

Developing digital capability: an organisational framework

This is an organisational perspective on the Jisc 'Six elements of digital capability'.

A separate profile for digital leaders covers the personal capabilities required to lead digital change, particularly from a capabilities perspective. Other profiles based on the 'Six elements' are available for staff in a variety of roles, allowing you to consider the expertise required in different areas of the organisation to implement an overall digital capabilities strategy or plan.

There is also an organisational audit tool and checklist and a series of organisational case studies in developing digital capabilities.

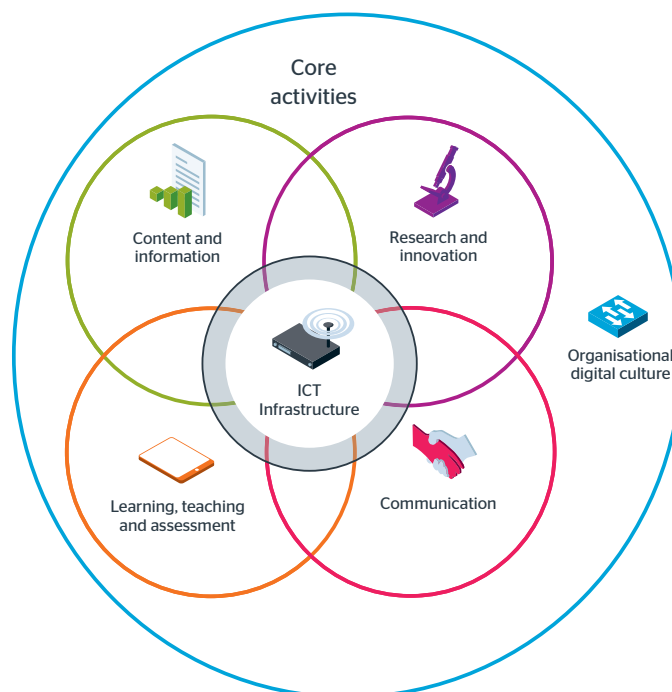
The main users of this document will be leaders, managers and change agents with responsibility for developing digital capability. They will occupy a range of different roles and locations within organisational structures.

The organisational view can be used to:

- » Bring together key stakeholders in order to map and allocate responsibilities – which teams have the expertise to fulfil each of the organisational capabilities?
- » Recognise the range of digital expertise within the organisation, and plan to share and use that expertise more effectively across organisational boundaries
- » Identify any gaps in expertise or in responsibility, and plan to fill them eg by developing or recruiting people, or allocating responsibility adds value

For more information on all related resources please see the **Building digital capability project page** (<http://ji.sc/building-digicap>)

Model of the digitally capable organisation



Organisational capabilities

Collectively, what do people in an educational organisation have to do for it to be digitally capable in each of these areas?

ICT infrastructure	
ICT productivity	<p>Stay up to date with developments in digital technology and infrastructure; assess developments in light of strategic priorities, and organisational opportunities and risks.</p> <p>Procure and/or develop, implement, manage and maintain organisational IT systems, ensuring the needs of diverse users are met through consultation and engagement.</p> <p>Evaluate, plan for, procure and/or develop new IT solutions to support advanced digital practices and prepare for future user needs; undertake innovation projects to support strategic goals.</p> <p>Ensure IT planning is coordinated with other relevant plans and strategies eg estates, Learning, teaching and assessment (LTA), student experience, research, information and communication, organisational plan.</p> <p>Plan an estates strategy that integrates virtual with physical infrastructure; involve diverse digital users in planning new-builds and refurbishments.</p> <p>Plan for a balanced investment between fixed computing and resources/facilities for personal device use (eg under a bring-your-own policy).</p> <p>Develop and manage IT support teams, develop and/or procure IT training resources; ensure a balance between live training and on-demand resources, and between support for organisational systems and support for personal devices and services.</p> <p>Manage roll-out and training for new digital systems and major updates.</p> <p>Coordinate software purchasing, licensing and access across diverse parts of the organisation to maximise efficiency and availability.</p> <p>Ensure infrastructure decisions meet the requirements of digital access and inclusion.</p> <p>Enable recruitment, development and retention of specialist ICT staff in central services and in the wide range of other roles that require specialist digital expertise.</p>
Content and information	
Information use	<p>Develop an information strategy for the organisation; establish policies and protocols for information management and compliance.</p> <p>Invest in systems for managing information across the organisation; undertake innovation projects to support strategic goals.</p> <p>Support the organisation's library and information professionals, helping them to develop and use their expertise in data and information management, IPR and licencing, digital resources, open publication, open educational content, information literacy and other digital specialisms.</p> <p>Provide a supportive, enabling environment for the development of staff/student information literacies; ensure information literacies are included in courses of study, researcher development and staff development.</p> <p>Enable recruitment, development and retention of specialist library and information staff.</p>
Data use	<p>Invest in systems for gathering, managing, analysing and using data across the organisation; establish protocols for data management and compliance.</p> <p>Undertake innovation projects and investigations in, for example, research data management, learning analytics.</p> <p>Engage with stakeholders to develop policies on the safe, ethical management and use of personal digital data by the organisation.</p> <p>Enable recruitment, development and retention of staff with specialist data skills in all areas of the organisation.</p>
Media use	<p>Develop a digital media strategy at organisational level.</p> <p>Invest in infrastructure for digital media production and dissemination, ensuring these services are available to all in the organisation who can benefit.</p> <p>Support the organisation's digital media professionals, helping them to develop and use their expertise in web site design, digital branding and reputation management, digital content production and other digital specialisms.</p> <p>Enable recruitment, development and retention of staff with digital media skills and expertise.</p>

Research and innovation	
Creativity	<p>Enable creative responses to digital change by rewarding innovation, developing a risk-accepting culture, and modelling innovative approaches.</p> <p>Create new events, awards, initiatives and funding streams to support digital innovators.</p>
Research and problem-solving	<p>Develop a digital research strategy or equivalent, including policies for open publishing and research data management.</p> <p>Invest in digital research systems and environments, and infrastructure for specialist digital research.</p> <p>Support Centres of Excellence in digital fields and ensure their expertise is leveraged inside the organisation.</p> <p>Provide a supportive, enabling environment for the development of digital scholarship, ensuring digital research skills are included in courses of study, researcher development and staff development.</p> <p>Create opportunities for organisational research using digital tools and data; use the outcomes of organisational research for decision making and in support of quality/compliance.</p> <p>Enable recruitment, development and retention of digital scholars; enable recognition, recruitment, development and retention of digital practitioners in professional roles.</p>
Innovation	<p>Lead digital transformation initiatives.</p> <p>Identify barriers to innovating practice across the organisation eg infrastructure, reward and career structures, time and task management: develop positive responses.</p> <p>Ensure innovation is recognised and valued among staff at all levels.</p> <p>Enable innovation in organisational structures, supported by digital work practices.</p>
Communication	
Digital communication	<p>Invest in infrastructure for digital communication, internally and externally.</p> <p>Use digital networks and media to build partnerships, to connect sites of learning, to carry out public/business/commuity engagement and to promote the vision and identity of the organisation.</p> <p>Promote a democratic style of communication as suited to a digital organisation; develop internal networks for knowledge exchange and practice sharing.</p> <p>Promote respectful communication in digital media; embed digital communication skills into courses of study and staff development opportunities.</p>
Digital collaboration	<p>Invest in digital environments for collaboration, internally and externally.</p> <p>Support open practices such as the release of open educational materials, open courses, open scholarship and publication; embed collaborative experiences into courses of study and staff development.</p> <p>Promote collaboration across organisational boundaries eg in project teams, working groups etc.</p> <p>Identify opportunities and risks involved in creating a broader culture of digital collaboration; develop appropriate policies and protocols.</p>
Digital participation	<p>Promote engagement and participation across the organisation, using digital tools to engage, consult and make effective decisions.</p> <p>Ensure the digital culture of the organisation supports access, inclusion, and equality of opportunity.</p>
Learning, teaching and assessment	
Digital learning	<p>Invest in digital personal/professional development opportunities for all staff employed by the organisation.</p> <p>Invest in digital learning infrastructure such as the VLE/LMS, assessment and submission/marking systems, e-portfolios, analytics; invest in support services that help students develop lifelong habits of digital learning.</p> <p>Invest in self-access resources to support the development of digital capabilities among learners.</p> <p>Explore the digital learning experience and work in partnership with learners to make improvements.</p> <p>Ensure learners have access to all the digital information they need to make good choices, to meet course requirements, to progress, and to achieve.</p> <p>Reward students for developing digital capabilities eg with internships, personal development opportunities, co-curricular awards, digital badges, digital capability as a graduate attribute.</p>
Digital teaching and assessment	<p>Develop a strategy for e-learning, technology-enhanced learning (TEL), digital education or equivalent and support its implementation in departments and services.</p> <p>Develop a strategy for e-assessment or electronically marked assessment (EMA) and support its implementation in departments and services.</p> <p>Investigate and develop strategies for the use of learning analytics to inform teaching and curriculum development.</p> <p>Embed digital capabilities into initial and ongoing professional development for teaching staff.</p> <p>Embed digital capabilities into courses of study and invest in support for curriculum teams to design effective, authentic digital learning opportunities.</p> <p>Invest in self-access resources to support the development of digital capabilities among staff.</p> <p>Provide opportunities for teaching staff to share digital practices and expertise, formally and informally.</p> <p>Ensure recognition and reward for teaching staff who develop their digital capabilities eg appraisal, grading, time allocation, career opportunities, specialist roles, link to teaching excellence.</p> <p>Ensure teaching staff with digital skills and expertise are recruited, developed and retained.</p>

Organisational digital culture	
Organisational identity	<p>Develop an internal digital culture that is congruent with the organisation's mission and values; develop and promote an external digital identity that is congruent with the organisation's mission and values.</p> <p>Ensure individual members of staff and students are supported to develop positive online identities, to the benefit of themselves and the organisation as a whole.</p> <p>Ensure the organisation is defended against the risks of negative online behaviours by staff and/or students.</p> <p>Promote digital engagement and participation across the organisation, ensuring the use of digital tools and networks supports access, inclusion, and equality of opportunity.</p>
Organisational wellbeing	<p>Model and promote healthy, sustainable practices with digital technology in the organisation.</p> <p>Ensure organisational health and safety policies are up to date and cover digital issues; ensure effective use of digital technologies in occupational health.</p> <p>Develop policies for staff and students on the legal, ethical and safety aspects of online behaviour.</p> <p>Develop and monitor organisational approaches to online abuse, cyber-bullying, cyber-fraud; model the use of digital communications to negotiate, argue respectfully, and deal with difference.</p> <p>Develop a realistic awareness of digital opportunities and risks, and use this to build a healthy digital workplace.</p>

Introducing the organisational framework

What needs to be in place at an organisational level for a college or university to be considered 'digitally capable'? This goes beyond the capabilities of individuals, even of individuals at the highest level of management. It requires consideration of structural issues such as strategic planning, cultures of innovation and engagement, staff development and reward, and how the digital environment supports individuals to express and develop their digital capabilities.

This organisational model is designed to reflect the individual capabilities model, but it is not an exact match – organisations do not develop in the same way that people do! Taking each element in turn:

Organisational digital culture expresses how the organisation supports the development of digitally capable people (staff and students) through its core strategies, its administrative structures and processes, and through cultural features such as its leadership, governance and engagement.

The organisation's digital culture also determines its style of internal and external communication, and its approach to issues such as digital safety and wellbeing, innovation (versus security), openness, and digital inclusion.

The four areas of **digital practice** represent the core business of educational organisations, viewed through a digital lens. They correspond to teaching, learning and assessment; research and innovation; managing content and information; and communications (external and internal). These areas of activity may be quite separate from one another structurally, but common digital issues create opportunities for staff to collaborate and to share ideas and know-how. Within each area, there will be staff with specialist digital expertise relating to their roles, and it will be important to know how that expertise is identified, developed, supported, and put to use. There may or may not be structures for recognising and rewarding staff who develop their digital practices. Sound digital leadership is essential in each of these areas, as well as in the organisation as a whole.

Finally, all of these practices - and the success or otherwise of the organisation's strategic vision - depend on a supportive digital infrastructure, expressed in the real and virtual estate (and the policies that govern access to these resources). Once again the infrastructure depends on people with the relevant expertise and vision, as well as on investment in networks, systems, hardware and digitally-equipped spaces.