IMPERIAL COLLEGE LONDON
DIGITAL PLAN 2023 – 2028

12.07.2024

1.0 PURPOSE

1.1 The pace of technological change has never been faster. Leveraging new and emerging technologies will enable Imperial to create exceptional services to attract and retain students, continue to provide world-leading teaching and research, and maximise the efficiency and effectiveness of our Professional Services systems. In addition, this generation of students is the most digitally literate, and as a result has very high expectations of the type of digital services and opportunities university life will provide for them.

1.2 The Digital Plan sets out a blueprint for how we will leverage the digital landscape and increased digital literacy to grasp new opportunities that are essential to the achievement of our **research and education** ambitions. The more digital we become the higher risk of unauthorised or malicious access to our systems and data. We will need to continue to be ever vigilant and highly focused on cybersecurity.

1.3 The digital plan aligns to Imperial's Enabling Roadmap and values. It consists of 5 goals:

1	We will create **a world-class digital education journey** that aligns with the behaviours and preferences of this digital generation
2	We will create **a campus experience that is world renowned** for our innovative use of digital technology
3	We will enhance our digital technologies to **optimise and transform Imperial's core operational functions** to deliver operational efficacy and efficiency
4	We will build **a data culture that maximises the value and impact of our research and enterprise data** based upon a robust resource of readily accessible research and enterprise data
5	We will foster partnerships between our **world-leading researchers and external organisations** to drive innovation, mature our digital capabilities and be ready to embrace future disruptions to existing business models in Higher Education

1.4 There is exciting potential for more flexible digital delivery across both physical and virtual environments and we will **adopt digital education journeys.** Historically investment by Imperial has been in expansion of the campus, investment has lagged in digital technologies; we have an opportunity to now make informed investments to truly **enable a sustainable digital campus**.

1.5 The considerable opportunities and flexibilities offered must be balanced with individual responsibility and organisational oversight. By embracing new ways of working offered by digital technologies, we will realise greater efficiency and productivity (lowering operational costs). For example, **digitally enhanced professional services** will offer new and exciting career pathways.

1.6 At the very core of our digital plan will be an **embedded data culture** collaborating across Imperial to prioritise gaining the maximum business value from our data. We will work collaboratively and flexibly to **pursue digital partnerships and innovation** in new digital capabilities to maintain and evolve our great institution.

1.7 This digital plan has a **strong focus on inclusion and diversity** so Imperial will continue to attract and retain top talent, deliver world-class education and research, and contribute to a more sustainable and inclusive society. Delivery of the plan embeds the Imperial values of Respect, Collaboration, Excellence, Integrity and Innovation.

2.0 PLAN GOALS

2.1 Goal 1: Create World-class Digital Education Journeys

2.2 We will create a world-class experience for students and staff that aligns with their digital expectations, behaviours and values. Using digital technologies, we will optimise and transform the experience of our students throughout the student lifecycle from enquiry to alumni. Our digital education platforms will enhance our teaching and learning experience, enabling remote, hybrid and mixed reality learning.

2.3 Goal 2: Enable a Digital Campus

2.4 We will create a campus experience that is world renowned for our innovative use of digital technology. It will enable students, staff and visitors to access and navigate both digital and physical services seamlessly and inclusively. Strategic investment will be made in next generation infrastructure and mobile capability and will enable Imperial's Net Zero and growth ambitions in research and education.

2.5 Goal 3: Digitally Enhanced Professional Services

2.6 We will enhance our digital technologies to optimise and transform Imperial's core operational functions for Finance, HR (Human Resources), and Research Administration, to deliver operational efficacy and efficiency. We will provide digital inclusion, providing equal access across Imperial as a core principle, ensuring that everyone has equal access to digital resources, training, and support.

2.7 Goal 4: Embed a Research and Enterprise Data Culture

2.8 We will evolve a comprehensive data culture that prioritises gaining maximum impact and value from data, building a robust resource of readily accessible research and enterprise data. We will establish data-based evidence as the standard by which we challenge the integrity of our strategic decisions and maintain transparent central data governance, adhering to global best-practice for data security, privacy, and ethics.

2.9 Goal 5: Enable Research and Innovation

2.10 We will focus on fostering partnerships between our world-leading researchers and external organisations to drive innovation, maturing our digital capabilities ready to embrace future disruptions to existing business models in Higher Education. This will allow us to move to a more boundaryless organisation, establishing next generation collaborative digital environments, collaborating with start-ups, industry partners, and other universities to co-create digital solutions that address pressing challenges in society.

3.0 GOAL 1: Create World-class Digital Education Journeys

3.1 Where are we now?

3.2 Today the Education experience across Imperial is disjointed, with multiple contact with students across various systems and no single source of truth. Students get mixed messages with conflicting information, inconsistent experience, and lack of visibility of their information in one place.

3.3 At the same time staff are not able to get a clear view of the history/important information in relation to a student and must use multiple systems to piece together a view of the student. Teaching spaces lack consistency, providing disjointed experience for staff and students. Academics have a cumbersome process for producing learning and assessment materials, compounded by decisions not made using data, as data is not always available or of poor quality. This highlights a lack of skills in using data to make decisions.

3.4 Finally, Imperial remains reactive to responding to the Higher Education Statistics Agency (HESA), and other data requests, due to considerable manual effort needed to gather data and then produce the required reporting information. Additionally, accessibility standards are not clear and therefore not always adhered to across teaching and administration products.

3.5 Where do we want to be **and why**?

3.6 Imagine a future where students and staff have access to what they want, when they want it, tailoring a secure personalised experience regardless of where they are. This is delivered in a simple, consistent way across purely digital and hybrid digital environments creating a rich experience that people enjoy.

3.7 To make this a reality we will have a single source of truth for student information and learning analytics, with education environments data supporting a student centric experience, including proactive support being flagged through trends / Artificial Intelligence (AI) or Machine Learning (ML). Staff will simply access the information they need to see on a student to support their engagement with individuals, creating hyper personalised experiences for both students and staff. Technology supporting traditional and innovative teaching practices will be reliable and simple to use. Feedback on educational content interactions surface to academic staff to aid content development.

3.8 Imperial will have automated processes to meet compliance needs and fulfil Regulatory Returns with high quality data. Universal design principles and supporting technology supports inclusion. Leading to increased time savings and efficiencies and ensure Imperial is compliant with legislation and standards.

3.9 How will we get there?

When	Type	What
Year 1	Foundation	• Implement the single Customer Relationship Management system (CRM), Imperial 360 into Outreach. • Phase 1 of student case management capabilities moved to Imperial 360 • Enable performance marketing and social media capabilities through Imperial 360. • Event management and survey capabilities launched on Imperial 360 • Enquiry management enabled to support simplification of multiple student enquiry points across Imperial. • Self-service of documentation for alumni from 1990-2020 • Curriculum linked for elective modules within programmes • Enrolment improvement including ability to manage criminal convictions • Launch learning analytics • Map education activities • Formation of a student digital education working group • Produce teaching room technology standards • Review digital skills standards • Equipment and platform monitoring review • Modernise current technology setup (room computer hardware)
Year 2	Foundation	• Extend the single CRM (Imperial 360) – phase 2 student case management & Alumni/Advancement • Students can select their modules via self-service in My Imperial • Students can organise their graduation via My Imperial • Enhancements to management of applications in Imperial 360 – forecasting, scenario testing and prioritisation capabilities • Enhanced reporting available in areas including visa compliance • Assessments able to be managed for modules digitally • Move Imperial to using HESA data futures for compliance • Develop digital education experience & product strategies • Deploy a next-generation digital education ecosystem • Implement teaching room technology standards • Create essential digital skills module • Create physical test bed for learning environments • Equipment and platform monitoring development • Standardise digital education support model

When	Type	What
Year 3	Optimise	• Continued release of new capabilities available through Imperial 360 • Banner v2 implemented • Student lifecycle business intelligence roll out • Develop physical test bed for learning environments • Widening participation next generation – interactive • Create advanced digital skills module • Equipment and platform smart monitoring • Standardise room setups
Year 4	Transform	• Move to a mobile apps first policy • Alignment of My Imperial and My Imperial Campus into one single interface for the whole student lifecycle • All content in My Imperial is tailored to reflect your stage of the student lifecycle • Staff need only use Imperial 360 to get a full view of an individual at any stage of the student lifecycle • Evaluate and improve next generation digital education ecosystem • Blend together the physical and digital education experience • Implement a user centric personalised approach to digital education for staff and students
Year 5	Transform	• Implement next generation learning environments • Usage of AI/ML within the student lifecycle to utilise data to proactively manage areas such as where interventions may be required for student welfare, applicant closure and selection of Imperial, fundraising opportunities.

3.10 <u>How do we know that we have arrived</u>

3.11 Whilst there will be a several lower-level performance indicators and indicators, the critical Key Performance Indicators that will be used to track success against this goal are:

- Increased student satisfaction
- Increased staff satisfaction
- Improved business continuity
- Reduced number of tools with the same functionality
- Increased number of available self-service processes
- Number of compliance breaches
- Increase in donations from alumni
- Increase in lifelong learning and returning to Imperial for further studies and executive education.

4.0 GOAL 2: Enable a Digital Campus

4.1 Where are we now?

4.2 Environmental sustainability is one the core pillars for the Imperial future strategy. The current physical campus space is not utilised effectively or intelligently meaning:

- We are unable to easily understand our energy consumption and carbon footprint
- Our operational costs for operating and maintaining space are high
- Space is not used to its optimum potential in support of the academic mission

4.3 Historic investments in digital technologies have been limited, resulting in a campus experience that is far less technologically advanced than other aspects of the Imperial communities' lives. Imperial has many digital tools and products although feedback shows that user needs are not adequately met. This proliferation of tools and products are often not centrally sourced and together they create a fragmented and complicated experience of both the physical campus and its digital counterpart.

4.4 Where do we want to be **and why**?

4.5 We will focus on delivering a consistent and personalised experience of campus that promotes Imperial's values and respects its status as a global destination for innovation. Moving around the physical space should be frictionless and safe, navigating the digital space should inclusive and familiar. The two should feel blended and considered as one. Imperial's community will be able to trust and rely on a seamless campus experience that optimises their learning and research journey.

4.6 We will introduce a simpler mobile experience for Students and the wider community. This will enable a more consistent and secure way to access both the physical campus and the digital services that students depend on. We want to work more closely with our users to understand their needs, for them to be included in the design process and for them to feel proud of the way technology supports their time with Imperial.

4.7 This goal will lay the foundations for an intelligent approach to space sharing. Space will be maximised for teaching, learning & research; with professional services and administration space also being optimised for efficiency and permitting us to realise previously missed opportunities for sustainability.

4.8 We will introduce digital technologies into physical spaces, capturing accurate energy analytics and carbon footprint data to support ongoing benchmarking

and reporting against the sustainability targets. These digital technologies can be directly contributed to by our student body with the implementation of part-time roles, internships and 'hackathons', meaning students can contribute directly to their physical and digital campus environments.

4.9 **How will we get there?**

When	Type	What
Year 1	Foundation	• Users can access foundational data relating to scope 1 and 3 carbon emissions and they are updated on a clear plan • Students are offered opportunities to be a part of the design and idea forming for a new mobile application • Faculties can easily report on class attendance for compliance, quality and student wellbeing • Students are benefitting from new mobile features • Users can book desks easily through an inclusive desk booking application • Catering customers are experiencing a faster service without technology disruption • Establish Digital Vision for Estates and integration with ICT around key Estates digital capabilities such as sensors and security access
Year 2	Foundation	• Campus feels more inclusive and accessible as users experience familiar, accurate and consistently branded Digital Signage • The community can make more data driven decisions around energy consumption and sustainability for key buildings and energy intensive departments • Students can locate knowledge and answer questions about Imperial's services faster and on the move • Customers of Campus Services can easily access data that enables them to make decisions and benefit from personalised offers and promotions • Navigation around the physical campus is simpler because users can more easily understand where they do and do not have access and can request access effortlessly • Students are being aided by an assignment management feature to be more productive and balance their wellbeing • Students are seeing greater personalisation of their campus experience as notifications based on their personal interests are being channelled to them
Year 3	Optimise	• The community is benefitting from being able to use their mobile device as a digital access card • The Community can way find to key areas of campus in a way that is accessible and reliable, it also shows them where there are bottlenecks and quiet areas

		• Users can surface Imperial spaces information in a variety of ways to aid planning and management • Catering customers can pre-order food using a mobile device empowering them to make more efficient use of their time
Year 4	Transform	• Students are enjoying most of the digital services they need to navigate the physical and digital campus via far fewer mobile apps, one of which is highly personalised and creates a sense of pride being a part of Imperial's community. • Imperial can clearly visualise how a Smart Campus will achieve Net Zero and Academic Growth goals within the 20-year strategy because COO Team has drafted a digital transformation roadmap encompassing Integrated Workplace Management, Building Automation and Space Planning. • Customers of Imperial's catering service can use self-service tills as part of a more digitally enabled and efficient catering operation. • The community can make data driven decisions around sustainability on a more granular basis because of a centralised data platform.
Year 5	Transform	• The community can self-serve in relation to sustainability, creating integrity and trust through transparency and accountability • The student's experience of the digital and physical campus is highly blended as My Imperial and My Imperial Campus are merged • Campus Services customers are experiencing fewer queue times, greater responsiveness and more of the right choices • Campus Services operations are smoother and more cost effective to run • The community is beginning to benefit from a data driven approach to planning, operating and sustaining our built environment, enabling Imperial to make better decisions faster. • Imperial can act on creating a much smarter Campus for the next 5 years strategy between 2028-2033

4.10 **<u>How do we know that we have arrived</u>**

4.11 Whilst there will be a several lower-level performance indicators and indicators, the critical Key Performance Indicators that will be used to track success against this goal are:

- Improved user adoption metrics of new mobile app
- Increased accuracy and usage of reporting on scope 1, 2 & 3 Emissions targets
- Increased accuracy of consumption forecasting & target tracking
- People feedback/surveys scoring highly on comfort, ease of use, and accessibility of physical environments
- Number of Digital prototypes built, tested and piloted, that directly support Digital campus
- Number of existing digital apps retired
- Spaces repurposed in support of the academic mission is growing
- A digital transformation roadmap around creating a data driven approach to the built environment is published
- Strategy 2028-2033 can action the adoption of an Integrated Workplace Management System to support Imperial's Smart Campus

5.0 GOAL 3: Digitally Enhanced Professional Services

5.1 Where are we now?

5.2 At Imperial we currently have a heritage Professional Services technology estate, with many disparate Finance, HR, Procurement and Administration processes and systems that do not integrate with each other. This leads to considerable manual activities (there is a lack of automation), which are often duplicated and leave us with continued risks of failure from using multiple versions of the same/similar data.

5.3 Additionally, we see delays, errors and confusion for the end users which are caused not just by technology challenges but also inconsistent and manual processes, limited transparency and community, and lack of clarity around roles and responsibilities.

5.4 Where do we want to be **and why**?

5.5 We want to enable the Professional Services teams' ability to support Imperial's anticipated growth without experiencing a corresponding growth in support costs, by providing significantly more efficient and effective digital platforms for them to work with.

5.6 We will focus on rationalising, standardising, and leveraging best-practice Enterprise Resource Planning (ERP) processes, supported by new integrated and efficient digital platforms that also enable users to easily access information and systems should they wish to do so.

5.7 We will ensure interoperability and integration across platforms so that services will be made available on any device, leveraging the continued maturity of the UDP (Unified Data Platform) to ensure there is a single version of truth on the data being used.

5.8 We will adopt a modern approach to business process engineering to firstly simplify processes and then incrementally enable new functionality to automate frequently used processes from Year 3. Further developments will be delivered in years 4 and 5. Digital skills and capabilities will mature over time across Imperial as a result with people embracing the idea of being self-productive (i.e., Citizen development). Imperial will need to invest in these digital skills, as whilst AI might not replace roles, people who know how to use AI will.

5.9 How will we get there?

When	Type	What

Year 1	Foundation	• Put a support wrap around the incumbent Imperial College Information Systems (ICIS) while a new system is implemented • Scope definition of new system • Complete procurement of a new platform and delivery partner
Year 2	Foundation	• Foundation in place • Integration completed with UDP • Reimaged processes for 7 priority areas • First reports and insights developed
Year 3	Optimise	• Reimaged processes extended to remaining scope • Reporting and insights extended across full scope • Realisation of Future Operating Model
Year 4	Transform	• Continuous Improvement embedded into the Operating Model
Year 5	Transform	• Continuous Improvement embedded into the Operating Model

5.10 **How do we know that we have arrived?**

5.11 Whilst there will be a several lower-level performance indicators and indicators, the critical Key Performance Indicators that will be used to track success against this goal are:

More efficient and effective services year on year:

- Reduction in end-to-end processing time
- Reduction in effort needed to deliver business processes
- Reduction in systems complexity
- Reduction in handoffs between teams
- Reduction in process steps
- Reduction in manual interventions
- Reduction of upgrade times due to standardised systems
- Reduction of duplication of data and services
- Increase in right first-time processing

6.0 Goal 4: Embedding a Research and Enterprise Data Culture

6.1 Where are we now?

6.2 There are common data challenges across Imperial. Neither research nor enterprise data are optimised for gaining the most value for Imperial nor is value achievable as quickly as we need it. Currently there are common weaknesses that we will address:

- Proliferation and duplication of data across multiple systems
- Limited data standards in place, causing data quality issues
- A lack of accessible central data cataloguing/discoverability tools
- Varying skills and expertise across Imperial in current data best-practice
- Access and data governance controls often at a local system-level only, increasing security risks

6.3 Additionally, **our research data** has an inconsistent approach to open data standards with metadata for describing/discovering research data also highly variable.

6.4 How we obtain **enterprise data** is often an afterthought. We do not effectively specify the data structures we need to capture, nor how we require it to be accessible. Currently, we do not benchmark data quality, connectivity, risk, coverage, availability, ease and speed of access.

6.5 Where do we want to be **and why**?

6.6 Strong data evidence will empower Imperial to remain at the forefront of Learning and increase the impact of Research. Our data will enable us to rapidly adjust to economic & global conditions. Imperial will be a fully data-driven organisation, with an embedded data culture, creating a thriving data community.

6.7 **Research data** will be a readily accessible Imperial-wide asset. Research data will be captured with ease of re-use in mind, aligned to the FAIR (Findability, Accessibility, Interoperability, and Reusability) data principles. As business opportunities arise staff will be able to use existing research data quickly and easily to generate further value from it.

Having a flexible research data foundation will allow staff to focus resource more effectively on advancing new research innovation. Certified environments will ensure that Imperials data is kept securely and will facilitate world leading research as certified environments/systems will assist researchers when applying for research contracts that require them.

6.8 **Enterprise Data** will become fully managed through the Unified Data Platform (UDP), making Data as a Service a reality. Access control will be centralised

with automated rules and machine monitoring of access attempts, with compliance being assisted by automation.

6.9 Imperial will ensure that all data generated, collected, processed, or stored is cyber secure and protected against unauthorised access, modification, destruction, or disclosure.

6.10 How will we get there?

When	Type	What
Year 1	Foundation	• Establish data maturity baselines • Launch minimum viable product (MVP) for data standards and data catalogue • Commence roll out of FAIR processes and supporting technology changes • Implement governance, identity, and access controls
Year 2	Foundation	• Embed and refine Imperial Common Data Model • Develop the data catalogue of all Imperial data assets, for research and enterprise • Introduce standard dashboards for major recurring business functions • Introduce data mining and auto-classification
Year 3	Optimise	• Establish research data management • Launch Data as a Service with high-quality data products • Implement automated data quality checks and reporting • Establish automated threat detection
Year 4	Transform	• Manage common reuse of research data • Launch research Data as a Service • Develop AI verification and checking for common data quality errors and unusual patterns • Develop AI assisted checking for security and ethical use
Year 5	Transform	• Develop advanced AI and ML assisted analysis of data • Make available machine discoverability & interoperability across all data

6.11 How do we know that we have arrived

6.12 Whilst there will be several lower-level performance indicators, the critical Key Performance Indicators that will be used to track success against this goal are:

Generic KPIs (apply to Enterprise and Research)

- 100% of data assets in data catalogue
- % of data assessed against common Imperial data standards
- Number of data incidents is within acceptable levels of risk
- % of data classification and security tasks that are automated

Enterprise Data KPIs

- Staff satisfaction with self-service discoverability of data
- Percentage of data meeting Imperial data standards
- Reduction in spend on external consultants for data and analytics

Research Data KPIs

- FAIR standards are deployed, and percentage target are set
- Increased percentage of archive research data used in new research increase

7.0 GOAL 5: Enable Research and Innovation

7.1 Where are we now?

7.2 To support our research endeavour there are several areas of innovation working independently across Imperial with limited visibility and little to no coordination. This has led to fragmentated approaches, ad-hoc collaboration and means Imperial is not getting the return on investments in this space; for example, money spent by faculties on standalone compute and outsourced data centres.

7.3 Although Imperial does have existing relationships with external people and organisations it is more by luck than judgement that people are aware of, and can leverage, these relationships for the benefit of Imperial. This could be giving a negative perception of Imperial to external partners, meaning they are less likely to engage on real Digital innovation opportunities.

7.4 We know we have corporate data sets that could be used in innovation, but these are largely unavailable for this purpose; leading to increased friction in experimenting/building new applications with modern technologies such as ChatGPT, AI & Blockchain.

7.5 Where do we want to be **and why**?

7.6 To support our research activity a professionally managed Partner ecosystem, Imperial will expand our global networks of partners. By developing a common way for Digital and Innovation Partners to work with us, we will ensure that there is a coordinated point of entry and account management for partners to engage with the University. This will reduce the risks and potential lost opportunities associated in individual relationships and fragmented communication with partners.

7.7 Develop a culture where people participate in exploring new approaches. The innovation process is driven by people and teams generating ideas and converting them into action, demonstrating 'the art of the possible' using known 'current and near future' technologies and services. This will help us build relationships more widely, developing a culture and funding to try things.

7.8 Provide great services to support Research

7.9 Innovation will go wider than digital technologies and can be thought of in broader terms to solve the future challenges that will face Imperial, e.g., Policy Co-Lab environments, where policy practitioners, service designers, technologist, students, and lecturers can come together

7.10 **How will we get there?**

When	Type	What
Year 1	Foundation	• Create an Innovation Centre with mechanisms to make work visible • Develop processes for funding, innovation & procurement • Deployment of a TRE (Trusted Research Environment) • Permission provided to start, setup to succeed • Progress early collaboration opportunities e.g., with the Digital Media Lab, Digital Innovation Fund, Student Shapers
Year 2	Foundation	• Compliance with industry standards such as Cyber Essentials +, DefStan 05-138. • Leverage the Community CRM to manage the partner ecosystem • Deliver agreed Proof of Concept to support ecosystem of innovation • Measure cultural change indicators to evidence innovation value • Creation of an 'inner source' approach
Year 3	Optimise	• Mechanisms in place to scale innovation • Simplify funding process for ease of use and buy-in to try things • Identify options for low carbon data centre
Year 4	Transform	• Institutionalise a culture of innovation
Year 5	Transform	• Build an Imperial low carbon Data Centre for research purposes

7.11 <u>How do we know that we have arrived</u>

7.12 Whilst there will be a several lower-level performance indicators and indicators, the critical Key Performance Indicators that will be used to track success against this goal are:

- Number of innovation initiatives tracked, (Pipeline managed number of initiatives, number not progressed, number successful)
- Number of partners on CRM contacts on system
- Level of proactivity with Partners
- Compliance with industry standards; Cyber Essentials + (UK Government certification), DefStan 05-138 (Defence standard), DSPT (NHS)
- Wide adoption and utilisation of TRE (Trusted Research Environment)
- Reduction of spend on shadow/non-standard IT
- Utilisation of self-service platforms
- Attendance and speaking engagements at events and awards being won for innovation

8.0 KEY STAKEHOLDERS

8.1 Delivering this plan is not a trivial undertaking. It will require a change in mind-set as to how we approach Digital technology, how we work, and how we deliver transformation within our organisation. It will also require significant funding. With the current significant pace of change, Imperial leadership teams will have to make conscious decisions on the role digital technologies will play in shaping our future, and the cultural shift required to achieve it.

8.2 Although each goal may have its own day to day stakeholder needs, they impact the wider Imperial community and therefore every facet of Imperial will need to be involved and committed to the successful implementation of this Digital plan. Overall, this Digital plan needs to be sponsored and driven from the top.

8.3 Therefore, the key stakeholders for this Digital Plan include:

- University Management Board (UMB)
- Department Operations Managers (DOMs)
- Faculty Operations Officers (FOOs)
- Professional Services (HR, Estates, ICT etc)
- Student Lifecycle Administration Board
- Teaching and Learning Board
- EdTech labs
- Digital Media Lab (DML)
- Campus & Pastoral Services
- Digital Innovation Fund
- Student Shapers

9.0 KEY DEPENDENCIES

9.1 **Executive support for digital culture change is** the single largest dependency. There will need to be joint ownership and adoption of holistic change management, bringing together both business and technology change management practices to create a truly 21st century Imperial.

9.2 **Investment for taking a lead in digital Higher Education is understood and permanent** during and after the implementation of this digital plan. This will need to include investments across digital and data capabilities to mitigate and reduce dependencies over time on the need for expensive external resource that currently plug some of these gaps.

9.3 **Continued focus on cyber security.** There has been an increasing number of attacks on universities, in some cases taking a year or more to recover. Recent investments in unified access, new identity governance, monitoring and professionalising the approach are essential to support Imperial's agenda.

9.4 **A need to commit to evidencing of success** that highlights outcomes that optimise and transform the Digital fabric across Imperial. This means there is a hard dependency on foundations being delivered that will:

- Implement and adopt foundational new ways of working for a Digital future
- Complete the implementation of the core technology stack, and decommission legacy technology (simplify/streamline)
- Recognise that Imperial data is a global shared asset with use and value across faculties and departments to support business objectives.

10.0 KEY RISKS

10.1 Risks associated with **specific deliverables underpinning the outcomes for each goal** are tracked an managed via the central risk management capability (Corestream) along with being tracked via roadmaps in Aha!

11.0 GOVERNANCE, MONITORING & REVIEW

11.1 The Operations & Infrastructure Committee will govern the delivery of the plan, including approving business cases for investment in excess of £1.5m and monitoring the delivery of agreed benefits.

11.2 Progress against delivery of the plan and goal roadmaps will be reviewed quarterly.

11.3 Progress against delivery of the plan outcomes (KPIs & other measurable outcomes) will be reviewed annually.

11.4 The plan will be reviewed on an annual basis to ensure that it remains relevant. Significant changes in the internal and/or external environments may initiate reviews during the intervening period.