



Tektology

Digitally Ready Workforce



Health sector global challenges - Digitisation requires successful leaders to adapt

THE CHALLENGE FOR HEALTH SYSTEMS IN 2021[^]



Digital transformation and interoperability

Exponential advances and interoperability in digital technologies are helping clinicians deliver health care services in ways consumers prefer to receive them



Care model innovation

New strategies, capabilities and technologies are shifting health systems' focus from providing episodic, acute care to keeping people healthy



Future of work

An ageing population and shortage of skilled clinicians are changing the future of work in health care and increasing the importance of sourcing, hiring, training and retaining skilled workers



Financial operations and performance improvement

Health systems are working to achieve financial sustainability by reducing cost to deliver and finance high quality and effective care for patients

WHAT WE NEED TO ACHIEVE?



Digitally ready Boards



Digitally ready Leadership



New careers and Professions



Workforce digital Literacy



Governance for the digital age

ENABLERS

- ▶ Digital Medical and Nursing Schools
- ▶ Digital Enterprise
- ▶ Digital Leaders and Professions

[^] Deloitte: 2020 Global Healthcare Outlook (available at: <https://www2.deloitte.com/content/dam/Deloitte/cz/Documents/life-sciences-health-care/2020-global-health-care-outlook.pdf>)

Game changers that will fundamentally shift how we deliver care in the future that need to be addressed now



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Several analytical and digital technology approaches will be critical for you to quickly plug the gaps, and build momentum, confidence and excitement about its digital future, Organisation's will need to quickly be able to embrace these solutions.

ARTIFICIAL INTELLIGENCE

AI simulates human learning processes by computer systems to develop predictions. AI can be applied via machine learning, natural language processing & RPA bots

AUGMENTED INTERFACES

Virtual Reality, Augmented Reality and Holograms replicate reality and minimise risks in actual procedures, and is an effective training method leveraging simulated environments for healthcare practitioners

INTERNET OF THINGS

IoT has been driving the evolution of wearables devices in the healthcare industry, where medical devices and applications share data with IT systems



Artificial Intelligence (AI)

Solutions that allow for more efficient and effective analysis of data, improving stakeholder decision-making



Machine Learning (ML)

An application of intelligence that is used to predict system need



Intelligent Automation

Driving process efficacy with higher accuracy and pace via Robotic Process Automation & Analytics



Natural Language Processing (NLP)

Technology focused on extracting relevant medical information efficiently



VR / AR

Reality solutions are helping clinicians, nurses and other healthcare stakeholders gain greater visualisation in training and delivery of healthcare



Haptics

Haptical feedback uses a sense of touch from either applied forces, vibrations or motions to interact with users

Mid / back office and infrastructure



Post Modern EHR and PAS



Real time Resource management



Asset and equipment optimisation



Infrastructure and Cyber Maturity



Digital control towers for supply chain resilience, risk & optimisation



Connected Devices

Aggregates and provides data-driven treatment feedback loops that inform patients, clinicians and pathways



Telemedicine / Tele health

Telehealth is the distribution of health-related services and information via electronic information and telecommunication technologies



Ambient Sensors

Continues and passive monitoring of vital signs and movements



Wearables

Wearables provide patients, Clinicians and HCPs with real-time insights into patient data and help provide personalised care through continuous monitoring

The need for transformation of the health sector is limited by the workforce

In 2019 the TOPOL review highlighted that globally within 20 years 90% of health and care staff would require significant digital skills. Health and care organisations will be radically changed, with safety, quality and efficiency enabled by technological innovation. This transformation will require leaders who understand how to leverage data and technology as well as leading others towards future models of care.

Skill emergency – Leadership emergency: With a globally ageing population in the west and increasing demands on services, the skill gap across the health sector looks set to widen in the coming years, meaning the threat posed by the skills gaps constitutes a significant long-term socio-economic issue in many regions.

Gap in workforce and capacity and capability: Across THE NHS, which is the worlds largest health system there is currently a shortage of more than 100,000 staff. Based on current trends, we project that the gap between staff needed and the number available is projected to reach in excess of 250,000 by 2030. Digital skills and enablement will be needed to bridge this gap and allow the existing workforce to be augmented by technology and data in order to deliver .

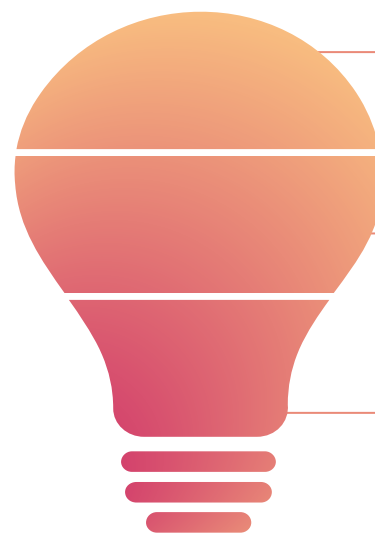
Limiting factor is people: As healthcare evolves the limiting factor will be the people. The workforce is not aligned to leverage new technologies with key shortage in area's such as: Board leadership, Direct care re-design, wider Workforce, The people who can change your target operating model to a digital one

Drawing on our tek-ed team to redefine the role of leadership as a catalyst for health and care transformation

Tektology looks to identify workforce learning needs; we work as a partner to embed digital, leadership and innovation into organisational strategy. We understand the role of health technology innovation in delivering better care and we help develop holistic system-wide strategy at organisational and national levels.

Our aim is to develop learning health systems that are citizen centered leveraging innovations in digital mobile-first and open data to develop organizational resilience.

Extensive awareness of the challenges faced by health and care providers, Tektology's strategy provides a unique fusion of global healthcare and executive education expertise, combined with a track record of successful digital transformation.



- 1 Develop metrics and evaluation systems to assess the value and effectiveness of interventions.
- 2 Align education and training provision with strategic local change initiatives and national policy.
- 3 Catalyze digital transformation by empowering the workforce as change agents.

Drawing on learning science experts from Tek-ed and delivered by Tektology to tailor our approach



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We bring key strengths in identifying workforce learning needs. We work as a partner to embed digital, leadership and innovation into organisational strategy and operations.

Our team of international experts bring a wealth of experience in developing and delivering programs of catalytic learning in healthcare. Catalytic Learning is based on facilitating and enabling learning so that the learning journey continues long after people complete a programme, thus making a sustainable impact. This approach will enable the workforce with the capability and capacity to deliver on future visions.

Credentials: TEK-ed's directors have led and designed The NHS Digital Academy which draws together expert perspectives from industry, academia and the public sector

Tektology's experienced team



DAVID ROBERTS

ABOUT

An international business leader, having lived, worked and practised in over 30 countries, leading and implementing solutions across health, wellness and social care, across health, insurance, life sciences and retail sectors.



JOHN HODDINOTT

ABOUT

John has over twenty years' experience helping public sector organisations deliver operational improvements, better outcomes for citizens and lower costs to the taxpayer. A former Equity Partner at EY before joining Tektology.



Phil Leonard

ABOUT

Phil has 25+ years working in healthcare across a range of its sub-sectors and in a variety of disciplines. He has worked extensively internationally in 50 countries

Supported by our Tek-ed team



PROF. RACHEL DUNSCOMBE

ABOUT

Rachel has 25 years' experience of deploying industry leading transformational technology in the health, care. She has worked globally on health and care digitisation research and acts as an advisor to both governments and international standards bodies. CEO of the NHS digital academy.



DR. ALISDAIR SMITHIES

ABOUT

An experienced lecturer, technology leader and innovator in health professions education. Alongside operational management of online learning, teaching and assessment teams at world-leading Russell Group medical schools, Alisdair has developed strategic international academic and commercial relationships.



Digitally Ready Workforce Requirements

WHAT IS REQUIRED FOR A DIGITALLY READY WORKFORCE

PHASE 0

DIGITAL WORKFORCE STRATEGY

A digital workforce strategy that is fully endorsed by the board is required determine the aspirations of the organisation, including the scale and pace the organisation wants to adopt digital



PHASE 1

WORKFORCE READINESS ASSESSMENT

With a clear understanding of the organisation's aspirations and vision we can begin to assess your workforce and ascertain the base line for which we will build on to meet the future needs

Expectation that a digital workforce strategy is in place



PHASE 2

DESIGN OF YOUR DIGITALLY READY WORKFORCE PROGRAMME

With an understanding of the organisation's vision for the future and an in-depth pool of insights on where the workforce currently stands we can begin to create a workforce Programme that addresses the gaps in learning and sustainable enables the fit for the future workforce



Our 3 phase approach required to correctly prepare your workforce for the future

DIGITAL WORKFORCE STRATEGY

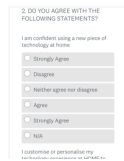
PHASE 0



STRATEGY DELIVERY

OUR DATA DRIVEN APPROACH TO THE DIGITALLY READY WORKFORCE ASSESSMENT PROVIDES A CLEAR BASELINE FOR PROGRAMME DESIGN

PHASE 1



Survey creation
and distribution

SURVEY

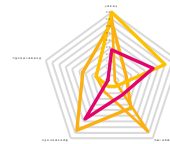


Analysis
Framework



Workforce
insights

ANALYSIS



DRW
Report



Workforce
Programme
Roadmap

REPORT

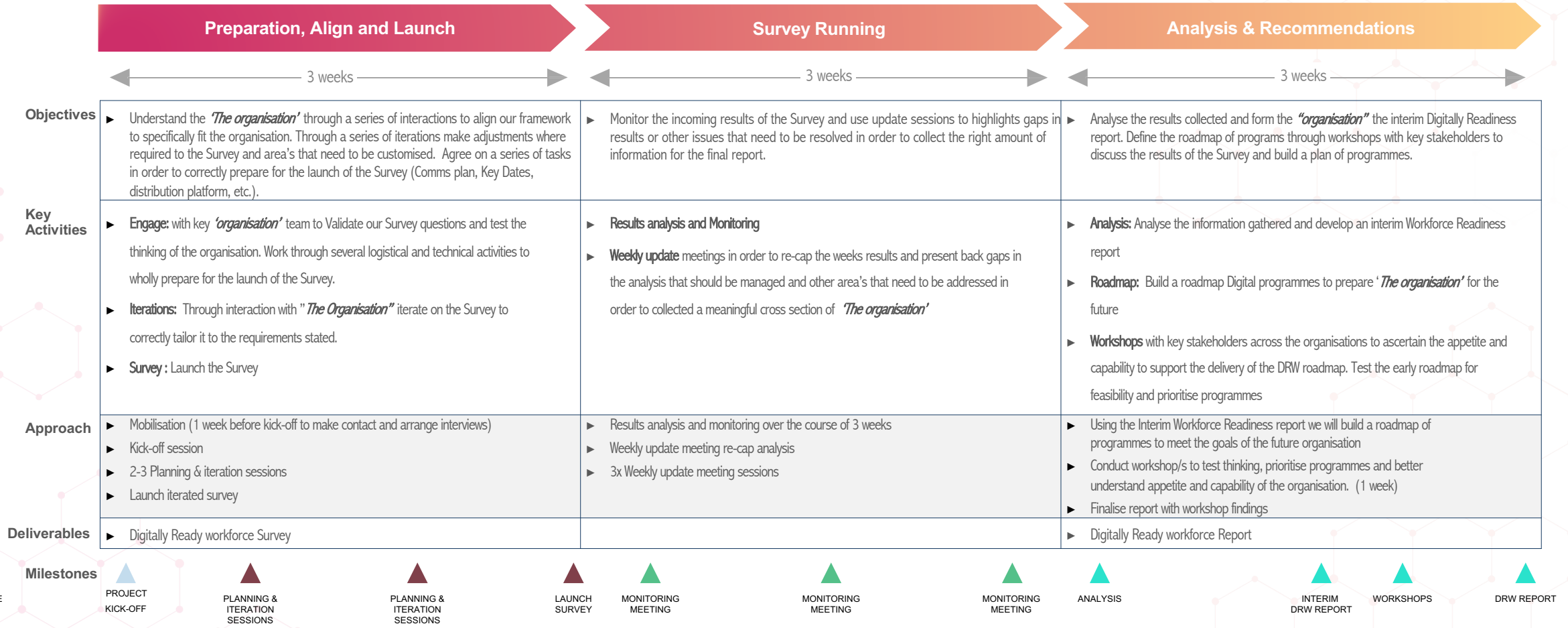
DESIGN OF YOUR DIGITALLY READY WORKFORCE PROGRAMME

PHASE 2



PROGRAMME DELIVERY

Example: Phase 1 breakdown of our approach to assess your workforce digital readiness



*Timings may vary depending on size of organisations and specific requirements

A digital readiness assessment gives you the tools to prepare your organisation and workforce for the future



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OUTPUTS

WORKFORCE STRATEGY

- ▶ A workforce strategy to align to your digital vision/aspiration

DIGITAL READINESS ASSESSMENT REPORT

- ▶ Workforce insights report detailing segmented workforce
- Digital literacy and readiness
- ▶ Roadmap of tailor built Tek-ed courses to close capability gap and build digital experience across the workforce
- ▶ Ready to proceed with the design of the digitally ready workforce

DESIGN OF YOUR DIGITALLY READY WORKFORCE PROGRAMME

- ▶ A Detailed list of programmes specifically designed to address your workforce needs

OUTCOMES

INTELLIGENT CLIENT

- ▶ Have a clear understanding of what's required in order to hold your transformation partner to clear outcomes.
- ▶ Effective commission of digital transformation projects in the future Alignment – workforce plan to technology plan
- ▶ De-Risk of future delivery

FUTURE PROOF

- ▶ Workforce will be Fit for the future of health care
- ▶ Strategically digital – build Digital into the DNA of the organisation
- ▶ Digital assets can be utilised effectively throughout the organisation
- ▶ Workforce will not become the rate limiting factor to digital transformation



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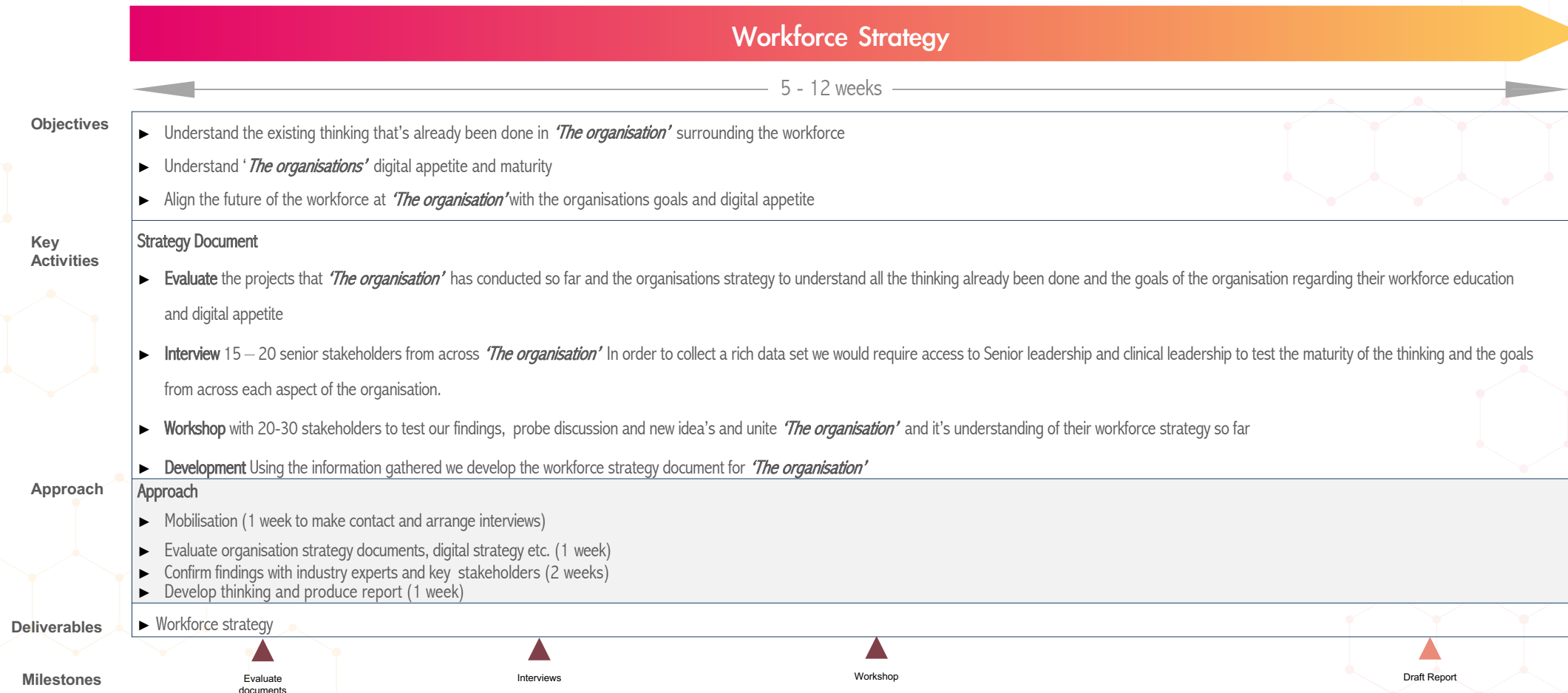
Thank you



Example: Phase 0 breakdown of our approach to create a workforce strategy and ready the organisation for phase 1



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**Timings may vary depending on size of organisations and specific requirements*