Pre-Discovery discussion with WT
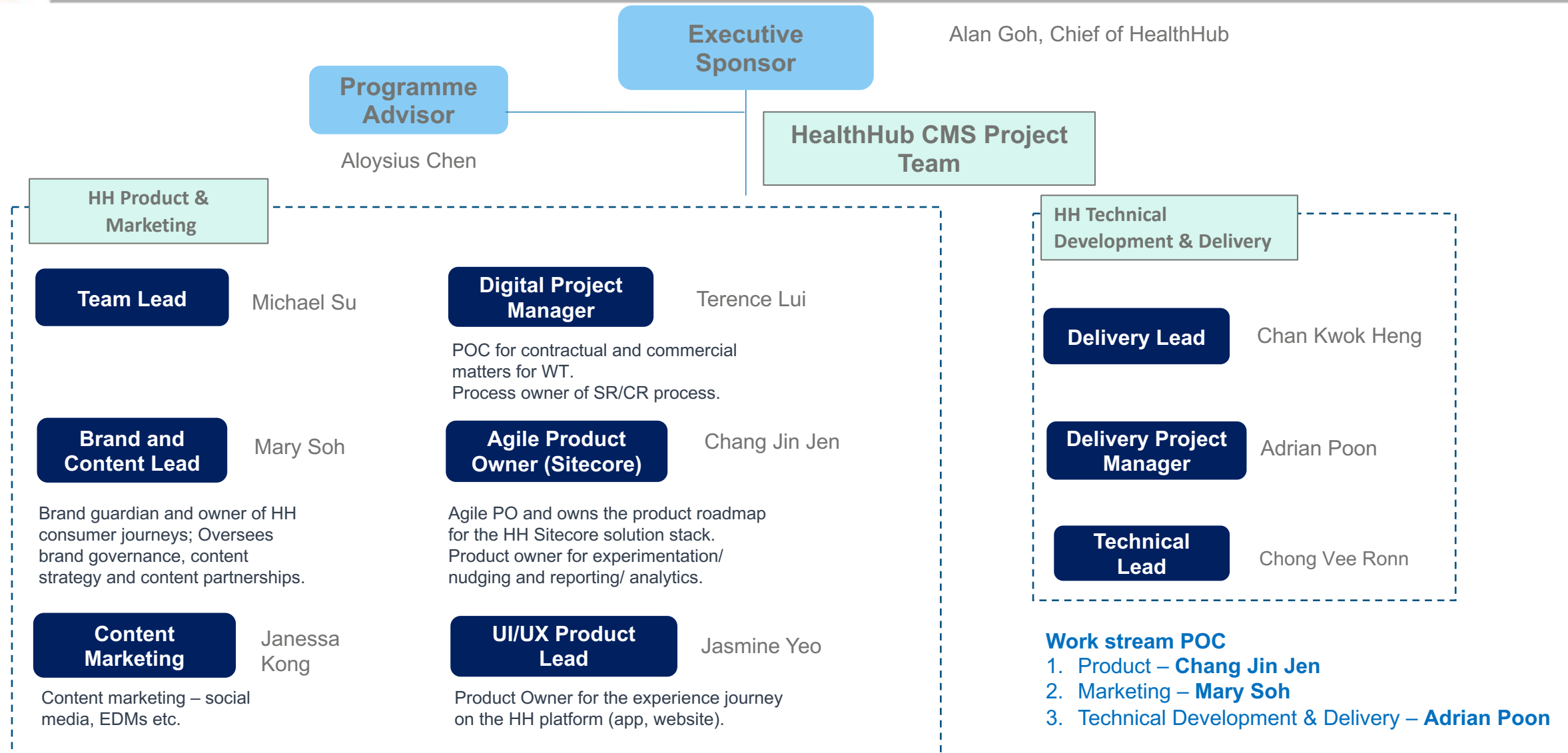## - Digital Project Lead Prof Svcs Retainer

HH Product & Marketing

12 September 2022

IHiS

Because IT's in Healthcare

HH CMS Modernisation – Project Organisation Structure

Executive Sponsor — Alan Goh, Chief of HealthHub

Programme Advisor — Aloysius Chen

HealthHub CMS Project Team

HH Product & Marketing

Team Lead — Michael Su

Brand and Content Lead — Mary Soh
Brand guardian and owner of HH consumer journeys; Oversees brand governance, content strategy and content partnerships.

Content Marketing — Janessa Kong
Content marketing – social media, EDMs etc.

Digital Project Manager — Terence Lui
POC for contractual and commercial matters for WT.
Process owner of SR/CR process.

Agile Product Owner (Sitecore) — Chang Jin Jen
Agile PO and owns the product roadmap for the HH Sitecore solution stack. Product owner for experimentation/ nudging and reporting/ analytics.

UI/UX Product Lead — Jasmine Yeo
Product Owner for the experience journey on the HH platform (app, website).

HH Technical Development & Delivery

Delivery Lead — Chan Kwok Heng

Delivery Project Manager — Adrian Poon

Technical Lead — Chong Vee Ronn

Work stream POC
1. Product – **Chang Jin Jen**
2. Marketing – **Mary Soh**
3. Technical Development & Delivery – **Adrian Poon**

Note: Please keep **Terence Lui** in the loop of all project communication.

To set some context …

- **Through the DPL prof svcs contract mechanism, WT to play the role of the HH digital agency and provide consulting services (and execution in some cases) to …**

  - **Digital solution framework:** Drive the integration of the nascent, digital marketing efforts by various teams, and piece them together cohesively in a digital solution framework with the tech capabilities and tech-enablement provided by the Sitecore DXP

  - **Deliver compelling citizen experiences and consumer insights:** Drive website UX/UI, IA, mature the HH team on the content / ad personalisation journey, measurement frameworks etc.

  - **HH Transformation roadmap (beyond informational website):** Formulate the overall strategy to deliver a compelling citizen experience and a 3-year digital transformation roadmap that incorporates the HH Tech Modernisation of our e-Services applications, and potentially to support Healthier SG nudges (see next slide)

  - Etc. (*list above is high-level and not meant to be comprehensive – we would like to understand where WT can fill in the gaps that we may not recognise we may have*)

- **From a HH Marketing perspective, digital health literacy remains an important goal for us. We have options when it come to co-creating content with partners.**

  - There are disparate health literacy efforts by our partners in the healthcare ecosystem; Some may not see HH as a partner per se (since we are a digital platform, rather than an entity), but as a consumer channel to amplify their health literacy efforts or health programmes.

  - However HH abides by the "transparency, equity, mutual benefits" partnership principles and aims to convert them into true partners that see HH as a valuable go-to consumer platform, with timely and relevant consumer insights from A/B experiments, data analytics etc. that guide the ecosystem.

  - Many of our partners have a challenge in creating health content in a consumer-friendly manner.

To set some context …

- **HH is digital-first, so our channels will be primarily focused on digital.**
  - However, we recognise that there are 2 important touchpoints for residents looking to level up digital health literacy:
    1. SEO, given that 93% of online experiences begin with a search engine.
    2. "Point-of-Care", where clinicians are in a position to provide medical advice.

      Note: Care team* may use central, nationally harmonised resources on HH to (a) educate the patients, (b) for care team's own education (e.g. on-demand training resources).

- **With Healthier SG (www.healthiersg.gov.sg) coming into the picture (Phase 1 launching in Jun/Jul 2023), HH and H365 will become the national front doors for enrolment, health plan, health programmes and Healthpoints.**

  - **HH:** Clinical care nudges (e.g. notification for eligibility for SFL[1] and subsidised vaccination, reminders to schedule appointment with GP, viewing health plan)
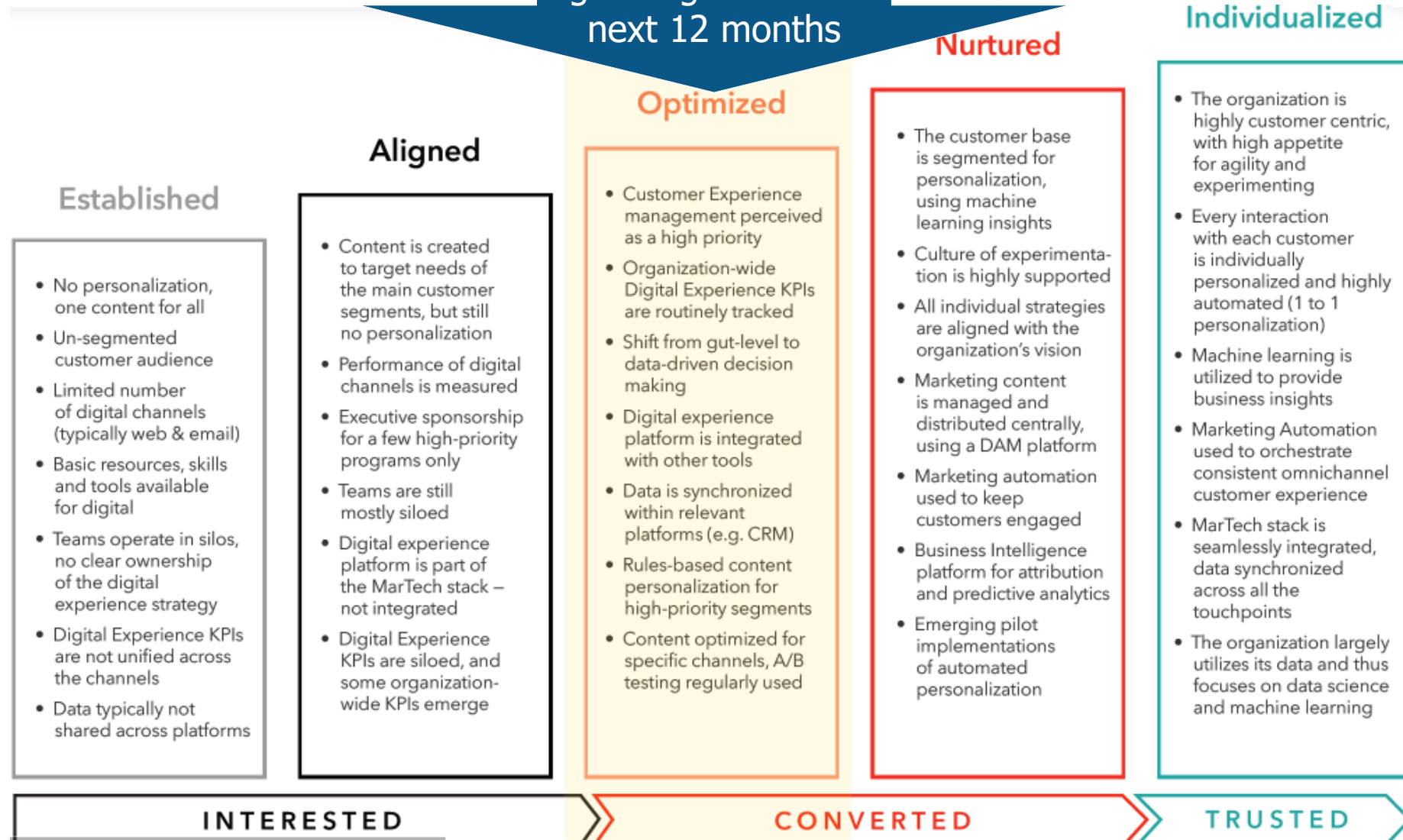 - **H365:** Lifestyle nudges
    The HS-Technology workstream is assessing if there is a need for a centralised platform to hold specific nudging rules; Outcomes of these nudges will be fed back into the IHiS AI engine.

* Care team refers collectively to doctors, nurses and allied health professionals (radiographers, dietitians, podiatrists, therapists, medical social works etc. See more here: MOH | Career & Practices
[1] SFL – Screen for Life programme by HPB

The Digital Experience Maturity Model (DXMM)

What we are gunning for in the next 12 months

Established

INTERESTED

- No personalization, one content for all
- Un-segmented customer audience
- Limited number of digital channels (typically web & email)
- Basic resources, skills and tools available for digital
- Teams operate in silos, no clear ownership of the digital experience strategy
- Digital Experience KPIs are not unified across the channels
- Data typically not shared across platforms

Aligned

- Content is created to target needs of the main customer segments, but still no personalization
- Performance of digital channels is measured
- Executive sponsorship for a few high-priority programs only
- Teams are still mostly siloed
- Digital experience platform is part of the MarTech stack – not integrated
- Digital Experience KPIs are siloed, and some organization-wide KPIs emerge

Optimized

CONVERTED

- Customer Experience management perceived as a high priority
- Organization-wide Digital Experience KPIs are routinely tracked
- Shift from gut-level to data-driven decision making
- Digital experience platform is integrated with other tools
- Data is synchronized within relevant platforms (e.g. CRM)
- Rules-based content personalization for high-priority segments
- Content optimized for specific channels, A/B testing regularly used

Nurtured

- The customer base is segmented for personalization, using machine learning insights
- Culture of experimentation is highly supported
- All individual strategies are aligned with the organization's vision
- Marketing content is managed and distributed centrally, using a DAM platform
- Marketing automation used to keep customers engaged
- Business Intelligence platform for attribution and predictive analytics
- Emerging pilot implementations of automated personalization

Individualized

TRUSTED

- The organization is highly customer centric, with high appetite for agility and experimenting
- Every interaction with each customer is individually personalized and highly automated (1 to 1 personalization)
- Machine learning is utilized to provide business insights
- Marketing Automation used to orchestrate consistent omnichannel customer experience
- MarTech stack is seamlessly integrated, data synchronized across all the touchpoints
- The organization largely utilizes its data and thus focuses on data science and machine learning

Our thoughts for DPL consulting services (for discussion)

S Strategy
E Execution

Information Architecture **S** **E**
- We do not expect WT to take in the recommendations from UXC lock, stock, barrel but to advice. This is the opportunity to lay the foundations right for the website IA.

KPI Workshops **S**
- To understand what are the KPIs / metrics that can be supported by Sitecore and how it tie into our 'North Star' (e.g. digital health literacy)
- Success metrics for before / after migration.

Nudge channels **S** **E**
- Help the HH Mktg team operationalise based on the nudge capabilities of Sitecore DXP including Email

360 xProfile / Data **S** **E**
- How to make the profile more robust to power personalisation, augmented by existing HH data sources?

GA / GTM / Pixels **S** **E**
- Audit existing GA / GTM and pixels, including legacy ones from HPB and make recommendations for consolidation and for integration.

UX/UI **S** **E**
- We need a website revamp.
- Consumers should have a consistent experience across our CMS website, e-Services and mobile app.
- Design system (?).
- Reusable web components for partners' microsites.

Channel Mgmt / API Ecosystem **S**
- HH owned platforms, social media channel integration with Sitecore.

- Demand management of HH's nationally harmonised, 'single source of trust' content that are in demand by channels in the public healthcare ecosystem. Some demands include:
- NHG HealthApps
- NHG Chabot

Digital Solution Framework **S**
- To map the digital solution framework for HH
- (Optional) Map the future state architecture as HH is undergoing a Tech Refresh.

CX/CXM **S**
- VOC measurement methods and touchpoints to measure in a holistic manner.
- We may institute brand trackers thru Qualtrics (TBC)
- We may commission a market research firm to run Health Literacy Questionnair benchmarking studies.

Content Strategy **S**
- Content playbook, including SEO best practices, to guide our partners on how to create / co-create content for HH.
- (Optional) Media kit, based on any new ad personalisation capability thru Sitecore DXP.

Regular Engagements / Sharings with Ecosystem Partners **E**
- Monthly sharing of research, learnings, best practices, heatmaps, analytics, A/B test experimentation results, product roadmap

Content Migration **S**
- How to split the MVPs to deliver value in incremental fashion
- Planning for user training / enablement to level up our digital maturity and getting the most out of Sitecore.
- Can Content Hub be used earlier before migration?

Objectives of health literacy studies

Health literacy relates to how people access, understand and use health information in ways that benefit their health. It will help to determine whether they are able to make appropriate health decisions and are able to follow treatment instructions.

This is important because low health literacy is associated with higher risk of mortality, worse health outcomes, poorer health behaviours and extra costs to the healthcare system.

Proposed method (reference to [Australia Bureau of Statistics](#), [British BMC Public Health](#), [UCL Institute of Health Equality](#), [National Library of Medicine](#))
A population based Health Literacy Questionnaire (HLQ) consists of 44 questions which forms nine domains of health literacy.

Functional health literacy A person's ability to read and comprehend information and instructions effectively in in everyday situations.	**Interactive health literacy** A person's ability to be actively involved in decisions about their health and care over time, and in changing circumstances.	**Critical health literacy** A person's ability to take control of the wider determinants of health.
2. Having sufficient information to manage my health 8. Ability to find good-quality health information 9. Understanding health information well enough to know what to do	1. Feeling understood and supported by health care providers 3. Actively managing my health 4. Social support for health 6. Ability to actively engage with health care providers 7. Navigating the healthcare system 8. Ability to find good quality-health information	3. Actively managing my health 4. Social support for health 5. Appraisal of health information

Each question are made up of 5 Likert style questions based on the level of agreement with a set of health literacy statements (*strongly agree / agree / undecided/ disagree / strongly disagree*) or the perceived difficulty of a health literacy characteristic (*always easy / usually easy / sometimes difficult / usually difficult / cannot do or always difficult*).

Conducting health literacy studies

Proposed survey sampling method (based on Singapore residents population statistics of 3.2m who are aged 20 & above):
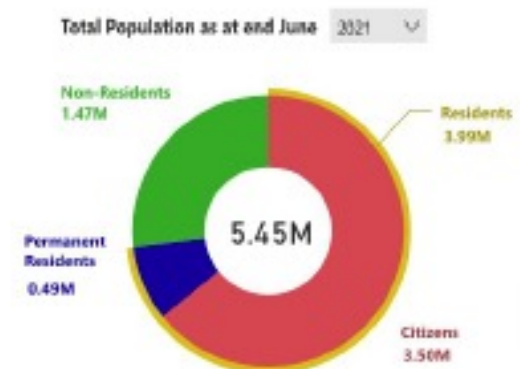
- Adopt a **95% confidence level** means that you can be 95% certain the results lie between x and y numbers
- Adopt a **4% margin of error** (an acceptable margin of error used by most survey researchers typically falls between 4% and 8% at the 95% confidence level)
- Using the survey sample size calculator, the minimum sample size of each HLQ should have at least 601 responses

Population Size ⓘ	Confidence Level (%) ⓘ	Margin of Error (%) ⓘ
3210000	95 ▼	4

Sample size
601

We can refer to the 44 health literacy survey questions segregated to the 9 domains by Australia National Health Survey, and further contextualise the language & structure to Singapore's context.

While the Australian National Health Survey is collected every 3 years, we propose the frequency for Singapore is **once every year** upon the launch of new HealthHub website to establish the foundation. The minimum sample size of 601 required is a practical target for the execution of annual survey.

Note: Survey sample size will need to change depending on the population shift and gradualarity level of sample size required for specific age group, household income level or accessibility to public health services.

Total Population as at end June 2021

5.45M

Non-Residents 1.47M
Residents 3.99M
Permanent Residents 0.49M
Citizens 3.50M

Resident Population as at end June 2021

3.99m (residents) - 0.7821m (19 yo & below)

Original Scope of Work for the DPL

Programme Management	Content Strategy / Omni-Channel Engagement Strategy	Channel Management Strategy	Data Integration Strategy	Customer Experience and Management Strategy	Quarterly Review
▪ Jointly determine the Key Performance Indicators (KPIs), measurement metrics and outcomes for this programme. Includes tracking the digital maturity of the organisation to achieve the outcomes. ▪ Put together a coherent programme roadmap to track the progress of the software implementation(s) and track the critical path and time frame of each implementation to arrive at the programme outcomes. ▪ Create architecture and interaction models that will guide and define the user experience for the multiple digital channels. ▪ Adopt an iterative life cycle approach to continuous delivery and innovation to release new features and capabilities in a sustainable manner.	▪ Drive the HH content strategy and omni-channel engagement strategy jointly to provide a fully integrated experience that allows customers to shift between channels. ▪ Work on the content integration framework with HPB and HPB's vendor and establish the escalation matrix and L1 / L2 / L3 technical support workflows for troubleshooting the microsites. Ensure that first-party data on the microsites are properly captured within the proposed software for HH to deliver personalised experiences in a holistic manner. ▪ Work with the IHiS and the vendor's PMs responsible for the delivery of the software to maintain a high degree of brand standards and consistency, quality and timelines such as the design of the new HH website. ▪ Work with the vendor PM for implementation of the DAM module for the proposed software to audit the digital content assets and propose a housekeeping and migration plan.	▪ Put together a digital solution framework together in consultation with the Company for health content on HH that will underpin the HH channel management strategy. The digital solution framework refers to the underlying digital platform and technology solutions which will orchestrate, manage, and deliver citizen engagement through the relevant channel. ▪ Work closely with the the Company on the channel strategy to level up HH's omni-channel content delivery capability for multiple channels including: (a) Owned platforms (website and mobile app), (b) Email, (c) Social, (d) Messaging, (e) Chatbot.	▪ Assess the Company's readiness for a data integration strategy on the new CMS to deliver personalised digital experiences at scale. Data here refers to a combination of the 1st Party, 2nd Party and to a lesser extent, 3rd Party data. ▪ Work with the Company and the Company's media agency in order to come up with the data integration strategy to inform the digital solution framework and enable the media agency to build audiences and deliver highly-targeted media campaigns. ▪ Work with the Company's media agency to identify programmatic platforms required to deliver on the channel strategy.	▪ Propose customer experience methodologies that can be activated on top of the foundational capabilities of the proposed software and provide counsel on when each of the methodologies can be activated at what phase of the programme. The methodologies proposed can be a mix of quantitative and qualitative research as well as experience design. ▪ Work with the Company to define the HH customer experience management (CEM) methodology through optimising the implementation of the existing Qualtrics software license (CustomerXM license) to collect quality customer feedback along the customer journey.	▪ Prepare and participate in quarterly reviews with the Company to update on the progress of the web transformation and align on priorities. ▪ Organise cross-content contributors, cross-agency alignment meetings and reviews as necessary.
Always-On					4x Yearly

WT Response

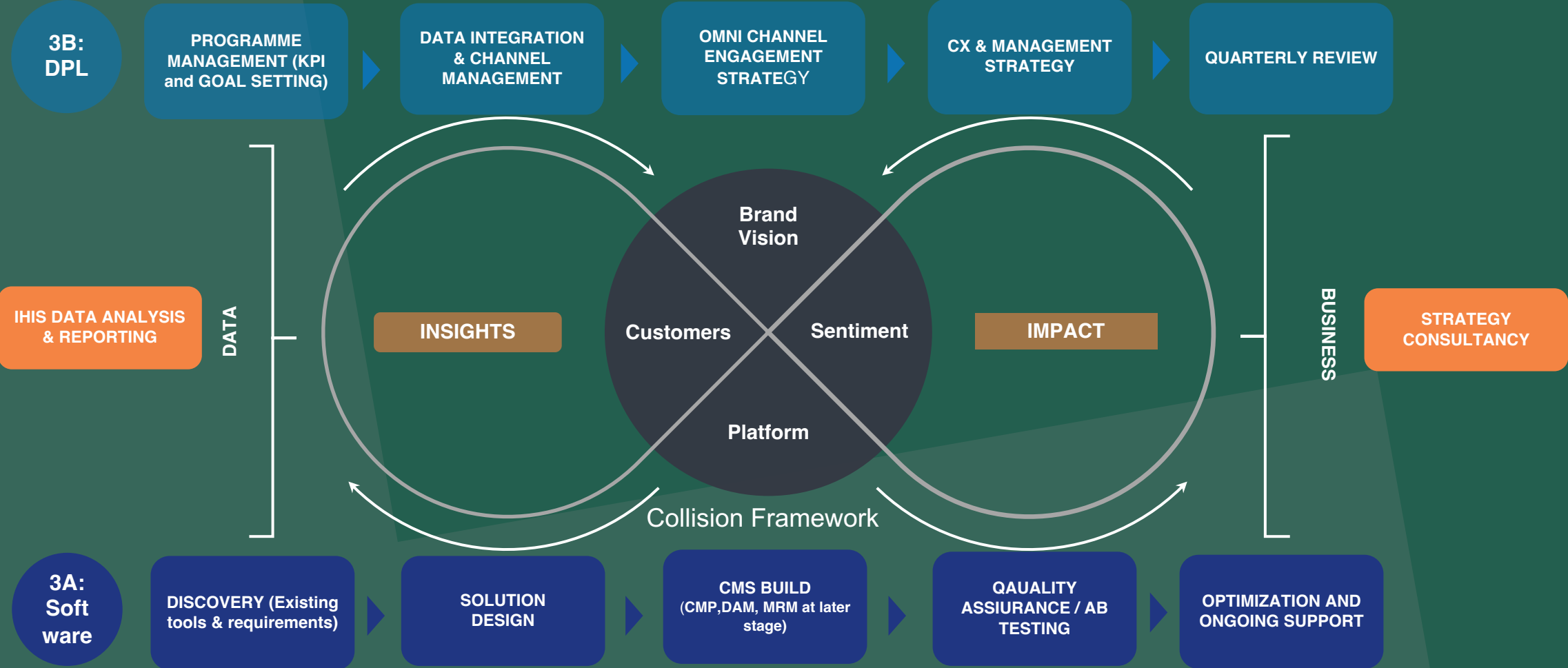## Original Firm SOW of the Digital Project Lead (12-month retainer)

Programme Management	Content Strategy / Omni-Channel Engagement Strategy	Channel Management Strategy	Data Integration Strategy	Customer Experience and Management Strategy	Quarterly Review

Programme Management

Assumptions and Deliverables Details:
- Programme roadmap and Digital maturity tracking and evaluation
- Audit of current HH website CMS data stack and tools
- Up to 6x stakeholder interview sessions
- Digital Maturity Assesment Mapping
- Roadmap to get from Currewnt Solution Design to Future Solution Design

Measurement metrics and outcomes
- - KPI and Goal Setting

Content Strategy / Omni-Channel Engagement Strategy

Assumptions and Deliverables Details:
Medium-term (1-3 years) content strategy
- - KPI and Goal Setting
- Target audience desktop research including SEO and Keyword Research
- Desktop research on trends, industry landscape, and competitors/similar brands (up to 3x competitors/similar brands)
- Communications and Messaging Framework development accross custmer persona and journey
- Integration with Channel Management Strategy to identify focus channels,

Content integration framework with HPB and HPB vendor
- Developed with integrations from the content strategy, channel strategy, and content marketing plan

12-month content marketing plan
- Integrated with content strategy
- High-level 12 months Editorial Calendar (Who, What, Where, When)

Channel Management Strategy

Assumptions and Deliverables Details:
- KPI and Goal Setting
- Audit of existing channels and current strategy
- Desktop research on trends, industry landscape, and competitors/similar brands (up to 3x competitors/similar brands)
- Identification, prioritization, and enablement strategy development of channels and platforms (up to 5x channels and platforms)

Data Integration Strategy

Assumptions and Deliverables Details:
Medium Term (1-3 years) Data Integration Strategy
- KPIs and Dimensions
- Data Gap Analysis
- Tagging Audit resulting to Tagging Governance and Implementation Recommendations

Medium Term (1-3 years) 1st Party Data Strategy
- KPI and Goal Setting
- Validation of Customer Journey and Target Audience
- Identification of Data Sources
- Detailed Possible Use Cases for 1st Party Data (up to 10)

Customer Experience and Management Strategy

Assumptions and Deliverables Details:
- Short term (0-1 year) recommendation on activation of customer experience methodologies
- Medium term (1-3 years) customer experience management strategy to capture the Voice of the Customer and establish a customer feedback loop that informs the programme / product roadmap(s)

Quarterly Review

Assumptions and Deliverables Details:
- - Mid-term review and action plan
- - Based on approved measurement framework and digital roadmap

| 254 hrs | 216 hrs | 216 hrs | 184 hrs | 176 hrs | 208 hrs |

One Frame-work. Two Scopes

VENDOR's ideation framework is called Collision. This framework streamlines the path to organizational outcomes using agile methodologies, leveraging local insight, data and expertise of cross disciplinary teams In the context of the IHiS retained agency relationship.

Project Lead), we have mapped out both scopes *3A and 3B* below is a phased approach to help unpack both your technical and functional requirements in building out the CMS solution alongside the strategic imperatives as laid out in Part 3B of your RFP.

We recognize there are ***two scopes*** - Part 3A (Scope Of Software) and Part 3B (Digital

3B: DPL

| PROGRAMME MANAGEMENT (KPI and GOAL SETTING) | ▶ | DATA INTEGRATION & CHANNEL MANAGEMENT | ▶ | OMNI CHANNEL ENGAGEMENT STRATEGY | ▶ | CX & MANAGEMENT STRATEGY | ▶ | QUARTERLY REVIEW |

IHIS DATA ANALYSIS & REPORTING

DATA

INSIGHTS

Brand Vision

Customers

Sentiment

Platform

IMPACT

BUSINESS

STRATEGY CONSULTANCY

Collision Framework

3A: Soft ware

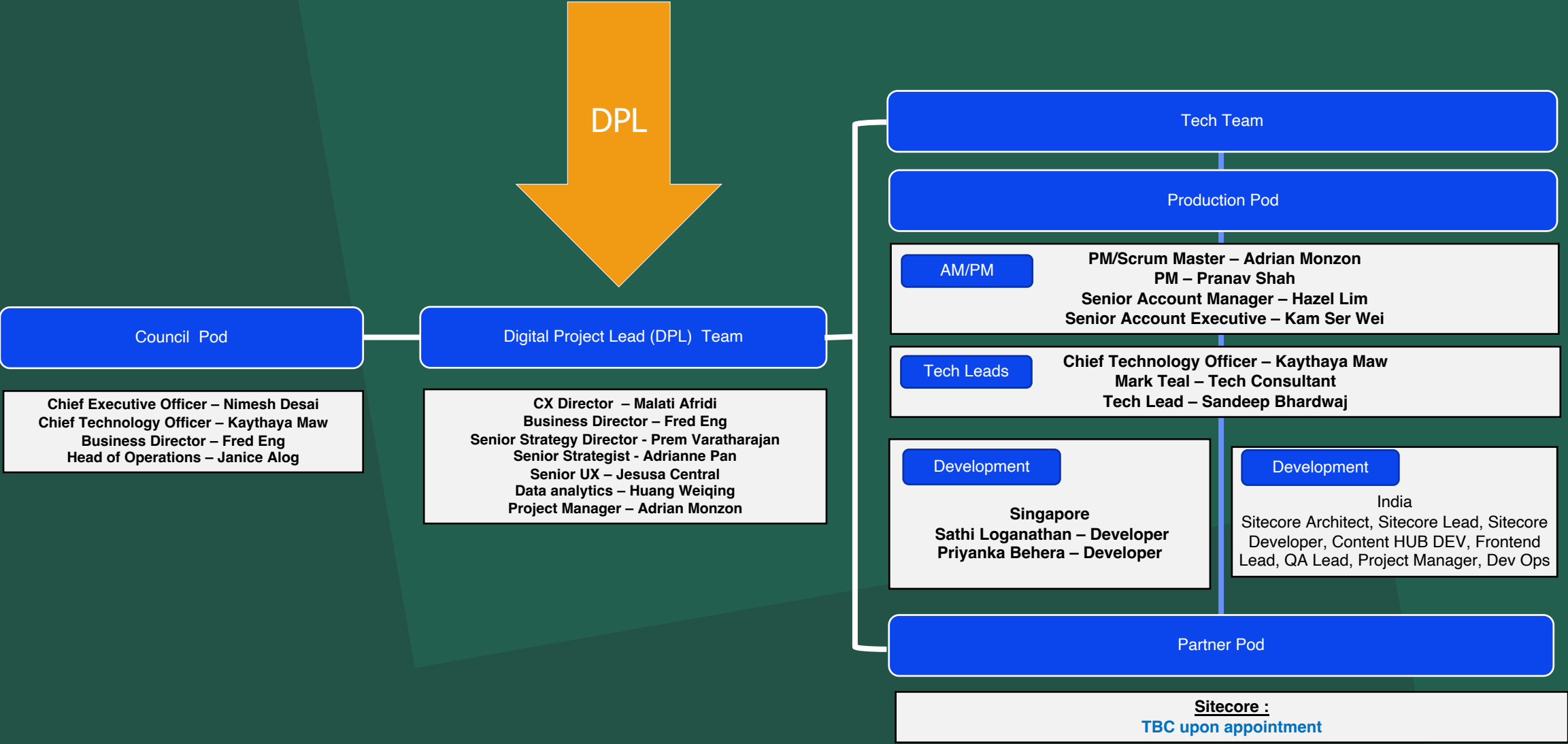| DISCOVERY (Existing tools & requirements) | ▶ | SOLUTION DESIGN | ▶ | CMS BUILD (CMP,DAM, MRM at later stage) | ▶ | QAUALITY ASSIURANCE / AB TESTING | ▶ | OPTIMIZATION AND ONGOING SUPPORT |

Digital Project Lead Scope

Based on the scope provided in Part 3B of the Digital Project Lead (DPL) document, we have mapped out the various tasks that the DPL will need to run and conduct. We have grouped them into a sequence that will inform our approach in working with IHiS and other stakeholders using our Collision framework. We have provided some sample activities below to help illustrate how we will lead and partner with you in delivering the goals set out in the RFP for the DPL.

3B Digital Project Lead	Sample Activities:
Programme Management: Business KPI and Measurement Setting	Contextual/Customer interviews (quant/qual), stakeholder interviews, KPI workshops, digital maturity audit, content, IA and UX audit, CMS skills assessment, data and tag management discovery, onsite user behaviour.
Data Integration & Channel Management	Data strategy and assessment approach, measurement framework, data layer technical requirements (GTM), customer journey design (based on approved personas), 1, 2 3rd party data collation audit, digital solution framework workshop and mapping exercise*
Omni Channel Engagement Strategy	Customer journey workshop to deliver creative/design across approved channels*, GTM testing, Content integration framework and SLA, DAM x CMS integration and data taxonomy, content migration and ingestion plan, CMS build alignment and front-end review, Qualtrics integration testing and deployment
CX & Management Strategy	Usability Testing methodology (TBD), 1PD behaviour analysis and persona optimization, A/B Test-case development, behavioural analytics tool sourcing and recommendations (tbc)
Quarterly Review	Quarterly reporting based on approved Measurement Framework and 3 year digital roadmap, onsite behaviour and full funnel analysis, business updates and future AB testing requirements

* To be discussed further as we acknowledge that there is another marketing vendor who has been engaged for content inventorying, auditing, customer journey mapping etc.

CORE WORKING TEAM STRUCTURE

DPL

Council Pod

Chief Executive Officer – Nimesh Desai
Chief Technology Officer – Kaythaya Maw
Business Director – Fred Eng
Head of Operations – Janice Alog

Digital Project Lead (DPL) Team

CX Director – Malati Afridi
Business Director – Fred Eng
Senior Strategy Director - Prem Varatharajan
Senior Strategist - Adrianne Pan
Senior UX – Jesusa Central
Data analytics – Huang Weiqing
Project Manager – Adrian Monzon

Tech Team

Production Pod

AM/PM

PM/Scrum Master – Adrian Monzon
PM – Pranav Shah
Senior Account Manager – Hazel Lim
Senior Account Executive – Kam Ser Wei

Tech Leads

Chief Technology Officer – Kaythaya Maw
Mark Teal – Tech Consultant
Tech Lead – Sandeep Bhardwaj

Development

Singapore
Sathi Loganathan – Developer
Priyanka Behera – Developer

Development

India
Sitecore Architect, Sitecore Lead, Sitecore Developer, Content HUB DEV, Frontend Lead, QA Lead, Project Manager, Dev Ops

Partner Pod

Sitecore :
TBC upon appointment

Appendix

Functional Requirements
Digital Project Lead

Digital Project Lead Scope

Based on the scope provided in Part 3B of the Digital Project Lead (DPL) document, we have mapped out the various tasks that the DPL will need to own and run. We have grouped them into a sequence that will inform our approach in working with IHiS and other stakeholders using our Collision framework. We have provided some sample activities below to help illustrate how we will lead and partner with you in delivering the goals set out in the RFP for the DPL.

3B Digital Project Lead	Sample Activities:
1. Programme Management: Business KPI and Measurement Setting	Contextual / customer interviews (quant/qual), stakeholder interviews, KPI workshops, digital maturity audit, content audit, IA and UX audit, CMS skills assessment, data and tag management discovery, onsite user behaviour.
2. Data Integration & Channel Management	Data strategy and assessment approach, measurement framework, data layer technical requirements (GTM), customer journey design (based on approved personas), 1, 2 3rd party data collation audit, digital solution framework workshop and mapping exercise*.
3. Omni Channel Engagement Strategy	Customer journey workshop to deliver creative / design across approved channels*, GTM testing, content integration framework and SLA, DAM x CMS integration and data taxonomy, content migration and ingestion plan, CMS build alignment and front-end review, Qualtrics integration testing and deployment
4. CX & Management Strategy	Usability Testing methodology (TBD), 1PD behaviour analysis and persona optimization, A/B test-case development, behavioural analytics tool sourcing and recommendations (tbc).
5. Quarterly Review	Quarterly reporting based on approved Measurement Framework and 3-year digital roadmap, onsite behaviour and full funnel analysis, business updates and future AB testing requirements.

* To be discussed further as we acknowledge that there is another marketing vendor who has been engaged for content inventorying, auditing, customer journey mapping etc.

Programme Management

Digital Maturity and Organisational Change

It is important to start the Content Management (CMS) and holistic Digital Asset Management Tool (DAM) with a clear and aligned roadmap that details out the business objectives now and into the future. These KPI's should be measurable and trackable within the CMS but also integrated into other channels that drive traffic to HealthHub.

We will conduct a series of stakeholder interviews, audit on your current stack and analyse your organisations relationship with data, the role of UX and content development, and how all of these components play a role within the organisation.

This is also an opportunity to work with IHiS and relevant stakeholders to also understand it's current maturity-state and its ambitions to evolve and grow is capabilities moving forwards. VENDOR has a digital maturity assessment that helps us to understand two things at once:

1. The specific details that are driving your ambition of transforming HealthHub

2. Understanding what those solutions are, and to ensure we are tracking and tagging them to track progress.
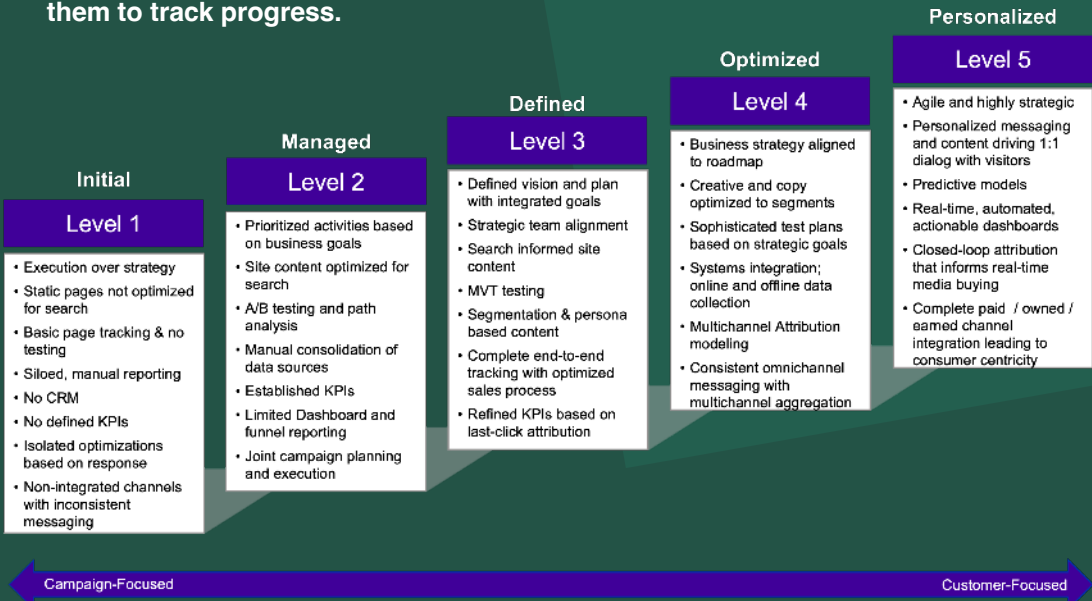
As we work with you on assessing your current-state and ambitions to progress towards Customer-Centricity, we will also be able to map out the detailed operational and strategic outcomes we will enable and upskill your internal teams and provide the necessary consulting to ensure that HealthHub is on track to deliver against its digital maturity progression.

Initial

Level 1

- Execution over strategy
- Static pages not optimized for search
- Basic page tracking & no testing
- Siloed, manual reporting
- No CRM
- No defined KPIs
- Isolated optimizations based on response
- Non-integrated channels with inconsistent messaging

Managed

Level 2

- Prioritized activities based on business goals
- Site content optimized for search
- A/B testing and path analysis
- Manual consolidation of data sources
- Established KPIs
- Limited Dashboard and funnel reporting
- Joint campaign planning and execution

Defined

Level 3

- Defined vision and plan with integrated goals
- Strategic team alignment
- Search informed site content
- MVT testing
- Segmentation & persona based content
- Complete end-to-end tracking with optimized sales process
- Refined KPIs based on last-click attribution

Optimized

Level 4

- Business strategy aligned to roadmap
- Creative and copy optimized to segments
- Sophisticated test plans based on strategic goals
- Systems integration; online and offline data collection
- Multichannel Attribution modeling
- Consistent omnichannel messaging with multichannel aggregation

Personalized

Level 5

- Agile and highly strategic
- Personalized messaging and content driving 1:1 dialog with visitors
- Predictive models
- Real-time, automated, actionable dashboards
- Closed-loop attribution that informs real-time media buying
- Complete paid / owned / earned channel integration leading to consumer centricity

Campaign-Focused ← → Customer-Focused

Stage	Organizational Teams	Level of Investment	Actions to Promote	Benefits
Report	No organized analytics team with usually one person responsible for high level, site metrics for their business unit.	Very low level with minor dev work/copy pasting. Analytics platform is typically free Google Analytics.	• Develop dashboards for various business units • Analyze conversion paths • Track basic A/B tests • Define Key Performance Indicators	• General idea of site performance
Explore	Typically requires a small, centralized analytics team or a hybrid employee per division whose responsibility falls within analytics. Requires some knowledge of A/B Testing and implementation through a CMS or low-level tool.	Medium level of investment. Most analysis and reporting can still be accomplished with a free analytics tool. Minor development time required to implement A/B Tests and tracking if no tool used.	• Begin to define valuable segments • Incorporate media data into site level behavioral metrics • Track additional actions on the site for analysis • Design multivariate optimization tests	• Begin to quantify digital effort ROI • A/B Testing can begin to optimize the site and lead to additional revenue
Optimize	Centralized analytics team required or highly-organized hybrid team from all disciplines of the organization. Partially dedicated development resource to implement a data layer for tagging efficiency. Advanced technical resources within analytics team to leverage tag management platform.	Medium level with implementation of advanced digital analytics platform (i.e. Adobe). More investment in employee training required and depending on the company structure, a centralized analytics team may be required. Typically a site optimization and personalization platform should be leveraged as well to implement more advanced optimization tests.	• Organizational shift to "trust" data from analytics platforms and findings from tests performed for creative and copy direction • Design of databases to allow for export of data from multiple sources • Integration of site analytics into advanced analytics attribution and modeling projects	• Increased revenue from media efforts with the ability to analyze campaign performance • Optimized site experience using analytics and a tag manager • Improved testing methodology makes testing efforts more efficient and effective
CXM	Centralized analytics team, advanced statistics capable analysis, and C and executive level buy in to analytics efforts and outcomes. Integration of all teams within the organization necessary.	Medium-High level of investment in data warehouse technology and customer modeling including customer unique identifiers and behavioral tracking. Investment necessary in creative resources more regularly.	• Creation of a robust customer data warehouse or SaaS technology adoption • Design personalized communication • Develop initiatives to communicate 1:1 with visitors in real-time	• Identifying the best mix of media and messages leads to an increase in revenue • Tying in offline channels with digital data can further optimizing media spend • Catering to high performing segments maximizes the profitable impact of testing and optimization
Immerse	Personalization/Optimization team, Centralized Customer Insights team. Advanced analytics team, full executive buy in and promotion.	High level of investment because of robust customer data warehouse. Personalized communications across all channels requires a detailed level of knowledge about one's customers that is hard to achieve without strong brand loyalty.		• 1:1 communication builds loyalty and increases revenue from those visitors • Executives can make decisions in real-time before the market adjusts • Brand loyalty becomes automatic leading to longer customer lifetime value

Note: The above is a sample of what the findings will be and is purely an illustration of the intended outcome of the DPL scope.

Programme Management

Defining KPIs and Tracking

We can then identify gaps in your marketing technology stack and start to build plans and a roadmap to help you address those gaps. Below is an example of a Marketing Technology Solution Design, where we are able to plot out the progression of the gaps as we move forwards.

Current Solution Design

This is an example of a typical solution design that helps deliver an omni-channel digital framework, powered by the CMS, supported by other solutions such as AdTech, CRM and Marketing Automation. As part of defining your KPIs we will need to understand, first a Direct-To-Consumer strategy and framework. We might find that HealthHub has already been set up with the tools highlighted in purple and we can start to integrate these into the broader experience layer that will help to optimize the front-end consumer experience.
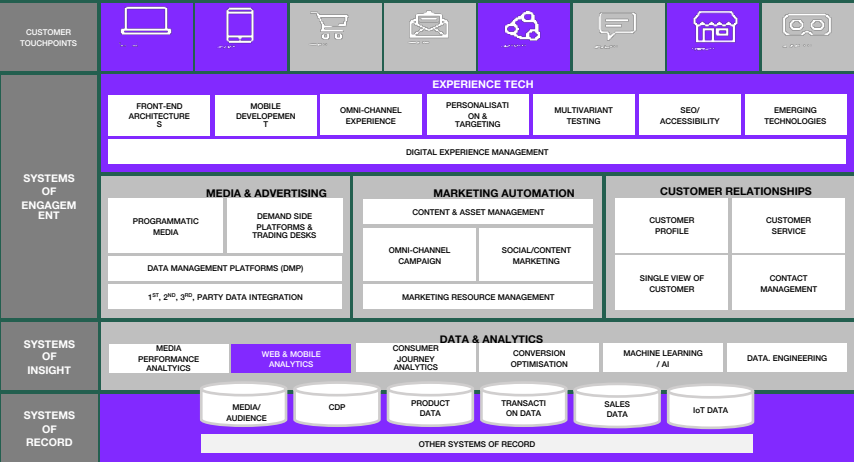
Future-State Solution Design

As HealthHub evolves in maturity (see previous page), we are proposing to fill in the gaps within the solution design, thereby powering a more personalised and conversion driving experience where the role of the CMS is further amplified.
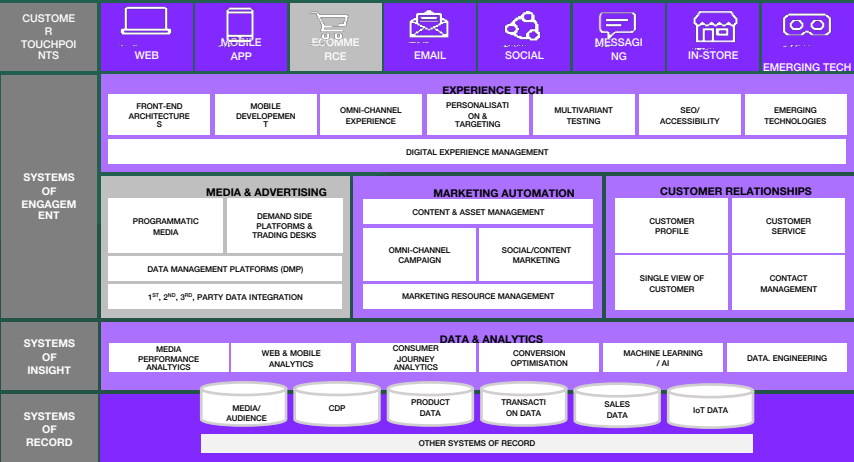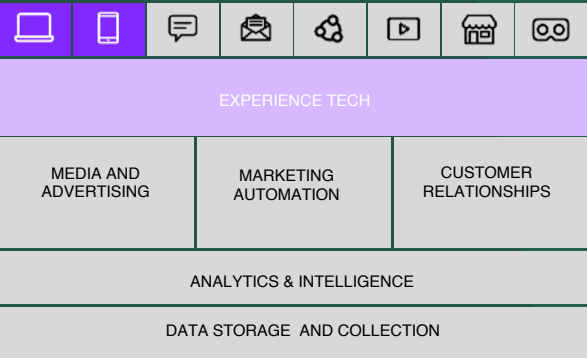
Programme Management

Defining KPIs and Tracking

Transformation is a journey - We know a journey of digital transformation and channel evolution doesn't happen overnight. It requires a phased approach to maturity across people, process, and technology. To enable this, we see the IHiS and the Health Hub journey evolving through the following key stages:

Modernising the core

Evolving core operations, processes and systems whilst embedding innovation, allowing the department to deliver the services that tenants and customers demand.

Delivering Innovation

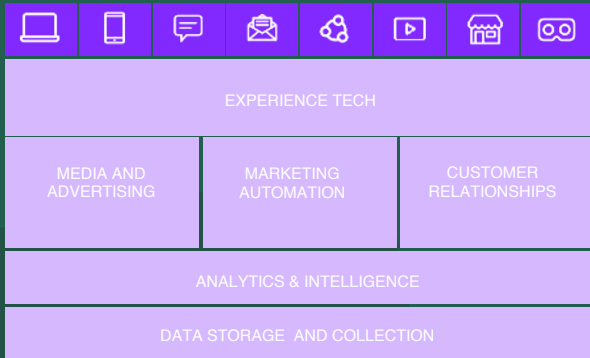Driving technology use to tackle opportunities and challenges, and prepare for change and create value.

Intelligent Citizen Interactions

Embrace seamless interfaces between humans, technology and systems—but always with an eye on benefits and experience for citizens and workers.

EXPERIENCE TECH

| MEDIA AND ADVERTISING | MARKETING AUTOMATION | CUSTOMER RELATIONSHIPS |

ANALYTICS & INTELLIGENCE

DATA STORAGE AND COLLECTION

Optimise your existing journey with today's 'SMAC' technologies (social, mobile, analytics, cloud).

EXPERIENCE TECH

| MEDIA AND ADVERTISING | MARKETING AUTOMATION | CUSTOMER RELATIONSHIPS |

ANALYTICS & INTELLIGENCE

DATA STORAGE AND COLLECTION

Investigate and experiment with the next wave of technologies with voice assistants, AI, immersive AR/VR.

EXPERIENCE TECH

| MEDIA AND ADVERTISING | MARKETING AUTOMATION | CUSTOMER RELATIONSHIPS |

ANALYTICS & INTELLIGENCE

DATA STORAGE AND COLLECTION

Leverage optimal channel mix to engage with citizens when, where, and how they want to interact.

Programme Management

Defining KPIs and Tracking

With understanding of your trajectory towards digital maturity and a solution design (i.e. the role of the CMS), we will work with all relevant departments to define the business goals to achieve, together with the necessary strategy required to understand user behaviour and give us data intelligence to optimize future experiences. We will work with IHiS to unpack each of the components below:

WHAT ARE THE BUSINESS OBJECTIVES?

- What are the client's business objectives?
- What marketing strategies and goals are related to those objectives?

WHAT ARE THE KPIs?

- Primary Metrics
  - What primary KPIs measure the business performance?
- Secondary Metrics
  - What other metrics will be required to make optimization decisions?
  - What metrics are required to understand the end-to-end journey?
- Benchmarks
  - What past performance results and competitive data are available?
  - Are the goals aligned with the business objectives?

WHO WILL ACCESS THE REPORTS?

- How will the reports be used?
- Who are the primary and secondary users of the reports?

WHAT DATA IS NEEDED?

- Which channels are we going to measure?
- Which systems/tools (e.g.,, Marketo, SFDC, Hadoop) do we need to access?
- Is the data reliable?
- How do we want to look at the data? (i.e., what dimensions are we interested in?)

| Web | Email | CRM | Social | Media | Sales |

WHICH TOOL(S) TO USE?

Google Analytics   Power BI   R   Python

GOVERNANCE

- How will users provide feedback on insights and recommendations?
- What is the reporting cadence?
- How often are we reviewing the KPIs?

Programme Management

Defining KPIs and Tracking

We will also distil your KPIs into more specific metrics that allow us to be more granular and precise in how we track and measure certain on-site journeys and events; thereby allowing the development of a more robust set of reports.

Primary Metrics

Primary metrics are the most important measures of success and are directly tied to the business objectives. They are used to project progression and success. Some examples of primary metrics are: No. of first time and repeat users, time spent, clicks on progressive reading, customer satisfaction, record updates, event sign ups, content utilization, efficacy and optimization.

Secondary Metrics

Secondary metrics, also known as consequential metrics, ensure that the process is improving and that we are not shifting one metric at the expense of another. Some examples of secondary metrics are No. of sessions with Singpass login (e.g. for appointments, payments, medication refills).

Benchmarks

Benchmarks compare one business process and performance metric to industry bests and best practices from ones or many companies. Benchmarking seeks to improve any given business process by exploiting "best practices" rather than merely measuring the best performance.

Programme Management

SMART KPIs

One way to evaluate the relevance of a KPI is to use SMART criteria. The letters stand for Specific, Measurable, Attainable, Relevant & Time-bound. In other words:

Is your objective **Specific**?

Can you **Measure** progress towards that goal?

Is the goal realistically **Attainable**?

How **Relevant** is the goal to your organization?

What is the **Time-frame** for achieving this goal?

Once the list of KPIs is complete, it needs to be approved by key stakeholders, and ideally the Board. It is worth noting that the KPI list is never definitive and will need to be reviewed periodically to ensure it remains up-to-date and in-line with the ever-changing digital environment

Roles and business processes

At the same time, we will need to work with you to also understand different needs, requirements and KPIs of the business, from individuals to various business groups and requirements:

By Role

Each role has a set of different business problems to manage. This demands different reports catered towards addressing each of their needs. The metrics and KPIs reported, the level of reporting as well as the frequency of these reports will greatly vary between each of these roles.
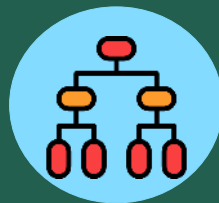
By Business Process

Similarly each business process will have their own set of metrics and KPIs to monitor and act against. A report that works for Marketing may not help Procurement. This is why there needs to be a separate set of reports that allows each process to make meaningful decisions.

Data Integration Strategy

Insights And Segmentation

As people visit the HealthHub portal/app, they give off data signals that help understand who they are, their interests, intent, needs and even how we speak to them.


Demographics

Location

Interests

Media use

Vaccine Status

Life stage

Health E-Services

Upcoming appointments

We will focus on the data foundation for HealthHub and build digital profiles which will aid:

• **Personalization**
• **Retargeting** – right content at the right time in the right channel
• **Lead Scoring** – understanding customer journey stage, level of interest, value.

Data Strategy Assessment And Enablement

To arrive at a robust set of insights and a better understanding of our segments, we must also map out and define a comprehensive process to track the KPIs that have been established and ensure we have a data collection, processing and reporting methodology in place. Our approach is outlined below; however we will tailor this with the relevant stakeholders during the project lifecycle and optimize this post launch of the CMS.
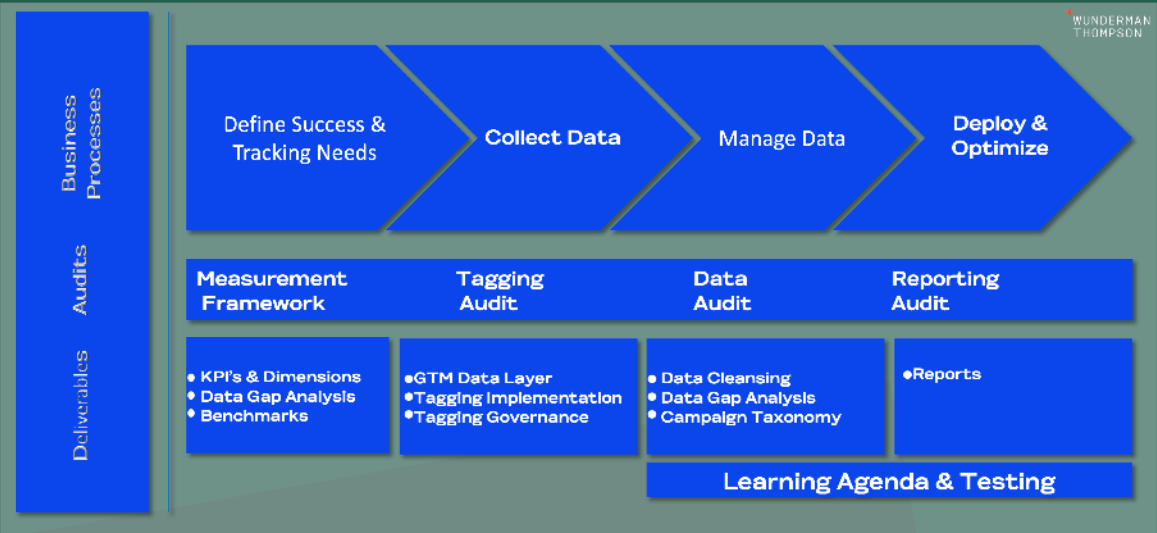
Data integration Strategy

Tagging Best Practices

As part of the data processing and tagging methodology process, we will work with the relevant stakeholders and media agencies to review best practice tagging methodologies to ensure that we are maximizing any conversions / events on-site and are able to effectively track and analyse on-site user behaviour.

Identify key events like digital lead conversion points, lead micro conversion points and high contribution points

Work backward to pages and sites that drive traffic

Check for
1) Google tracking codes
2) Tracking errors

List major issues that need to be dealt with to track consumers better so that a lead scoring system can be built.
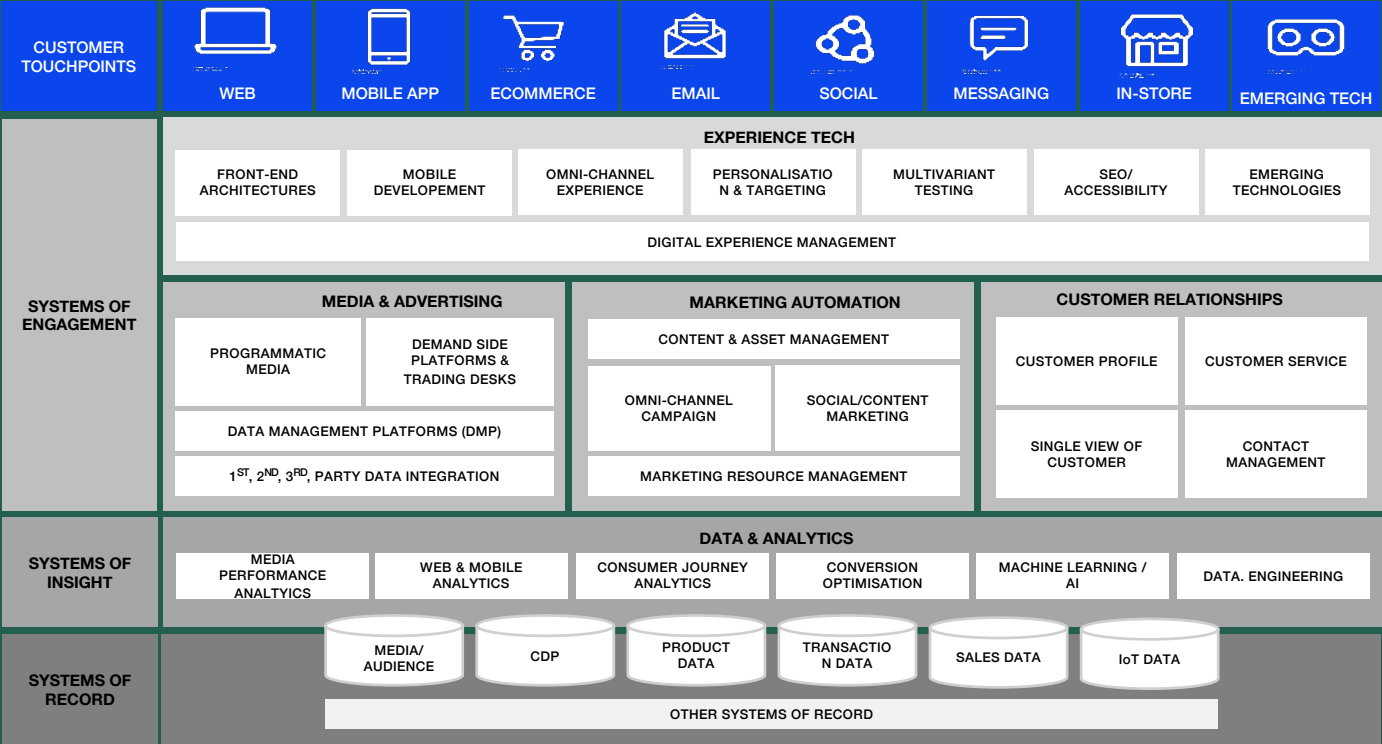
Data Outcomes

Our ambition is to help IHiS and the HealthHub portal become more relevant, secure and insightful through an effective data and tag management strategy. We aim to deliver these outcomes and benefits over the course of the project lifecycle:

1. Protection against data loss by identifying broken tags
2. Improved quality of data completeness and accuracy
3. Creation of a better understanding of user behaviour
4. Efficient data collection processes
5. Maximized investments on existing tagging and analytics tools
6. Better data-driven decision making through quality data
7. A foundation for future capabilities to deliver further consumer persona development, next-best-offer triggers and contextual profiling

Our approach to digital maturity and data will help us design and manage your channels for you.

Underpinning your channel management strategy is the underlying digital platform and technology solutions, which will orchestrate, manage, and deliver citizen engagement through the relevant channels.

CUSTOMER TOUCHPOINTS	WEB	MOBILE APP	ECOMMERCE	EMAIL	SOCIAL	MESSAGING	IN-STORE	EMERGING TECH

SYSTEMS OF ENGAGEMENT

EXPERIENCE TECH

FRONT-END ARCHITECTURES	MOBILE DEVELOPEMENT	OMNI-CHANNEL EXPERIENCE	PERSONALISATION & TARGETING	MULTIVARIANT TESTING	SEO/ ACCESSIBILITY	EMERGING TECHNOLOGIES

DIGITAL EXPERIENCE MANAGEMENT

MEDIA & ADVERTISING	MARKETING AUTOMATION	CUSTOMER RELATIONSHIPS

MEDIA & ADVERTISING
- PROGRAMMATIC MEDIA
- DEMAND SIDE PLATFORMS & TRADING DESKS
- DATA MANAGEMENT PLATFORMS (DMP)
- 1ST, 2ND, 3RD, PARTY DATA INTEGRATION

MARKETING AUTOMATION
- CONTENT & ASSET MANAGEMENT
- OMNI-CHANNEL CAMPAIGN
- SOCIAL/CONTENT MARKETING
- MARKETING RESOURCE MANAGEMENT

CUSTOMER RELATIONSHIPS
- CUSTOMER PROFILE
- CUSTOMER SERVICE
- SINGLE VIEW OF CUSTOMER
- CONTACT MANAGEMENT

SYSTEMS OF INSIGHT

DATA & ANALYTICS

MEDIA PERFORMANCE ANALTYICS	WEB & MOBILE ANALYTICS	CONSUMER JOURNEY ANALYTICS	CONVERSION OPTIMISATION	MACHINE LEARNING / AI	DATA. ENGINEERING

SYSTEMS OF RECORD

MEDIA/ AUDIENCE	CDP	PRODUCT DATA	TRANSACTION DATA	SALES DATA	IoT DATA

OTHER SYSTEMS OF RECORD

Customer touchpoints **cover the interaction channels through which the Department engages with citizens.**

Systems of Engagement **span both MarTech and AdTech platforms together with CRM to deliver campaign execution, content management marketing automation and customer.**

Systems of Insight **handle the consumption, collection, analysis, and reporting of data to derive insights to support decision making - including channel optimisation, predictive analytics, and next best action recommendations.**

Systems of Record **represent sources of data and the underlying repositories in which data is stored.**

Approach to Omnichannel Engagement Strategy

The channel management strategy should enable us to develop marketing campaigns for broad reach, tailored engagement initiatives for each of our segments, as well as personalized 1:1 journeys. Our goal in defining your channel management is to build meaningful connection with audiences, based on the value propositions uncovered in the research, combined with a strong understanding of effectiveness of each channel choice.

OMNI-CHANNEL ENGAGEMENT

Employs a cross-channel content strategy to provide a fully integrated experience, allowing customers to shift between channels, from website to app to CRM or chatbot, and engage with our content in the channel of their choice, and a time that is convenient to them.

DIGITAL PLATFORMS & TECHNOLOGY

While we focus on the Website or the App as the starting points for your digital channel strategy, we explore the underlying platforms design encompassing experience management (CMS), customer relationships management (CRM), marketing automation, and programmatic media platforms required to deliver on your channel strategy.

DATA AND INSIGHTS

We take a data driven approach to provide Clients with insights into which engagement channel best suits the particular customer base. Starting with an audit of your current channels and their usage. Channels should be segmented according to the characteristics of your customers, their needs, life stage, and requirements.

DIGITAL MARKETING PLATFORMS

Channel Management Strategy

DATA & INSIGHTS

Approach to CX & Management Strategy

Below is the CX & Management strategy Approach, Tools and Methodologies across various stage; from audience understanding to setting up and optimizing the product offering, as well as progressively learning about user behaviour.

| Stakeholder interviews & objectives alignment | Consumer understanding: uncovering motivations, barriers, needs by segment | Validation & enrichment of segment content needs | Content audit: performance & gaps | Workshops/ co-creation of KPIs & metrics | A/B Testing • Personalization • Design • Content relevance | Ongoing Optimization |

KICKOFF & STAKEHOLDER INTERVIEWS

SOCIAL LISTENING

SEARCH ANALYTICS

SEGMENTS VALIDATION

CONTEXTUAL INTERVIEWS
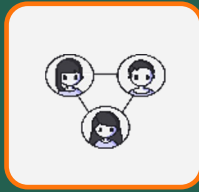
CO-CREATION

A/B TESTING

WEBSITE PERFORMANCE: UI/UX/CONTENT
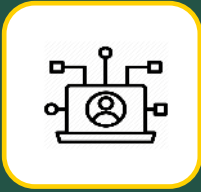
WEBSITE ANALYTICS

SURVEYS

PERSONAS

UI-UX-CONTENT AUDITS

KPI SETTING

**PROGRESSIVE PROFILING**
(basis data availability)

Approach to Quarterly Review

We will provide quarterly reporting based on: the approved Measurement Framework and 3-year digital roadmap, onsite behaviour and full funnel analysis, business updates and any A/B testing.

CASE STUDY: Workforce Singapore's MyCareersFuture Content Website
A one-stop resource platform for Singaporean jobseekers, employees and employers.
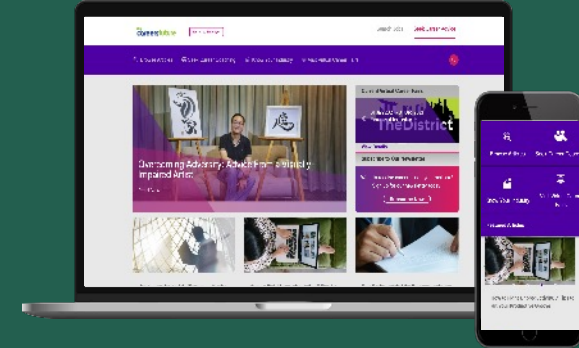
What we do : partners for growth
Producing relevant and localised content targeting Singaporean jobseekers, employees and employers on their career paths, with the aim of driving more conversions to mcf's career matching services

Future proofing:
Optimising the website user experience to Address the changing needs

YEARLY

Yearly Content Planning: Devising monthly themes centered around key events throughout the year.

KPI Setting: To drive increased engagements through sign-ups for Career Matching Services, social shares.

Content Strategy

QUARTERLY

Alignment on key KPI and measurement metrics

Quarterly reporting to track website and content performance based on Google Analytics data.

MONTHLY

Content Creation: 4-7 articles per month

Alignment on key KPI and measurement metrics

Monthly reporting to track website and content performance based on Google Analytics data.

WEEKLY

Work with media partner to optimise media buying and targeting strategy.

Provide analysis and recommendations such as exploring new platforms for ad buy and content distribution. i.e. Telegram, online channels

Having demonstrated our expertise, Workforce Singapore signed-up WT to lead the website refresh.

- **Ongoing Activities**
- **Conducted user interviews to discover user pain points**
- **Discover user behaviour through Google Analytics data**
- **Website UX/UI Audit**
- **Website Content Audit**
- **Data-driven and research-based recommendations on website optimisation**
- **Ongoing CMS template re-design based on Atomic Design Principles**
- **Tech Consultancy on website development**
- **Target launch date : December 2021**

CONTENT STRATEGY

ICON

Creating targeted content for different personas: fresh entrants, mid-career workers, mature workers

ICON

Exploring a variety of content formats: infographics, quizzes, etc.

ICON Creating follow-up content based on top performing articles

ICON Localised content

ICON SEO-friendly headlines.

RESULTS

- **Quarterly visits to websites increased by 168% from 508K in Q1 2020 to 1,361K in Q1 2021.**

- **Percentage of returning visitors increased by 41% from 30.4% in Q1 2020 to 42.8% in Q1 2021.**

- **Total content engagement (including link clicks on article, social shares etc) increased by 178% from 113K in Q1 2020 to 314K in Q2 2021.**

- **Directed over 10K visits to WSG's Career Management Service (CMS) in 12 months (Apr 2020 – Mar 2021).**

* To be discussed further as we acknowledge that there is another marketing vendor who has been engaged for content inventorying, auditing, customer journey mapping etc.