



Government
Digital Service

Legacy IT skills, knowledge and capability framework



Legacy IT skills, knowledge and capability areas

Please see below ten areas of focus for legacy IT. The areas were created by legacy IT stakeholders, and tested and validated through cross-government subject matter experts.

Focusing on the skills, knowledge and capability required across skill levels will help you to address legacy IT challenges in your job and your organisation to benefit citizens, save money and boost innovation.

Improve awareness, identification and management of legacy IT across my team, department and government	3
Improve responsiveness of government IT to enable policy and operational delivery	12
Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices	21
Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud	30
Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies	39
Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation	48
Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata	57
Reduce operational failure as a result of legacy IT	66
Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government	75
Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users	84



Improve awareness, identification and management of legacy IT across my team, department and government

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	4
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	5
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	6
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	7
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	8
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	9
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	10
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	11

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Improve awareness, identification and management of legacy IT across my team, department and government

Level – General awareness

I have an awareness of what legacy IT is and I am able to to raise questions about the legacy IT in use.

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants



Legacy IT skills, knowledge and capability areas

Improve awareness, identification and management of legacy IT across my team, department and government

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I am aware of what legacy IT is and what the legacy IT systems are in my team. I am able to raise questions about its use.

I am aware of good practice in service design and procurement to support building renewal steps into the process, to protect against the risks of buying or building legacy IT systems of the future.

I am aware of the 'keeping the lights on' measure, and contribute to the gathering and analysing of data on this measure to assist business cases.

I have a good understanding of how to use the Digital, Data and Technology capability framework to:

- ◆ recruit people with the right skills and expertise
- ◆ upskill the existing workforce
- ◆ create a succession plan as part of the job role

- [gov.uk/service-manual/technology](https://www.gov.uk/service-manual/technology)
- [gov.uk/government/collections/digital-data-and-technology-profession-capability-framework](https://www.gov.uk/government/collections/digital-data-and-technology-profession-capability-framework)
- [gov.uk/guidance/managing-legacy-technology](https://www.gov.uk/guidance/managing-legacy-technology)



Improve awareness, identification and management of legacy IT across my team, department and government

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand what legacy IT is and what the legacy IT systems are across my team. I am able to raise questions about its use.

I apply good practice in service design and procurement to support building renewal steps into the process, to protect against the risks of buying or building legacy IT systems of the future.

I understand the ‘keeping the lights on’ measure, and use data on this measure to contribute to business cases.

I have a good understanding of how to use the Digital, Data and Technology capability framework to:

- ◆ recruit people with the right skills and expertise
- ◆ upskill the existing workforce
- ◆ create a succession plan as part of the job role



Legacy IT skills, knowledge and capability areas

Improve awareness, identification and management of legacy IT across my team, department and government

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a good understanding of what legacy IT is, what the legacy IT systems are across my team, and I am confident in raising questions about its use and advising others.

I am able to champion good practice in service design and procurement to build renewal steps into the process, to protect against the risks of buying or building legacy IT systems of the future.

I have a good understanding of the ‘keeping the lights on’ measure, and use data on this measure to support business cases.

I have a good understanding of how to use the Digital, Data and Technology capability framework to:

- ◆ recruit people with the right skills and expertise
- ◆ upskill the existing workforce
- ◆ create a succession plan as part of the job role

I am aware of the overall impact of legacy IT, including its visibility and management. I am aware of how inefficiencies can affect the overall operational costs of legacy IT across the organisation.

[gov.uk/guidance/managing-legacy-technology](https://www.gov.uk/guidance/managing-legacy-technology)

[gov.uk/service-manual/technology](https://www.gov.uk/service-manual/technology)

[gov.uk/government/collections/digital-data-and-technology-profession-capability-framework](https://www.gov.uk/government/collections/digital-data-and-technology-profession-capability-framework)



Improve awareness, identification and management of legacy IT across my team, department and government

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand and advise others on what legacy IT is, know what the legacy IT systems are across my team and organisation, and I raise questions about its use and advise others on solutions.

I champion good practice in service design and procurement to ensure renewal steps are built into the process, to protect against the risks of buying or building legacy IT systems of the future.

I use data on the ‘keeping the lights on’ measure to make business cases for investment.

I use the Digital, Data and Technology capability framework to:

- ◆ recruit people with the right skills and expertise
- ◆ upskill the existing workforce
- ◆ create a succession plan as part of the job role

I promote its use to others.

I have an understanding of the overall impact of legacy IT, including its visibility and management. I understand how inefficiencies can affect the overall operational costs of legacy IT across the organisation.



Legacy IT skills, knowledge and capability areas

Improve awareness, identification and management of legacy IT across my team, department and government

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I am aware of what legacy IT is and the legacy IT systems that we have across my organisation. I’m able to contribute to discussions on the topic of legacy IT at executive and board-level meetings and across functions.

I take advice from my experts and champion good practice in service design and procurement renewal steps to protect against the risks of legacy IT.

I am aware of the Digital, Data and Technology capability framework, and advocate its use to:

- ◆ recruit people with the right skills and expertise
- ◆ upskill the existing workforce
- ◆ create a succession plan as part of the job role, for system development

I am aware of the overall impact of legacy IT, including its visibility and management. I am aware of how inefficiencies can affect the overall operational costs of legacy IT across the organisation.

[gov.uk/guidance/managing-legacy-technology](https://www.gov.uk/guidance/managing-legacy-technology)

[gov.uk/service-manual/technology](https://www.gov.uk/service-manual/technology)

[gov.uk/government/collections/digital-data-and-technology-profession-capability-framework](https://www.gov.uk/government/collections/digital-data-and-technology-profession-capability-framework)



Improve awareness, identification and management of legacy IT across my team, department and government

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I understand what legacy IT is and my organisation's legacy IT assets. I discuss them at executive and board-level meetings and across functions.

I am able to champion good practice in service design and procurement renewal to protect against the risks of legacy IT.

I have a good understanding of, and promote use of, the Digital, Data and Technology capability framework to:

- ◆ recruit people with the right skills and expertise
- ◆ upskill the existing workforce
- ◆ create a succession plan as part of the job role, for system development

I understand the overall impact of legacy IT, including its visibility and management. I understand how inefficiencies can affect the overall operational costs of legacy IT across the organisation.

[gov.uk/guidance/managing-legacy-technology](https://www.gov.uk/guidance/managing-legacy-technology)

[gov.uk/service-manual/technology](https://www.gov.uk/service-manual/technology)

[gov.uk/government/collections/digital-data-and-technology-profession-capability-framework](https://www.gov.uk/government/collections/digital-data-and-technology-profession-capability-framework)



Legacy IT skills, knowledge and capability areas

Improve awareness, identification and management of legacy IT across my team, department and government

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I have a good understanding of what legacy IT is and the legacy IT systems across my organisation. I can lead on the topic of legacy IT at executive and board-level meetings.

I work in partnership with my Digital, Data and Technology colleagues and policy counterparts to ensure legacy IT, service design and procurement renewal steps are understood and visible, to avoid building legacy IT of the future.

I promote use of the Digital, Data and Technology capability framework to:

- ◆ recruit people with the right skills and expertise
- ◆ upskill the existing workforce
- ◆ create a succession plan as a part of the job role, for system development

I have a good understanding of the overall impact of legacy IT, including its visibility and management. I have a good understanding of how inefficiencies can affect the overall operational costs of legacy IT across the organisation.

[gov.uk/guidance/managing-legacy-technology](https://www.gov.uk/guidance/managing-legacy-technology)

[gov.uk/service-manual/technology](https://www.gov.uk/service-manual/technology)

[gov.uk/government/collections/digital-data-and-technology-profession-capability-framework](https://www.gov.uk/government/collections/digital-data-and-technology-profession-capability-framework)



Improve responsiveness of government IT to enable policy and operational delivery

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	13
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	14
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	15
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	16
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	17
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	18
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	19
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	20

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Improve responsiveness of government IT to enable policy and operational delivery

Level – General awareness

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants

I am aware that the use of IT infrastructure is key to digital transformation including data sharing and cloud migration.
I am aware of how the constraints of poorly designed technology can impact cost and policy delivery.
I have an awareness of how to move away from legacy systems.

- ico.org.uk/for-organisations/data-sharing-a-code-of-practice/
- gov.uk/guidance/use-cloud-first
- gov.uk/service-manual/technology/moving-away-from-legacy-systems



Improve responsiveness of government IT to enable policy and operational delivery

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I am aware that the use of IT infrastructure is key to digital transformation including data sharing and cloud migration.

I am aware of how the constraints of poorly designed technology can impact cost and policy delivery.

I have an awareness of how to move away from legacy systems.

I have an awareness of how to work towards implementing projects which are scalable, efficient and minimise legacy IT of the future.

I have an awareness of how to design technology that is cost-effective, measurable and delivers on its policy intent.

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

gov.uk/guidance/use-cloud-first

gov.uk/service-manual/technology/moving-away-from-legacy-systems

gov.uk/service-manual/measuring-success



Improve responsiveness of government IT to enable policy and operational delivery

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand that the use of IT infrastructure is key to digital transformation including data sharing and cloud migration.

I have a working knowledge of how the constraints of poorly designed technology can impact cost and policy delivery.

I have a working knowledge of how to move away from legacy systems.

I am able to work towards implementing projects which are scalable, efficient and minimise legacy IT of the future.

I have a working knowledge of how to design technology that is cost-effective, measurable and delivers on its policy intent.

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

gov.uk/guidance/managing-legacy-technology

gov.uk/service-manual/technology/moving-away-from-legacy-systems

gov.uk/service-manual/measuring-success



Improve responsiveness of government IT to enable policy and operational delivery

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a good knowledge of how the use of IT infrastructure is key to digital transformation including data sharing and cloud migration.

I have a good knowledge of how the constraints of poorly designed technology can impact cost and policy delivery.

I contribute to a plan to move away from legacy systems.

I am able to implement programmes which are scalable, efficient and minimise legacy IT of the future.

I have a good knowledge of how to design technology that is cost-effective, measurable and delivers on its policy intent.

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

gov.uk/guidance/use-cloud-first

gov.uk/service-manual/technology/moving-away-from-legacy-systems

gov.uk/service-manual/measuring-success



Improve responsiveness of government IT to enable policy and operational delivery

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a deep understanding that the use of IT infrastructure is key to digital transformation including data sharing and cloud migration.

I have a deep understanding of how the constraints of poorly designed technology can impact cost and policy delivery.

I lead on a plan to move away from legacy systems.

I am the subject matter expert to ensure the commissioning, build or purchase of IT is scalable, efficient and minimises legacy IT of the future.

I have a deep understanding of how to design technology that is cost-effective, measurable and delivers on its policy intent – and I share this with others.

gov.uk/guidance/use-cloud-first

gov.uk/service-manual/technology/moving-away-from-legacy-systems

ncsc.gov.uk/collection/cyber-security-design-principles/reducing-the-impact-of-compromise

gov.uk/service-manual/measuring-success



Improve responsiveness of government IT to enable policy and operational delivery

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it's applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I am aware that the use of IT infrastructure is key to digital transformation including data sharing and cloud migration. I use this knowledge in my plans.

I have an understanding of how the constraints of how the constraints of poorly designed technology can impact cost and policy delivery.

I make plans to move away from legacy systems.

I am able to oversee and ensure that the commissioning, build or purchase of IT is scalable, efficient and minimises legacy IT of the future. I know when to seek advice from my Digital, Data and Technology leadership colleagues across government.

I encourage teams to design technology that is cost-effective, measurable and delivers on its policy intent.

I have an awareness of the balance between 'keeping the lights on' and making the case for new investment. I actively seek advice from security experts who understand legacy architecture and legacy remediation when making legacy decisions.

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

gov.uk/guidance/use-cloud-first

gov.uk/service-manual/technology/moving-away-from-legacy-systems

gov.uk/service-manual/service-standard/point-11-choose-the-right-tools-and-technology

gov.uk/service-manual/measuring-success



Improve responsiveness of government IT to enable policy and operational delivery

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I have a good understanding of how the use of IT infrastructure is key to digital transformation including data sharing and cloud migration.

I have good knowledge of how the constraints of poorly designed technology can impact cost and policy delivery.

I make plans to move away from legacy systems.

I direct and enable others to lead programmes of work which are scalable, efficient and minimise legacy IT of the future.

I direct and empower teams to design technology that is cost-effective, measurable and delivers on its policy intent.

I have good knowledge of the balance between ‘keeping the lights on’ and making the case for new investment. I actively seek advice from security experts who understand legacy architecture and legacy remediation when making legacy decisions.

[gov.uk/service-manual/technology/moving-away-from-legacy-systems](https://www.gov.uk/service-manual/technology/moving-away-from-legacy-systems)

[gov.uk/service-manual/measuring-success](https://www.gov.uk/service-manual/measuring-success)



Improve responsiveness of government IT to enable policy and operational delivery

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I have deep understanding that the use of IT infrastructure is key to digital transformation including data sharing and cloud migration. I lead conversations about legacy IT with the right people.

I have deep knowledge of how the constraints of poorly designed technology can impact cost and policy delivery.

I make plans to move away from legacy systems

I am the senior responsible officer who ensures the decommissioning, build or purchase is scalable, efficient and minimises legacy IT of the future.

I lead, direct and empower teams to design technology that is cost-effective, measurable and delivers on its policy intent.

I have deep understanding of the balance between ‘keeping the lights on’ and making the case for new investment. I actively lead, direct and empower security experts who understand legacy architecture and legacy remediation when making legacy decisions.

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

gov.uk/guidance/use-cloud-first

gov.uk/service-manual/technology/moving-away-from-legacy-systems



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	22
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	23
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	24
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	25
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	26
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	27
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	28
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	29

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

Level – General awareness

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants

I am aware of the vulnerabilities related to cyber attacks for my team, and know how to flag them.
I am aware of how to secure information and the vulnerabilities of sharing data on the cloud.

ncsc.gov.uk/guidance/vulnerability-management

gov.uk/service-manual/technology/securing-your-information



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have an understanding of vulnerability management, managing legacy technology and security design principles. I ensure cyber security is embedded in programme delivery and flag this accordingly.

I have foundation knowledge of how to secure information and the vulnerabilities of sharing data on the cloud.

ncsc.gov.uk/guidance/vulnerability-management

gov.uk/guidance/managing-legacy-technology

ncsc.gov.uk/collection/cyber-security-design-principles/reducing-the-impact-of-compromise

gov.uk/service-manual/technology/securing-your-information



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand and apply good practice in vulnerability management, managing legacy technology and security design principles.
I contribute to embedding security in programme and service delivery and flag as appropriate.
I have a working knowledge of how to secure information and the vulnerabilities of sharing data on the cloud.

- ncsc.gov.uk/guidance/vulnerability-management
- gov.uk/guidance/managing-legacy-technology
- ncsc.gov.uk/collection/cyber-security-design-principles/reducing-the-impact-of-compromise
- gov.uk/service-manual/technology/securing-your-information



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand, apply and encourage others to apply good practice in vulnerability management, managing legacy technology and security design principles. I ensure security is embedded in service and programme delivery and flag as appropriate.

I have a good understanding of how to secure information and the vulnerabilities of sharing data on the cloud.

ncsc.gov.uk/guidance/vulnerability-management

gov.uk/guidance/managing-legacy-technology

ncsc.gov.uk/collection/cyber-security-design-principles/reducing-the-impact-of-compromise

gov.uk/service-manual/technology/securing-your-information



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand, apply, and promote use of good practice in vulnerability management, managing legacy technology and security design principles. I ensure security is embedded in service and programme delivery and flag as appropriate.

I understand how to secure information and the vulnerabilities of sharing data on the cloud, and I advise and encourage others.

I am the subject matter expert on cyber security for my team when going through service assurance or decommissioning.

I advocate the application of government security standards across government.

ncsc.gov.uk/guidance/vulnerability-management

gov.uk/guidance/managing-legacy-technology

ncsc.gov.uk/collection/cyber-security-design-principles/reducing-the-impact-of-compromise

gov.uk/service-manual/technology/securing-your-information

gov.uk/government/publications/security-policy-framework/hmg-security-policy-framework#technology-and-services



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it's applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I am aware of the vulnerabilities related to cyber attacks for my department or industry and the risks attached. I ensure security is embedded in programme delivery, and flag these with my Digital, Data and Technology colleagues.

I will take advice from my security experts in my team:

- ◆ to ensure funds and resources can be deployed to address security vulnerabilities
- ◆ when going through service assurance or decommissioning
- ◆ to apply the government security standards across government

I am aware of the vulnerabilities of sharing data on the cloud, and encourage others to follow good practice.

ncsc.gov.uk/guidance/vulnerability-management

gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy

gov.uk/government/publications/security-policy-framework/hmg-security-policy-framework#technology-and-services



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I understand, apply, and manage others applying good practice in vulnerability management, managing legacy technology and security design principles. I ensure security is embedded in programme delivery and flag as appropriate.

I direct and empower teams to:

- ◆ ensure funds and resources can be deployed to address security vulnerabilities
- ◆ go through service assurance or decommissioning
- ◆ apply the government security standards across government

I have good understanding of the vulnerabilities of sharing data on the cloud, and promote good practice.

ncsc.gov.uk/guidance/vulnerability-management

gov.uk/guidance/managing-legacy-technology

ncsc.gov.uk/collection/cyber-security-design-principles/reducing-the-impact-of-compromise

gov.uk/government/publications/security-policy-framework/hmg-security-policy-framework#technology-and-services



Reduce vulnerability to cyber attacks and make improvements to cyber risk management practices

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I understand, apply and oversee good practice for vulnerability management, managing legacy technology and security design principles. I ensure security is embedded in programme delivery and flag as appropriate.

I lead, direct and empower teams to:

- ◆ ensure funds and resources can be deployed to address security vulnerabilities
- ◆ go through service assurance or decommissioning
- ◆ apply the government security standards across government

I understand, advise and lead others on the vulnerabilities of sharing data on the cloud.

ncsc.gov.uk/guidance/vulnerability-management

gov.uk/guidance/managing-legacy-technology

ncsc.gov.uk/collection/cyber-security-design-principles/reducing-the-impact-of-compromise



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	31
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	32
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	33
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	34
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	35
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	36
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	37
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	38

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

Level – General awareness

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants

I understand what the cloud is, the government's cloud-first policy and the benefits of migrating to the cloud.
I have an awareness of how to work out if a cloud service is secure enough to handle my legacy data.

- [gov.uk/service-manual/technology/choosing-technology-an-introduction](https://www.gov.uk/service-manual/technology/choosing-technology-an-introduction)
- [gov.uk/guidance/government-cloud-first-policy](https://www.gov.uk/guidance/government-cloud-first-policy)
- [gov.uk/guidance/use-cloud-first](https://www.gov.uk/guidance/use-cloud-first)
- [ncsc.gov.uk/collection/cloud-security](https://www.ncsc.gov.uk/collection/cloud-security)



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment.
Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

- I understand what the cloud is, the government's cloud-first policy and the benefits of migrating to the cloud.
- I have a foundation understanding of how to work out if a cloud service is secure enough to handle my legacy data.
- I can consider the legacy technology in use to see if it's a good option for cloud services.
- I have a foundation understanding to determine if a legacy technology is a good candidate for migrating to the cloud.

- gov.uk/service-manual/technology/choosing-technology-an-introduction
- gov.uk/guidance/government-cloud-first-policy
- gov.uk/guidance/use-cloud-first
- ncsc.gov.uk/collection/cloud-security
- gov.uk/government/publications/cloud-guide-for-the-public-sector/cloud-guide-for-the-public-sector#security



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I having a working knowledge of what the cloud is, the government’s cloud-first policy, its benefits and limits, and the security implications of migrating to the cloud.

I have a working knowledge of how to work out if a cloud service is secure enough to handle my legacy data.

I understand my organisation’s cloud hosting strategy for legacy IT and can contribute to plans for cloud migration. I consider if legacy technology can be migrated to the cloud or rebuilt.

I seek to migrate data where possible and know when to move the data through a strategy, including cost, risks, maintenance, and use of new innovation.

I consider the drawbacks and if cloud is the best approach to use in the short and long term.

I have a working knowledge of how to apply the 14 cloud security principles to protect and secure data for new builds and existing builds.

I understand how to classify and protect data under security classifications and GDPR rules.

I have a working knowledge of how to use the data ethics framework to use data responsibly when planning and evaluating a new policy or service.

gov.uk/service-manual/technology/choosing-technology-an-introduction

gov.uk/guidance/government-cloud-first-policy

gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy

ncsc.gov.uk/collection/cloud-security

ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles

gov.uk/government/publications/uk-national-data-strategy

gov.uk/government/publications/government-security-classifications

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

gov.uk/government/publications/data-ethics-framework



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have good understanding of what the cloud is, the government’s cloud-first policy, its benefits and limits, and the security implications of migrating to the cloud.

I have a good understanding of how to work out if a cloud service is secure enough to handle my legacy data.

I have a good understanding of my organisation’s cloud hosting strategy for legacy IT and can contribute to plans for cloud migration. I confidently consider if legacy technology can be migrated to the cloud or rebuilt.

I seek to migrate data where possible and know when to move the data through a strategy, including cost, risks, maintenance, and use of new innovation.

I consider the drawbacks and if cloud is the best approach to use in the short and long term.

I have a good understanding of how to apply the 14 cloud security principles to protect and secure data for new builds and existing builds.

I have good understanding of how to classify and protect data under security classifications and GDPR rules.

I have a good understanding of how to use the data ethics framework to use data to responsibly when planning and evaluating a new policy or service.

- gov.uk/service-manual/technology/choosing-technology-an-introduction
- gov.uk/guidance/government-cloud-first-policy
- gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy
- ncsc.gov.uk/collection/cloud-security
- ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles
- gov.uk/government/publications/uk-national-data-strategy
- gov.uk/government/publications/government-security-classifications
- ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/
- gov.uk/government/publications/data-ethics-framework



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have deep understanding of what the cloud is, the government’s cloud-first policy, its benefits and limits, and the security implications of migrating to the cloud.

I have a good understanding of how to work out if a cloud service is secure enough to handle my legacy data.

I have deep understanding my organisation’s cloud hosting strategy for legacy IT and can contribute to plans for cloud migration. I confidently consider if legacy technology can be migrated to the cloud or rebuilt.

I seek to migrate data where possible and know when to move the data through a strategy, including cost, risks, maintenance, and use of new innovation.

I consider the drawbacks and if cloud is the best approach to use in the short and long term.

I have a deep understanding of how to apply the 14 cloud security principles to protect and secure data for new builds and existing builds.

I have a deep understanding of how to classify and protect data under security classifications and GDPR rules.

I have a deep understanding of how to use the data ethics framework to use data to responsibly when planning and evaluating a new policy or service.

gov.uk/guidance/government-cloud-first-policy

gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy

ncsc.gov.uk/collection/cloud-security

ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles

gov.uk/government/publications/uk-national-data-strategy

gov.uk/government/publications/government-security-classifications

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

gov.uk/government/publications/data-ethics-framework



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I have an awareness of what the cloud is, the government’s cloud-first policy, its benefits and limits, and the security implications of migrating to the cloud.

I have an understanding of my organisation’s cloud hosting strategy for legacy IT and can contribute to plans for cloud migration. I seek advice from my experts if legacy technology can be migrated to the cloud or rebuilt.

I encourage others to seek to migrate data where possible and know when to move the data through a strategy, including cost, risks, maintenance, and use of new innovation.

I seek advice from my experts on the risks of cloud migration and if cloud is the best approach to use in the short and long term.

I have an awareness of how to apply the 14 cloud security principles to protect and secure data for new builds and existing builds.

I have an awareness of how to classify and protect data under security classifications and GDPR rules.

I am aware of the data ethics framework and promote its use to others, to ensure that data is used responsibly when planning and evaluating a new policy or service.

I’m aware of offshoring and data residency.

I seek advice from others on choosing whether the cloud solution has the appropriate level of security.

I consult with with the right experts when procuring cloud services (finance, commercial, technical, service delivery, legal etc.) I oversee the process to avoid vendor lock-in and ensure: flexibility and fairness, intellectual property is understood, data is not lost, and that there are no hidden data storage costs. I seek advice from my Digital, Data and Technology colleagues where needed.

I empower others to ensure they have suitable training to implement and use cloud computing.

- gov.uk/guidance/government-cloud-first-policy
- gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy
- ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles
- gov.uk/government/publications/uk-national-data-strategy
- gov.uk/government/publications/government-security-classifications
- ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/
- gov.uk/government/publications/data-ethics-framework
- gov.uk/government/publications/cloud-guide-for-the-public-sector/cloud-guide-for-the-public-sector



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I have good understanding of what the cloud is, the government's cloud-first policy, its benefits and limits, and the security implications of migrating to the cloud. I also encourage others.

I direct and empower others to apply my organisation's cloud hosting strategy for legacy IT and can contribute to plans for cloud migration. I consider if legacy technology can be migrated to the cloud or rebuilt.

I direct and enable others to migrate data where possible and know when to move the data through a strategy, including cost, risks, maintenance, and use of new innovation.

I direct and enable others to consider the risks to determine if cloud is the best approach to use in the short and long term.

I direct and empower others to apply the 14 cloud security principles to protect and secure data for new builds and for existing builds. I direct and empower others on choosing the cloud solution with the appropriate level of security.

I direct and empower others to classify and protect data under security classifications and GDPR rules.

I direct and empower others to use the data ethics framework to use data responsibly when planning and evaluating a new policy or service.

I have good understanding of the government policy and guidance on offshoring and data residency.

I consult with the right experts when procuring cloud services (finance, commercial, technical, service delivery, legal etc.)

I oversee the process to avoid vendor lock-in and ensure: flexibility and fairness, intellectual property is understood, data is not lost, and that there are no hidden data storage costs. I seek advice from my Digital, Data and Technology colleagues where needed.

I direct and empower others to ensure they have suitable training to implement and use cloud computing.

[gov.uk/guidance/government-cloud-first-policy](https://www.gov.uk/guidance/government-cloud-first-policy)

[gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy](https://www.gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy)

[ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles](https://www.ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles)

[gov.uk/government/publications/uk-national-data-strategy](https://www.gov.uk/government/publications/uk-national-data-strategy)

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

[gov.uk/government/publications/data-ethics-framework](https://www.gov.uk/government/publications/data-ethics-framework)

[gov.uk/government/publications/cloud-guide-for-the-public-sector/cloud-guide-for-the-public-sector](https://www.gov.uk/government/publications/cloud-guide-for-the-public-sector/cloud-guide-for-the-public-sector)



Reduce and secure legacy IT data through use of legacy IT remediation strategies including migration to the cloud

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I understand what the cloud is and promote good practice around the government’s cloud-first policy and its benefits and limits.
I understand and highlight to others the security implications of migrating to the cloud.

I lead, direct and empower others to apply my organisation’s cloud hosting strategy for legacy IT and can contribute to plans for cloud migration. I consider if legacy technology can be migrated to the cloud or rebuilt.

I lead, direct and empower others to migrate data where possible and know when to move the data through a strategy, including cost, risks, maintenance, and use of new innovation.

I lead, direct and empower other to consider the risks to determine if cloud is the best approach to use in the short and long term.

I direct and empower others to apply the 14 cloud security principles to protect and secure data for new builds and for existing builds. I direct and empower others on choosing the cloud solution with the appropriate level of security.

I lead, direct and empower others to classify and protect data under security classifications and GDPR rules.

I lead, direct and empower others to use the data ethics framework to use data responsibly when planning and evaluating a new policy or service.

I have deep understanding of the government policy and guidance on offshoring and data residency.

I consult with with the right experts when procuring cloud services (finance, commercial, technical, service delivery, legal etc.)

I oversee the process to avoid vendor lock-in and ensure: flexibility and fairness, intellectual property is understood, data is not lost, and that there are no hidden data storage costs. I seek advice from my Digital, Data and Technology colleagues where needed.

I direct and empower others to ensure they have suitable training to implement and use cloud computing.

[gov.uk/guidance/government-cloud-first-policy](https://www.gov.uk/guidance/government-cloud-first-policy)

[gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy](https://www.gov.uk/guidance/creating-and-implementing-a-cloud-hosting-strategy)

[ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles](https://www.ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles)

[gov.uk/government/publications/uk-national-data-strategy](https://www.gov.uk/government/publications/uk-national-data-strategy)

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

[gov.uk/government/publications/data-ethics-framework](https://www.gov.uk/government/publications/data-ethics-framework)

[gov.uk/government/publications/cloud-guide-for-the-public-sector/cloud-guide-for-the-public-sector](https://www.gov.uk/government/publications/cloud-guide-for-the-public-sector/cloud-guide-for-the-public-sector)



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	40
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	41
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	42
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	43
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	44
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	45
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	46
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	47

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

Level – General awareness

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants

I have an awareness of the cloud to support business cases and understand the impact between cloud scalability and cost efficiency.

I have an awareness of the security implications of cloud migration.

[gov.uk/service-manual/technology/choosing-technology-an-introduction](https://www.gov.uk/service-manual/technology/choosing-technology-an-introduction)

[ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles](https://www.ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles)



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have an understanding of the cloud to support business cases and have a foundation understanding of the impact between cloud scalability and cost efficiency.

I have an understanding of the security implications of cloud migration.

I have an understanding of how to manage vendor technical lock-in when migrating to the cloud.

I have a foundation understanding of the techniques to optimise the cloud (including cost optimisation) and can share the benefits of the cloud cost model.

gov.uk/service-manual/technology/choosing-technology-an-introduction

ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles

gov.uk/guidance/managing-technical-lock-in-in-the-cloud

gov.uk/guidance/managing-your-spending-in-the-cloud#setting-up-your-organisation-to-take-advantage-of-the-cloud



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a working knowledge of the cloud to support business cases, and understand the impact between cloud and cost efficiency.

I have a working knowledge of how and what to move to the cloud, and the security implications of cloud migration.

I have a working knowledge of how to manage vendor technical lock-in when migrating to the cloud.

I have a working knowledge of the techniques to optimise the cloud (including cost optimisation) and can share the benefits of the cloud cost model.

[gov.uk/service-manual/technology/choosing-technology-an-introduction](https://www.gov.uk/service-manual/technology/choosing-technology-an-introduction)

[ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles](https://www.ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles)

[gov.uk/guidance/managing-technical-lock-in-in-the-cloud](https://www.gov.uk/guidance/managing-technical-lock-in-in-the-cloud)

[gov.uk/guidance/managing-your-spending-in-the-cloud](https://www.gov.uk/guidance/managing-your-spending-in-the-cloud)



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have good understanding of and regularly use the cloud to support business cases, and I understand the relationship impact between cloud and cost efficiency.

I have good understanding of, and advocate how and what to move to, the cloud. I advise others through the process and I consider the security implications of cloud migration.

I have a good understanding of how to manage vendor technical lock-in when migrating to the cloud.

I have a good understanding of the techniques to optimise the cloud (including cost optimisation) and can share the benefits of the cloud cost model.

[gov.uk/service-manual/technology/choosing-technology-an-introduction](https://www.gov.uk/service-manual/technology/choosing-technology-an-introduction)

[ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles](https://www.ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles)

[gov.uk/guidance/managing-technical-lock-in-in-the-cloud](https://www.gov.uk/guidance/managing-technical-lock-in-in-the-cloud)

[gov.uk/guidance/managing-your-spending-in-the-cloud](https://www.gov.uk/guidance/managing-your-spending-in-the-cloud)



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a deep understanding of and regularly use the cloud to support business cases and I understand the impact between cloud and cost efficiency.

I have a deep understanding of, and advocate how and what to move to, the cloud. I advise others through the process and I consider the security implications of cloud migration.

I have a deep understanding of how to manage vendor technical lock-in when migrating to the cloud.

I have a deep understanding of the techniques to optimise the cloud (including cost optimisation) and can share the benefits of the cloud cost model.

- gov.uk/service-manual/technology/choosing-technology-an-introduction
- ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles
- gov.uk/guidance/managing-technical-lock-in-in-the-cloud
- gov.uk/guidance/managing-your-spending-in-the-cloud



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it's applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I seek advice from my experts on the business, data and cost benefits in migrating to the cloud and empower staff across my organisation to realise these.

I am aware of vendor technical lock-in when migrating to the cloud, and know that renewal steps should be built into the process.

I seek advice from my experts on the techniques to optimise the cloud (including cost optimisation) and can share the benefits of the cloud cost model.

I have an understanding of how to advocate and what to move to the cloud, and advise others through the process. I consider the security implications of cloud migration.

I am developing an understanding of government-wide good practices used in regards to cloud migration, and seek advice from my experts on the benefits of cloud migration across the business.

[gov.uk/service-manual/technology/choosing-technology-an-introduction](https://www.gov.uk/service-manual/technology/choosing-technology-an-introduction)

[gov.uk/guidance/managing-technical-lock-in-in-the-cloud](https://www.gov.uk/guidance/managing-technical-lock-in-in-the-cloud)

[gov.uk/guidance/managing-your-spending-in-the-cloud](https://www.gov.uk/guidance/managing-your-spending-in-the-cloud)

[ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles](https://www.ncsc.gov.uk/collection/cloud-security/implementing-the-cloud-security-principles)

[gov.uk/government/case-studies/how-the-home-offices-immigration-technology-department-reduced-its-cloud-costs-by-40](https://www.gov.uk/government/case-studies/how-the-home-offices-immigration-technology-department-reduced-its-cloud-costs-by-40)



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I direct and enable others to realise the business, data and cost benefits in migrating to the cloud and empower staff across my organisation to realise these.

I am aware of vendor technical lock-in when migrating to the cloud, and know that renewal steps should be built into the process.

I direct and enable others on the techniques to optimise the cloud (including cost optimisation) and can share the benefits of the cloud cost model.

I direct, advocate and enable others on how and what to move to the cloud, and advise others through the process. I consider the security implications of cloud migration.

I have good knowledge of government-wide good practices used in regards to cloud migration, and seek advice from my experts on the benefits of cloud migration across the business.



Reduce capital (capex) expense to operational (opex) expense when migrating to the cloud or other legacy IT remediation strategies

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I lead, direct and enable others to realise the business, data and cost benefits in migrating to the cloud and empower staff across my organisation to realise these.

I am aware of vendor technical lock-in when migrating to the cloud and know that renewal steps should be built into the process.

I lead, direct and enable others on the techniques to optimise the cloud (including cost optimisation) and can share the benefits of the cloud cost model.

I lead, direct, advocate and enable others on how and what to move to the cloud, and advise others through the process.
I consider the security implications of cloud migration.

I have deep understanding of government-wide good practices used in regards to cloud migration, and seek advice from my experts on the benefits of cloud migration across the business.



Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	49
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	50
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	51
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	52
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	53
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	54
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	55
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	56

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

Level – General awareness

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants

I'm aware of the importance of data interoperability and file formats for my organisation.

I'm aware of the open standards principles of data, the open standards for sharing government data and how to build technology.

I'm aware of the tools (including data profiling and modelling), techniques, common reference, methods and protocols to identify legacy data issues and to collect and share data and metadata in my organisation.

- [gov.uk/guidance/using-open-document-formats-odf-in-your-organisation](https://www.gov.uk/guidance/using-open-document-formats-odf-in-your-organisation)
- [gov.uk/government/publications/open-standards-principles/open-standards-principles](https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles)
- [gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data](https://www.gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data)
- [gov.uk/guidance/make-use-of-open-standards#building-technology-that-uses-open-standards](https://www.gov.uk/guidance/make-use-of-open-standards#building-technology-that-uses-open-standards)
- [gov.uk/guidance/make-use-of-open-standards](https://www.gov.uk/guidance/make-use-of-open-standards)



Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I'm aware of and understand the importance of data interoperability and file formats for my organisation.

I'm aware of and understand the open standards principles of data and how to practically apply the open standards for sharing government data when buying or building technology.

I'm aware of and understand the tools (including data profiling and modeling), techniques, common reference, methods and protocols to identify legacy data issues and to collect and share data and metadata.

I'm aware of and understand that data has to be assessed on an ongoing basis to maintain quality and timeliness (data being readily available).

gov.uk/guidance/using-open-document-formats-odf-in-your-organisation

gov.uk/government/publications/open-standards-principles/open-standards-principles

gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data

gov.uk/guidance/make-use-of-open-standards#building-technology-that-uses-open-standards

gov.uk/guidance/make-use-of-open-standards

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-impact-assessments/



Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand the importance of data interoperability and file formats for my organisation.

I understand and apply open standards principles of data and know how to practically apply the standards for sharing government data when buying or building technology.

I apply my knowledge of the tools (including data profiling and modelling), techniques, common reference, methods and protocols to identify legacy data issues and to collect and share data and metadata.

I know that data has to be assessed on an ongoing basis to maintain quality and timeliness (data being readily available).

I have knowledge of the risks and rewards of adopting new approaches to data collection and sharing and the interoperability of that data.

gov.uk/guidance/using-open-document-formats-odf-in-your-organisation

gov.uk/government/publications/open-standards-principles/open-standards-principles

gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data

gov.uk/guidance/make-use-of-open-standards#building-technology-that-uses-open-standards

gov.uk/guidance/make-use-of-open-standards

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-impact-assessments/

gov.uk/government/publications/open-standards-for-government



Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a good understanding of the importance of data interoperability and file formats for my organisation.

I have a good understanding of the open standards principles of data and know how to practically apply the standards for sharing government data when buying or building technology.

I have a good understanding of the tools (including data profiling and modelling), techniques, common reference, methods and protocols to identify legacy data issues and to collect and share data and metadata.

I have a good understanding that data has to be assessed on an ongoing basis to maintain quality and timeliness (data being readily available).

I have a good understanding of the risks and rewards of adopting new approaches to data collection and sharing and the interoperability of that data.

I can share tangible examples of the benefits of data interoperability with the wider team.

gov.uk/guidance/using-open-document-formats-odf-in-your-organisation

gov.uk/government/publications/open-standards-principles/open-standards-principles

gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data

gov.uk/guidance/make-use-of-open-standards

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-impact-assessments/

gov.uk/government/publications/open-standards-for-government



Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand and advise on the importance of data interoperability and file formats for my organisation.

I understand, advise on and apply open standards principles of data. I practically apply the standards for sharing government data and when buying or building technology.

I understand and advise on the use of the tools (including data profiling and modelling), techniques, common reference, methods and protocols to identify legacy data issues and to collect and share data and metadata.

I understand and oversee data assessments on an ongoing basis to maintain quality and timeliness (data being readily available).

I understand and advise on the risks and rewards of adopting new approaches to data collection and sharing and the interoperability of that data.

I can share tangible examples of the benefits of data interoperability with the wider team.

gov.uk/guidance/using-open-document-formats-odf-in-your-organisation

gov.uk/government/publications/open-standards-principles/open-standards-principles

gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data

gov.uk/guidance/make-use-of-open-standards

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-impact-assessments/

gov.uk/government/publications/open-standards-for-government



Legacy IT skills, knowledge and capability areas

Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I seek advice from my experts on the importance of data interoperability and file formats for my organisation.

I seek advice from my experts on of the open standards principles of data and how to practically apply the standards for sharing government data when buying or building technology.

I seek advice from my experts on the tools (including data profiling and modelling), techniques, common reference, methods and protocols to identify legacy data issues and to collect and share data and metadata.

I seek advice from my experts on how the data has to be assessed on an ongoing basis to maintain quality and timeliness (data being readily available).

I seek advice from my experts on the risks and rewards of adopting new approaches to data collection and sharing and the interoperability of that data.

I seek advice from my experts and share tangible examples of the benefits of data interoperability with the wider team.

I am aware of the need to use the Government Functional Standards to make sure the right governance structure is in place to allow teams to work with data in a safe and secure way and to keep user needs front and centre.

- gov.uk/guidance/using-open-document-formats-odf-in-your-organisation
- gov.uk/government/publications/open-standards-principles/open-standards-principles
- gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data
- gov.uk/guidance/make-use-of-open-standards
- ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-impact-assessments/
- gov.uk/government/publications/open-standards-for-government
- gov.uk/guidance/digital-data-and-technology-functional-standard-version-1



Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I can direct and enable others on the importance of data interoperability and file formats for my organisation.

I can direct and enable others on the open standards principles of data and how to practically apply the standards for sharing government data when buying or building technology.

I can direct and enable others on the tools (including data profiling and modelling), techniques, common reference, methods and protocols to identify legacy data issues and to collect and share data and metadata.

I can direct and enable others on how the data has to be assessed on an ongoing basis to maintain quality and timeliness (data being readily available).

I can direct and enable others on the risks and rewards of adopting new approaches to data collection and sharing and the interoperability of that data.

I can share tangible examples of the benefits of data interoperability with the wider team.

I make sure that my team has the required data interoperability training and skills for the long-term to do their job to the best of their ability and to address future trends.

I use the Government Functional Standards to make sure the right governance structure is in place to allow teams to work with data in a safe and secure way and to keep user needs front and centre.

gov.uk/guidance/using-open-document-formats-odf-in-your-organisation

gov.uk/government/publications/open-standards-principles/open-standards-principles

gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data

gov.uk/guidance/make-use-of-open-standards

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-impact-assessments/

gov.uk/government/publications/open-standards-for-government

gov.uk/guidance/digital-data-and-technology-functional-standard-version-1



Legacy IT skills, knowledge and capability areas

Follow the data standards, open standards principles of data and data qualification framework for ongoing quality evaluation

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I can lead, direct and enable others on the importance of data interoperability and file formats for my organisation.

I can lead, direct and enable others on the open standards principles of data and how to practically apply the standards for sharing government data when buying or building technology.

I can lead, direct and enable others on the tools (including data profiling and modelling), techniques, common reference, methods and protocols to identify legacy data issues and to collect and share data and metadata.

I can lead, direct and enable others on how the data has to be assessed on an ongoing basis to maintain quality and timeliness (data being readily available).

I can lead, direct and enable others on the risks and rewards of adopting new approaches to data collection and sharing and the interoperability of that data.

I can share tangible examples of the benefits of data interoperability with the wider team.

I make sure that my team has the required data interoperability training and skills for the long-term to do their job to the best of their ability and to address future trends.

I use the Government Functional Standards to make sure the right governance structure is in place to allow teams to work with data in a safe and secure way and to keep user needs front and centre.

- gov.uk/guidance/using-open-document-formats-odf-in-your-organisation
- gov.uk/government/publications/open-standards-principles/open-standards-principles
- gov.uk/government/collections/metadata-standards-for-sharing-and-publishing-data
- gov.uk/guidance/make-use-of-open-standards
- ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/accountability-and-governance/data-protection-impact-assessments/
- gov.uk/government/publications/open-standards-for-government
- gov.uk/guidance/digital-data-and-technology-functional-standard-version-1



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

General awareness	Has an awareness of legacy IT and an appreciation of how it's applied in the environment.	58
Awareness	Has an awareness and knowledge of legacy IT and how it's applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	59
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	60
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	61
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	62
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it's applied in the environment and how others do it.	63
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	64
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	65

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

Level – General awareness

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants

I am aware of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata and how to implement those changes.

I'm aware of how to use data responsibly and ethically when planning and evaluating a new policy or service as informed by the data ethics framework and other tools.

I'm aware of the Data Standards Authority and what they do.

I'm aware of the need to anonymise data when sharing it.

- gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use
- gov.uk/government/publications/data-ethics-framework
- gov.uk/government/groups/data-standards-authority
- ico.org.uk/for-organisations/data-sharing-a-code-of-practice/



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment.
Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have an understanding of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata and how to implement those changes.

I have an understanding of how to use data responsibly and ethically when planning and evaluating a new policy or service as informed by the data ethics framework and other tools.

I know who the Data Standards Authority is and what they do.

I understand the need to anonymise data when sharing it.

I am aware of the risks of data sharing and have a working knowledge of the approaches to risk planning and public acceptability to data sharing.

I have a foundation understanding of the security requirements and legal implications of data sharing.

gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use

gov.uk/government/publications/data-ethics-framework

gov.uk/government/groups/data-standards-authority

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/security/



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand and apply ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata. I understand how to implement those changes.

I know how to use data responsibly and ethically when planning and evaluating a new policy or service as informed by the data ethics framework and other tools.

I know who the Data Standards Authority is and what they do.

I'm aware of the importance and need to anonymise data when sharing it.

I am aware of the risks of data sharing and have knowledge of the approaches to risk planning and public acceptability to data sharing.

I understand the security requirements and legal implications of data sharing.

gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use

gov.uk/government/publications/data-ethics-framework

gov.uk/government/groups/data-standards-authority

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/security/



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a good knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and joining data and its metadata. I understand how to influence, promote and champion a culture for positive change across my organisation.

I have a good knowledge of how to use data responsibly and ethically when planning and evaluating a new policy or service as informed by the data ethics framework and other tools.

I have a good knowledge of who the Data Standards Authority is and what they do.

I have good knowledge of how to anonymise data when sharing it.

I have good knowledge of data sharing, approaches to risk planning and what constitutes good public awareness of data sharing. I have a developed understanding of public acceptability.

I have a good knowledge of the security requirements and legal implications of data sharing.

gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use

gov.uk/government/publications/data-ethics-framework

gov.uk/government/groups/data-standards-authority

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/security/



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand, advise on and apply ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and joining data and its metadata. I influence, promote and champion a culture for positive change across my organisation.

I understand, advise on and oversee the use of responsible and ethical data when planning and evaluating a new policy or service as informed by the data ethics framework and other tools.

I know who the Data Standards Authority is and what they do, and refer others.

I apply, advise on and oversee the sharing of anonymous data.

I am aware of the risks of data sharing. I have deep knowledge of the approaches to risk planning and what constitutes good public awareness of data sharing, as well as a deep understanding of public acceptability.

I have good knowledge of the security requirements and legal implications of data sharing.

gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use

gov.uk/government/publications/data-ethics-framework

gov.uk/government/groups/data-standards-authority

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/security/



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it's applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I'm aware of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata. I endorse, promote and champion a culture for positive change.

I'm aware of how to use data responsibly and ethically when planning and evaluating a new policy or service as informed by the data ethics framework and other tools.

I know who the Data Standards Authority is and what they do, and refer others.

I'm aware of the need to anonymise data when sharing it.

I'm aware of the risks to data sharing, approaches to risk planning and what constitutes good public awareness of data sharing. I have a deep understanding of public acceptability.

I seek advice from my experts to understand security requirements and legal implications of data sharing.

[gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use](https://www.gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use)

[gov.uk/government/publications/data-ethics-framework](https://www.gov.uk/government/publications/data-ethics-framework)

[gov.uk/government/groups/data-standards-authority](https://www.gov.uk/government/groups/data-standards-authority)

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/security/



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I have good knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata.

I direct and empower my experts on how to use data responsibly and ethically when planning and evaluating a new policy or service as informed by the data ethics framework and other tools.

I know who the Data Standards Authority is, what they do and promote this to others.

I have good understanding of the need to anonymise data when sharing it and promote this to others.

I have good understanding of the risks to data sharing, approaches to risk planning and what constitutes good public awareness of data sharing. I have a deep understanding of public acceptability.

I direct and empower my experts to understand the security requirements and legal implications of data sharing.

gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use

gov.uk/government/publications/data-ethics-framework

gov.uk/government/groups/data-standards-authority

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/security/



Improve the knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I lead, direct and enable others to apply a data strategy that addresses good knowledge of the ethical, legal, technical, access and cultural barriers to using, managing, sharing, owning and linking data and its metadata.

I lead, direct and empower my experts on how to use data responsibly and ethically when planning and evaluating a new policy or service as informed by the data ethics framework and other tools.

I know who the Data Standards Authority is and what they do, and advocate this to others.

I understand the need to anonymise data when sharing it and promote this to others.

I have good understanding of the risks to data sharing and approaches to risk planning. I have good understanding of what constitutes good public awareness of data sharing and public acceptability.

I direct and empower my experts to understand security requirements and work with legal teams to ensure clarity in approach and oversight of the strategic direction of data sharing.

gov.uk/government/publications/cdei-publishes-its-first-report-on-public-sector-data-sharing/addressing-trust-in-public-sector-data-use

gov.uk/government/publications/data-ethics-framework

gov.uk/government/groups/data-standards-authority

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/

ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/what-is-personal-data/

ico.org.uk/for-organisations/data-sharing-a-code-of-practice/security/



Reduce operational failure as a result of legacy IT

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	67
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	68
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	69
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	70
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	71
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	72
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	73
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	74

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Reduce operational failure as a result of legacy IT

Level – General awareness

I am aware of potential risks to operational delivery caused by legacy IT, and know how to flag these in my team.
I am aware of good practice to help government design, build and buy technology that reduces operational failure.

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants



Reduce operational failure as a result of legacy IT

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment.
Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I'm aware of and have an understanding of potential risks to operational delivery caused by legacy IT, and know how to flag these in my team.

I am aware of good practice to help government design, build and buy technology that reduces operational failure.



Reduce operational failure as a result of legacy IT

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I know how to identify and mitigate potential risks to operational delivery caused by legacy IT. I know how to flag these in my team and make the case for investment for mitigation.

I apply good practice to help government to design, build and buy technology that reduces operational failure.

I know how to align operational efficiencies alongside service design in line with service assurance.

I'm aware of how to migrate legacy data to a new technology.

I know what to do in the event of operational failures as a result of legacy IT.

gov.uk/guidance/managing-legacy-technology

gov.uk/service-manual/technology/moving-away-from-legacy-systems



Reduce operational failure as a result of legacy IT

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have good understanding of how to identify and mitigate potential risks to operational delivery caused by legacy IT. I know how to flag these in my team and make the case for investment for mitigation.

I apply and encourage others to apply good practice to help government to design, build and buy technology that reduces operational failure.

I have good understanding of how to align operational efficiencies alongside service design in line with service assurance.

I have good understanding of how to migrate legacy data to new technology.

I have good understanding of what to do in the event of operational failures as a result of legacy IT and advise others.

[gov.uk/guidance/managing-legacy-technology](https://www.gov.uk/guidance/managing-legacy-technology)

[gov.uk/government/publications/technology-code-of-practice/technology-code-of-practice](https://www.gov.uk/government/publications/technology-code-of-practice/technology-code-of-practice)

[gov.uk/service-manual/technology/moving-away-from-legacy-systems](https://www.gov.uk/service-manual/technology/moving-away-from-legacy-systems)



Reduce operational failure as a result of legacy IT

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a deep understanding of how to identify and mitigate potential risks to operational delivery caused by legacy IT. I know how to flag these in my team and make the case for investment for mitigation.

I have a deep understanding of the Technology Code of Practice to help government to design, build and buy technology that reduces operational failure.

I oversee the alignment of operational efficiencies alongside service design in line with service assurance.

I have a good understanding of how to migrate legacy data to new technology, and oversee migrations.

I have a good understanding of what to do in the event of operational failures as a result of legacy IT, and am a part of the senior management reporting team.

[gov.uk/guidance/managing-legacy-technology](https://www.gov.uk/guidance/managing-legacy-technology)

[gov.uk/government/publications/technology-code-of-practice/technology-code-of-practice](https://www.gov.uk/government/publications/technology-code-of-practice/technology-code-of-practice)

[gov.uk/service-manual/technology/moving-away-from-legacy-systems](https://www.gov.uk/service-manual/technology/moving-away-from-legacy-systems)



Reduce operational failure as a result of legacy IT

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it's applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I am developing an understanding of how to identify and mitigate potential risks to operational delivery caused by legacy IT. I know how to flag these in my team and make the case for investment for mitigation.

I can anticipate what would happen, and direct my experts to put a process in place to deal with it.

I take advice and advocate to others on how to align potential risks to operational delivery caused by legacy IT. I know how to flag this to my organisation.

I have an awareness of how to align operational efficiencies alongside service design in line with service assurance.

I advocate and seek advice from others on how to migrate legacy data to new technology. I direct and empower others to oversee migration activities for my organisation and across government where appropriate.

I seek advice from my experts on what to do in the event of operational failures as a result of legacy IT.



Reduce operational failure as a result of legacy IT

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I direct and enable others to identify and mitigate potential risks to operational delivery caused by legacy IT. I know how to flag these in my team and make the case for investment for mitigation.

I can anticipate what would happen, and direct my experts to put a process in place to deal with it.

I direct and enable others on how to align potential risks to operational delivery caused by legacy IT, and know how to flag this to my organisation.

I direct and enable others to align operational efficiencies alongside service design in line with service assurance.

I direct and enable others on how to migrate legacy data to new technology. I direct and empower others to oversee migration activities for my organisation and across government where appropriate.

I direct and enable others on what to do in the event of operational failures as a result of legacy IT.



Reduce operational failure as a result of legacy IT

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I lead, direct and enable others to identify and mitigate potential risks to operational delivery caused by legacy IT. I know how to flag these in my team and make the case for investment for mitigation.

I can anticipate what would happen, and direct my experts to put a process in place to deal with it.

I lead, direct and enable others on how to align potential risks to operational delivery caused by legacy IT, and know how to flag this to my organisation.

I lead, direct and enable others to align operational efficiencies alongside service design in line with service assurance.

I lead, direct and enable others on how to migrate legacy data to new technology. I direct and empower others to oversee migration activities for my organisation and across government where appropriate.

I lead, direct and enable others on what to do in the event of operational failures as a result of legacy IT.



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	76
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	77
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	78
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	79
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	80
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	81
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	82
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	83

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

Level – General awareness

I am able to identify legacy IT and I'm aware of how legacy IT costs money and time to my team.

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

Level – Awareness

I'm aware of the legacy IT in my team, and contribute to plans to reduce the cost and time spent on managing legacy IT.
I'm aware that reducing legacy IT costs time and money and of the need to set measurements to mitigate.

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment.
Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I understand what the legacy IT is in my team, and contribute to plans to reduce the cost and time spent on managing legacy IT.
I understand that reducing legacy IT costs time and money and assist in setting measurements to mitigate.



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a good understanding of the legacy IT for my team, and make plans to reduce the cost and time spent on managing legacy IT.

I understand that reducing legacy IT costs time and money and I support the setting of measurements to mitigate.

I am responsible for measuring the time and cost of managing legacy IT to support business cases for sign off.

I have a good understanding of the technical debt associated in managing legacy IT, and put plans in place to reduce time and cost through risk, portfolio and remediation for my team.



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have a good understanding of the legacy IT for my organisation, and oversee continuous improvement planning of existing technology to reduce the cost and time spent on managing legacy IT.

I understand that reducing legacy IT costs time and money and oversee the setting of measurements to mitigate.

I can empower teams to highlight the time and cost of managing legacy IT and translate this into business case sign off.

I am responsible for measuring the time and cost of managing legacy IT to support business cases for sign off.



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I understand how legacy IT costs money and time across my organisation. I understand the need for continuous improvement planning of existing technology to reduce the cost and time spent on managing legacy IT.

I have oversight of the the time and cost of reducing legacy IT for my organisation and take advice on setting measurements to mitigate legacy IT.

I am aware that the improvement to legacy IT will be positive for time and cost but not detrimental to jobs.

I seek advice from my experts on the opportunities to reduce legacy IT and work with experts and commercial to: define a purchasing strategy, build in renewal steps, manage technical lock-in and check that new technology doesn’t become a legacy problem of the future.

I seek advice from my experts on measuring the time and cost of managing legacy IT to support business cases for sign off.



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I have good understanding of how legacy IT costs money and time across government. I have good understanding of the need for continuous improvement planning of existing technology to reduce the cost and time spent on managing legacy IT.

I have oversight of the the time and cost of reducing legacy IT for my organisation and direct and enable others on setting measurements to mitigate legacy IT.

I have good understanding that the improvement to legacy IT will be positive for time and cost but not detrimental to jobs.

I direct and empower others on the opportunities to reduce legacy IT and work with experts and commercial to: define a purchasing strategy, build in renewal steps, manage technical lock-in and check that new technology doesn't become a legacy problem of the future.

I direct and empower others to measure the time and cost of managing legacy IT to support business cases for sign off.



Reduce the time and cost of technical debt in managing legacy IT, through risk and portfolio remediation across team, department and government

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I have a good understanding of how legacy IT costs money and time across government. I have good understanding of the need for continuous improvement planning of existing technology to reduce the cost and time spent on managing legacy IT. I also advocate good practice.

I have oversight of the the time and cost of reducing legacy IT for my organisation and lead, direct and enable others on setting measurements to mitigate legacy IT.

I understand that the improvement to legacy IT will be positive for time and cost but not detrimental to jobs, and advise others.

I lead, direct and empower others on the opportunities to reduce legacy IT and work with experts and commercial to: define a purchasing strategy, build in renewal steps, manage technical lock-in and check that new technology doesn't become a legacy problem of the future.

I lead, direct and empower others to measure the time and cost of managing legacy IT to support business cases for sign off.



Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

General awareness	Has an awareness of legacy IT and an appreciation of how it’s applied in the environment.	85
Awareness	Has an awareness and knowledge of legacy IT and how it’s applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.	86
Working	Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.	87
Practitioner	Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.	88
Expert	A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.	89
Leadership Developing	Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.	90
Leadership Proficient	Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.	91
Leadership Accomplished	Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.	92

The skill levels illustrated tell you about the level of expertise required across four skill levels: awareness, working, practitioner and expert. For leadership, there are three skill levels: developing, proficient and accomplished.



Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

Level – General awareness

Description of level

Has an awareness of legacy IT and an appreciation of how it's applied in the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, or cross-functional role
- ◆ all civil servants who are not Senior Civil Servants

I am aware of the following good practice to build and design digital services that move away from legacy IT: spend controls and service assurance, Technology Code of Practice, the Service Standard and service manual.

I have an awareness of the legacy IT risk and remediation measures associated with portfolio and pipeline spending.



Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

Level – Awareness

Description of level

Has an awareness and knowledge of legacy IT and how it's applied in the environment. Applies knowledge of legacy IT including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, associate or junior role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I am aware of the following good practice to build and design digital services that move away from legacy IT: spend controls and service assurance, Technology Code of Practice, the Service Standard, Government Commercial Operating Standards and the service manual.

I am aware of legacy IT risk and remediation measures associated with portfolio and pipeline spending.

I am aware of the importance of IT assets and asset management for organisations, to ensure they have a comprehensive and structured approach to identifying and tackling legacy IT in their Digital, Technology and Commercial portfolio.

I am aware of the strategies that help prevent legacy IT from arising in government digital and technology portfolios.

I am aware of the need to undertake continuous service improvements to ensure assets do not become legacy.



Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

Level – Working

Description of level

Applies knowledge and manages legacy IT implementation including tools and techniques, adopting those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational or management role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I apply the following good practice to build and design digital services that move away from legacy IT: spend controls and service assurance, Technology Code of Practice, the Service Standard, Government Commercial Operating Standards and the service manual.

I am aware of and apply legacy IT risk and remediation measures associated with portfolio and pipeline spending.

I understand the importance of IT assets and asset management for organisations to ensure they have a comprehensive and structured approach to identifying and tackling legacy IT in their Digital, Technology and Commercial portfolio.

I understand and apply strategies that help prevent legacy IT from arising in government digital and technology portfolios.

I understand and undertake continuous service improvements to ensure assets do not become legacy.



Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

Level – Practitioner

Description of level

Shares knowledge and experience of legacy IT with others, including tools and techniques, defining those most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, senior or lead role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I have good knowledge of how to interpret and apply the following good practice to build and design digital services that move away from legacy IT: spend controls and service assurance, Technology Code of Practice, the Service Standard, Government Commercial Operating Standards and the service manual.

I advise and support spending teams on legacy IT risk and remediation measures associated with portfolio and pipeline spending.

I have a good understanding the importance of IT assets and asset management for organisations to ensure they have a comprehensive and structured approach to identifying and tackling legacy IT in their Digital, Technology and Commercial portfolio.

I have a good understanding of the strategies that help prevent legacy IT from arising in government digital and technology portfolios.

I have good knowledge of how to undertake continuous service improvements to ensure assets do not become legacy.



Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

Level – Expert

Description of level

A recognised specialist and advisor in legacy IT who has knowledge and experience in application in this capability. Leads or guides others in the application of good practice of methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in an operational, managerial, head or principal role in the Digital, Data and Technology profession or across the following job families:
 - ◆ Technical
 - ◆ Product and Delivery
 - ◆ Quality and Assurance
 - ◆ IT Operations
 - ◆ Data
 - ◆ User Centered Design

I apply and advise on the following good practice to build and design digital services that move away from legacy IT: spend controls and service assurance, Technology Code of Practice, the Service Standard, Government Commercial Operating Standards and the service manual.

I advise and support spending teams and Digital, Data and Technology colleagues across my organisation on legacy IT risk and remediation measures associated with portfolio and pipeline spending.

I have a good understanding the importance of IT assets and asset management for organisations to ensure they have a comprehensive and structured approach to identifying and tackling legacy IT in their Digital, Technology and Commercial portfolio.

I understand, apply and oversee the implementation of strategies that help prevent legacy IT from arising in government digital and technology portfolios.

I oversee the application of continuous service improvements to ensure assets do not become legacy.



Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

Level – Leadership Developing

Description of level

Seeks knowledge of legacy IT with an appreciation of how it’s applied in the environment and how others do it.

Types of user

For example:

- ◆ those working in a leadership or managerial role
- ◆ Senior Civil Servants who are not in the Digital, Data and Technology profession and who work across other functions

I am aware of the following good practice to build and design digital services that move away from legacy IT: spend controls and service assurance (including undertaking portfolio assurance), Technology Code of Practice, the Service Standard and the Government Commercial Operating Standards. I ensure my team has the right level of knowledge and experience relevant to their roles, to be aware of and/or to apply these standards.

I am able to oversee the setting up a digital and technology pipeline and other pipelines to request spending approval for portfolio spending items (both below and above £10 million).

I seek advice from my experts to ensure that new online services have continuous improvement plans to avoid becoming legacy.

I seek advice on how to drive out legacy where there are financial, operational and policy pressures that result in legacy remaining. I also seek advice to prevent new services and technology from inheriting legacy IT problems or challenges in the future.

I empower and support others to identify, evaluate, design and deliver remediation measures to be applied within the portfolio, to help reinforce the importance of tackling legacy IT.

I seek advice and support colleagues across my organisation on legacy IT risk and remediation measures associated with portfolio and pipeline spending.

I seek advice from others on the importance of IT assets and asset management for organisations to ensure they have a comprehensive and structured approach to identifying and tackling legacy IT in their Digital, Technology and Commercial portfolio.

I support and endorse others to apply strategies that help prevent legacy IT from arising in government digital and technology portfolios.

I support and endorse others to undertake continuous service improvements to ensure assets do not become legacy.

[gov.uk/guidance/set-up-a-commercial-or-digital-and-technology-spend-controls-pipeline](https://www.gov.uk/guidance/set-up-a-commercial-or-digital-and-technology-spend-controls-pipeline)

[gov.uk/guidance/managing-legacy-technology](https://www.gov.uk/guidance/managing-legacy-technology)



Legacy IT skills, knowledge and capability areas

Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

Level – Leadership Proficient

Description of level

Leads, oversees and manages specialists and advisors in legacy IT, enabling others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those working in a leadership or managerial role; both within and outside the Digital, Data and Technology Profession
- ◆ Senior Civil Servants who work across other functions

I direct and empower others to use the following good practice to drive out legacy IT in my solutions and business case work: Technology Code of Practice, the Service Standard and Government Commercial Operating Standards. I encourage leadership to take a strong line on legacy IT.

I direct and empower the setting up of the digital and technology pipeline and commercial pipeline.

I direct and enable others to ensure that new online services have continuous improvement plans to avoid becoming legacy.

I act as an advocate to driving out legacy IT where there are financial, operational and policy pressures that result in legacy IT remaining, and to prevent new services and technology from inheriting legacy IT problems or challenges in the future.

I direct and enable others across my organisation on legacy IT risk and remediation measures associated with portfolio and pipeline spending.

I direct and enable others on the importance of IT assets and asset management for organisations to ensure they have a comprehensive and structured approach to identifying and tackling legacy IT in their Digital, Technology and Commercial portfolio.

I direct and enable others to apply strategies that help prevent legacy IT from arising in government digital and technology portfolios.

I direct and enable others to undertake continuous service improvements to ensure assets do not become legacy.



Improve outcomes for government IT governance, portfolio (spend, standards, service and commercial) assurance, spend and service users

Level – Leadership Accomplished

Description of level

Leads, drives and directs specialists and advisors in legacy IT, guiding and overseeing others in the application of good practice methods, tools and techniques most appropriate for the environment.

Types of user

For example:

- ◆ those who work in leadership or managerial roles within the Digital, Data and Technology Profession and are Senior Civil Servants

I direct, empower and enable others to apply the following good practice to support leadership and to advise across my department and across government: Technology Code of Practice, the Service Standard and Government Commercial Operating Standards.

I lead, direct and empower the setting up of the digital and technology pipeline and commercial pipeline.

I lead, direct and enable others to ensure that new online services have continuous improvement plans to avoid becoming legacy.

I act as an advocate to driving out legacy where there are financial, operational and policy pressures that result in legacy remaining, and to prevent new services and technology from inheriting legacy IT problems or challenges in the future.

I lead, direct and empower others across my organisation on legacy IT risk and remediation measures associated with portfolio and pipeline spending.

I lead, direct and empower others on the importance of IT assets and asset management for organisations to ensure they have a comprehensive and structured approach to identifying and tackling legacy IT in their Digital, Technology and Commercial portfolio.

I lead, direct and enable others to apply strategies that help prevent legacy IT from arising in government digital and technology portfolios.

I lead, direct and empower others to undertake continuous service improvements to ensure assets do not become legacy.

