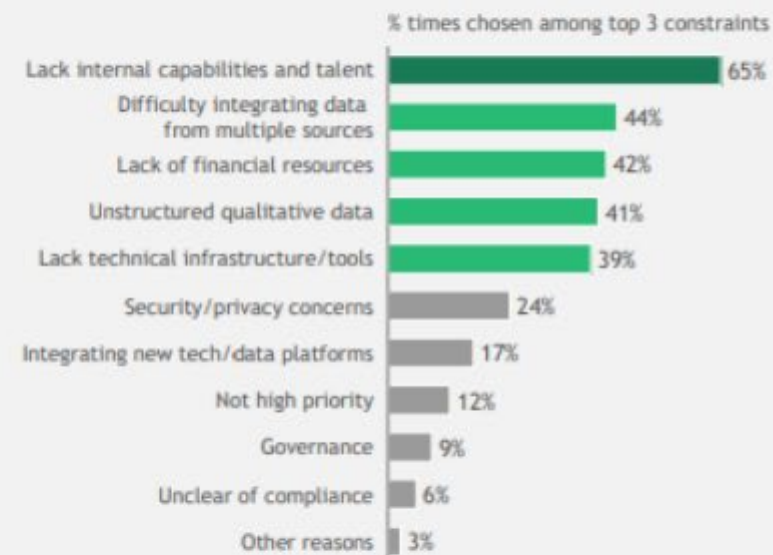
Mar 2024

## Core functions to remain as top areas for SSAs' current & future digital investment, while data is emerging as a new focus

In which areas does your organisation mostly invest/ plan to invest in 3 years for digitalisation<sup>1</sup> ?



Which are the 3 biggest constraints that limit your agency's ability to unleash the full potential of data?



Source: Digital Acceleration Index Survey 2021



# Leveraging existing initiatives

Uplift **data proficiency** in the sector with the **Better Data Driven Charities (BDDC)** initiative

To emulate Infocomm Media Development Authority (IMDA)'s Better Data-driven Business (BDDB) Programme for SMEs

That was aimed to help more SMEs to use data to **gain deeper consumer insights and scale up their businesses** through responsible use of data



by

**Providing  
resources**



SSAs become  
more data-driven



Achieve better client  
outcomes and  
operational objectives

Carefully-curated **data templates** to generate automated **dashboards** that can analyse data and provide deeper insights on the 4 shortlisted common use cases

# Approach and resources provided to SSAs



## Collecting user stories\* from SSAs

\* A user story is an **informal, customer-centric** explanation of a software feature, detailing how it will **deliver specific value** to the end user or customer.



## Two rounds of User Acceptance Testing (UAT) per use case, in-person to validate visualisations



## Hands-on training workshops with vendor for four different use cases



## Consultancy Partnership with Institute of Higher Learning (IHL)

- Support from academic staff for BDDC Consultancy projects and training programme in data analytics and visualisation.
- Customisation of data templates to align with agency needs and selection of relevant charts.
- Evaluation of charts based on contextual requirements.



## To recognise potential high-risk cases and take improvements to close the case

## Case Analysis

To efficiently manage high risk cases in stages, and to provide a structured and coordinated approach to ensure case closure



## Client Demographic

- Identifying specific needs, strengths, and challenges of the client, leading to more personalised and effective interventions
- Increases the chances of success and positive outcome

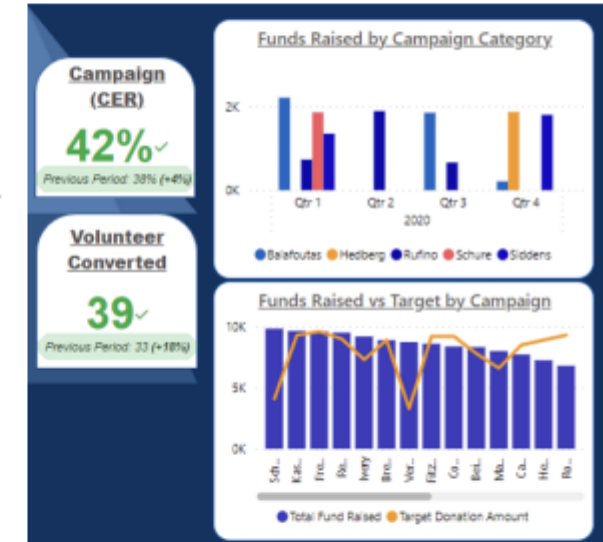
## Case Management

To track case outcomes and performance of case workers to track contact logs

## To strategically plan for more successful fundraising campaigns and activities that entice higher donation rate

- Did we achieve the annual donation fund target in selected time frame?
- Which donation channels are the most popular?
- How many volunteer make regular donation?
- Can we drill up and down to monthly or annual view?

### USE CASE 1: DONOR MANAGEMENT



Evaluate campaign performance to reduce campaign cost which affects total donations received

Identify campaigns that are more effective to better manage and prioritise resources



## To strategically design recruitment campaign, cost effective activities and program to attract and retained volunteer

- What is the average commitment level of volunteers?
- What is the demographic of some the longest serving volunteers?

Volunteers who live near to serving site tend to serve more frequently. Lower cost of transportation and time

Tapping on volunteer's skillset to plan a beneficial befriending- learning activities

Committed volunteers are more willing to contribute time and make donations to the Agency



## Understand employee demographics, engagement levels and productivity to create conducive working environment and design better HR policies

### USE CASE 4: HUMAN RESOURCE (HR)

- Are the staff overworked based on their duty roster?
- What is the lead-time to rehire when there is an opening?
- What is the conversion rate from contract to permanent employment?



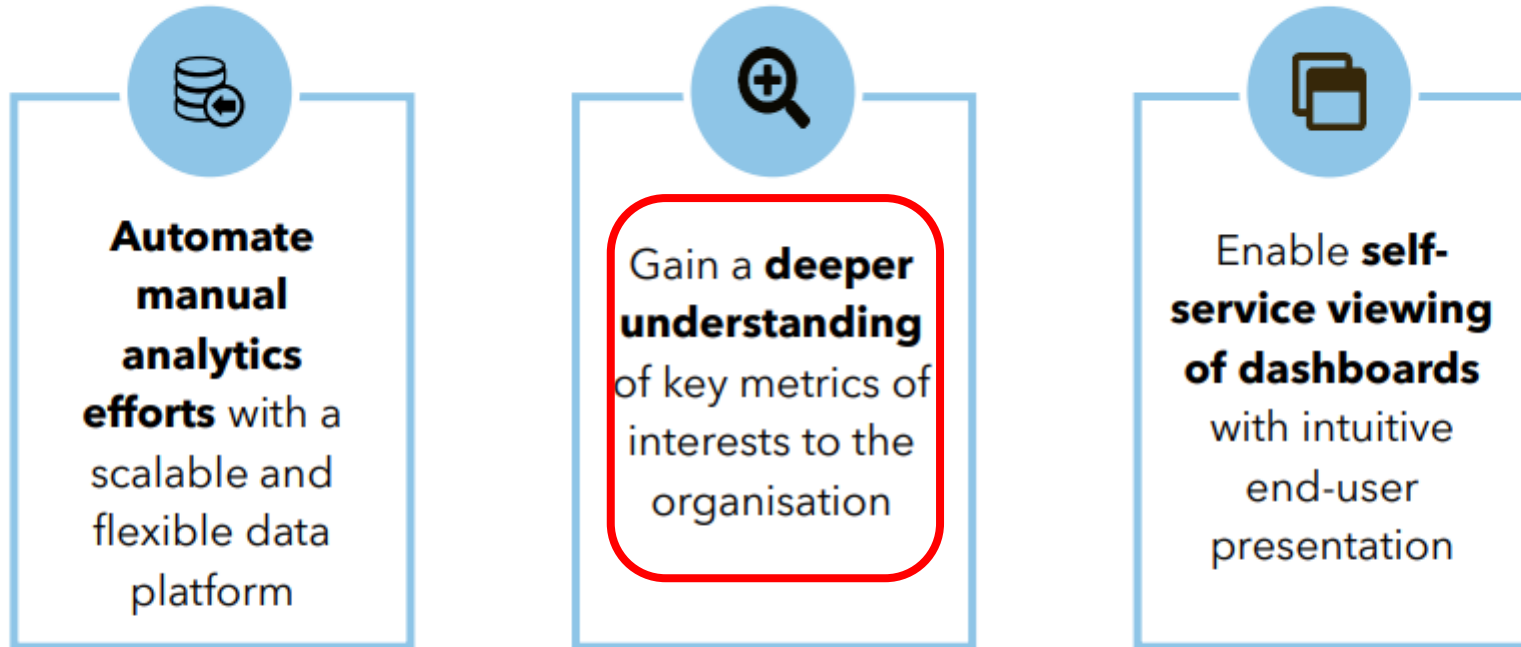
Evaluate employee's performance to factor budget and plan for skill upgrading

HR team is able to monitor talent development and career advancement



# SSA's Vision for Data & Analytics

Seek to adopt a modern data and analytics platform to empower our organization with valuable insights.



## Key pain points to address:

1. Current systems have limitations in their functions and features. e.g., Lack the ability to **drill down** into details, or provide visualisations to better represent data.
2. Difficulties in **churning vendors' records and expenses** for auditing purpose
3. Difficulties in **analysing the free-text** columns (e.g., Reason of rejection, comments)



# Social Service Agencies

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SSAs

# Tech that Cares: How Technology Improves Productivity and Efficiency of Professionals

NCSS Sector Digital Transformation

Mar 2024

**IMPORTANT:** For internal circulation and intended participants of the HKCSS Delegation Visit from 20-22Mar24 only. No further distribution is allowed without permission from NCSS.



# PROJECT BACK-TO-BASICS (B2B)

Enhance Productivity & Job Satisfaction of Therapists, Social & Youth Workers in Social Services

## Fully Funded Consultancy and Workshops

Baseline Study



Job/Process Redesign  
Consultancy



Tech Adoption  
Consultancy



Change Management  
Workshops



Funding Support for SSAs  
Tech Subsidy & Role Design



Main KPI: Improve productivity

# IMPLEMENTATION APPROACH

## Integrated Change Management


Baseline  
Assessment


Factors for  
Considerations

2-Pronged Approach to  
Improvement

Pilot & Implementation of Project

Post Implementation

- 
1. Interviews
  2. Time Motion Study & Observations
  3. Staff Time Log
  4. As-Is Process Mapping Workshop
  5. Staff & Client Surveys

- 
1. Current therapy & intervention programme
  2. Service intent and KPIs
  3. Clients' needs and outcomes
  4. Therapy resource and programme structure

Select technology & equipment for adoption

Review/Design programmes


Develop process, SOP, protocol & training

Review/Design & intervention programmes

Select technology & equipment for adoption

Develop process, SOP, protocol & training

Job Redesign to conduct programmes, interventions and operate technology

- 
- Change management plan review
  - Devise plans to follow up with recommendations
  - Accountability meetings
  - Project impact and scaling discussions

## Use Case - Assisted Case Recording and Analytics



### Assisted Case Recording and Analytics

*Transcribe case recordings (speech or handwriting) and organise key words into assessment categories. Facilitate supervisory process and case study/research through situational and trending analysis.*

#### Operational impact:

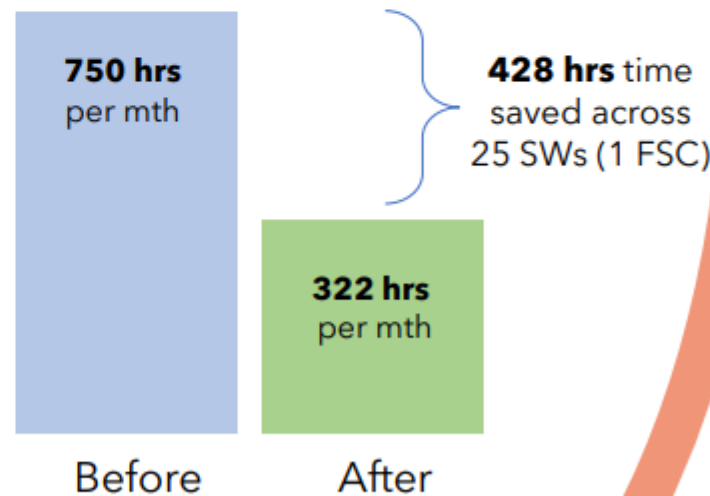
Benefits to SW

- Automate transcription of audio case recordings.
- Facilitate data collection and enrich supervision by providing case verbatims.
- Assist in categorising key words into assessment domains.
- Help generate insights for better-customised interventions.
- Improve clinical practices through enhanced supervisory process.

#### Operational impact:

Benefits to SSA

Time spent on note taking and case summary writing (illustration)



#### Client Impact



- Improve client's well-being and functioning (e.g. increase resilience manage risk, achieve goal) through enhanced case planning and supervision.
- Enhance interventions through case studies and research that can be used in future case planning.



## Use Case - Geospatial Community Outreach

### Client Impact

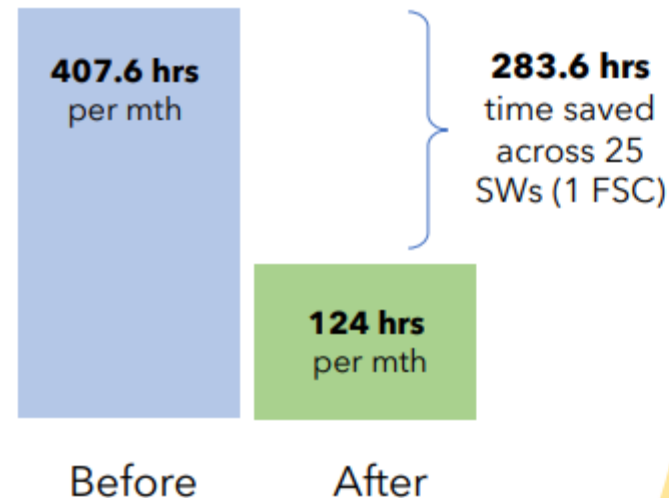


- Enhance social network and empower the community.
- Encourage community initiatives to transition from professional-led to community-led.
- Optimise allocation of resources in the community.
- Uncover new and under-served needs and assets in the community.

### Operational impact:

Benefits to SSA

Time spent on community engagement activities (illustration)



### Operational impact:

Benefits to SW

- Improve work coordination.
- Eliminate pen-and-paper tracking.
- Ease of data collection and collation.



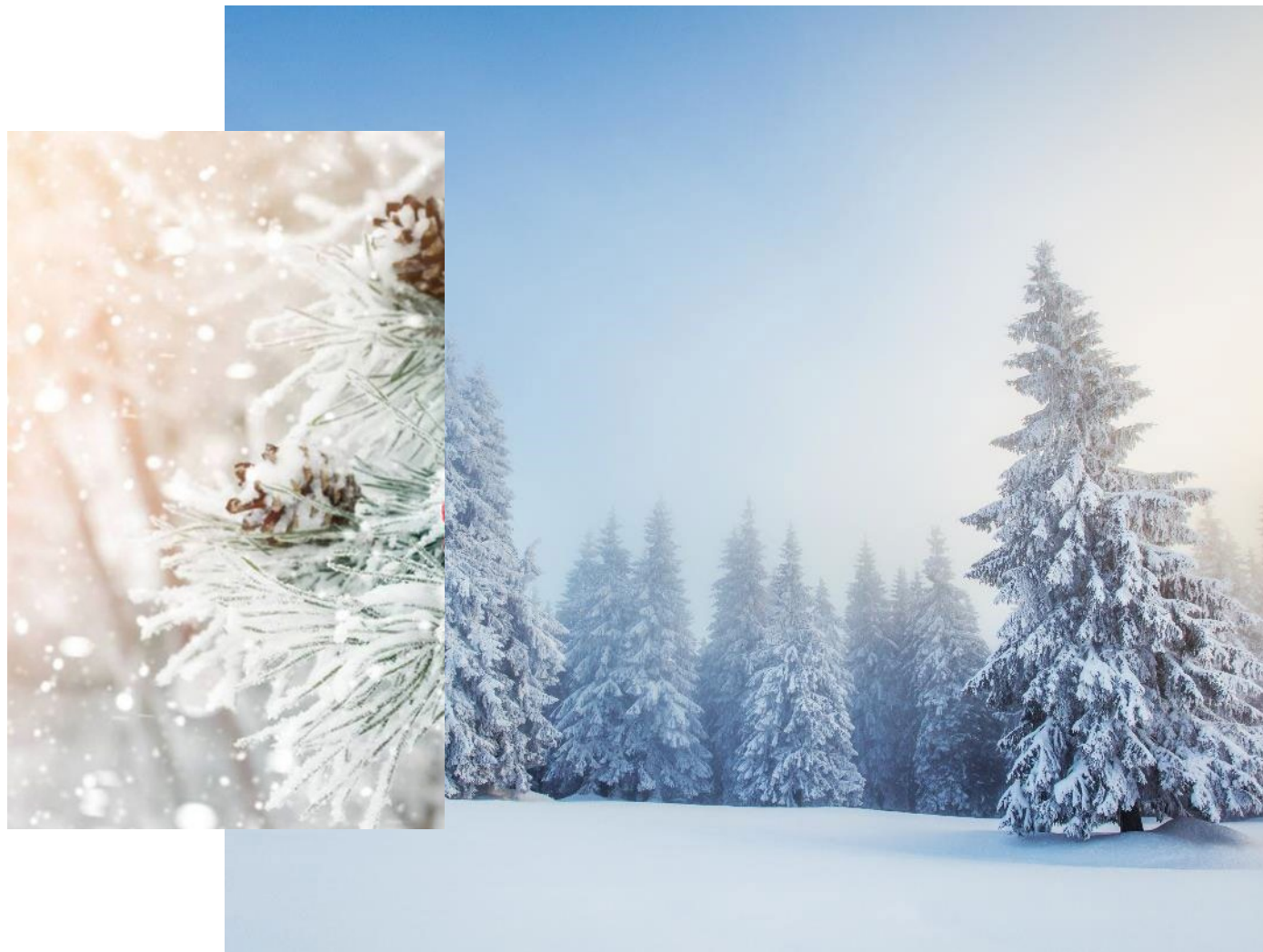
*Identify community members with high risk or mental health needs, locate and register community members/ volunteers as resources and connect them with others within proximity*

**“CHANGES FIXES THE PAST.  
TRANSFORMATION CREATES  
THE FUTURE”**





# Insight & Adoption





# Strategic Role in Digitalization

## Ministry of Social and Family Development (MSF)

STRENGTHENING SOCIAL SERVICE DELIVERY VIA:

- SYSTEM CONNECTIVITY
- DATA GOVERNANCE

## The Nation Council of Social Service (NCSS)

Accelerating digitalization across Singapore's social service sector

- Digital Acceleration Index (DAI)
- Social Services Digitalisation Playbook (Roadmap)
- Tech-and-GO! (Fund)
- Pre-scoped service delivery tech
- Consultancy & Coaching
- Social Service Data Standards

## Social Services Agency (SSA)

- How Technology Improves Productivity and Efficiency
- Implementation of Technology Enabled Therapy Programmes

# Pre-Scope Solutions

## Pareto Principle “80/20 Rule”

- 80/20 Rule: Once you have identified the high-value elements, **focus your efforts on optimizing or digitizing those that contribute** to approximately 80% of the desired outcomes.
- Prioritize these **activities as they are likely to deliver the most significant results**. This allows you to achieve maximum impact with limited resources and time.
- The key is to identify and focus on the vital few elements that **drive the majority of the desired outcomes in the pre-scope system for sector digitalization**.



# While progress has been made, our schemes can be simpler, more sustainable and holistic

## Key Considerations

## Principles



### Simplicity vs comprehensiveness

#### User Centricity

While having many schemes address the myriad of needs in the sector, scheme and design architecture can be made simpler and more user-centric to drive further adoption and effectiveness.



### Sustainability of Solutions

#### Off-the-shelf over customisation

As manpower and funding are constant constraints, we are pushing for more off-the-shelf solutions (i.e. plug and play), for greater sustainability of solutions in the long run.



### Holistic Impact Assessment

#### Beyond Productivity to Client Outcomes

As technology is an enabler of better services and more effective organisations, we need to evolve our metrics to be more inclusive of impact beyond manpower and time savings.





# THANK YOU

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