



SFIA defines the skills and competencies required by professionals who design, develop, implement, manage and protect the data and technology that power the digital world.

SFIA and Digcomp

Using together to support pathways into
in-demand jobs

Agenda:

- Introduction
(Lisa Howdin)
- General Frameworks with SFIA
(Ian Seward)
- DigComp
(Jude Cosgrove)
- SFIA
(Ian Seward)
- DigComp & SFIA together

Introductions:

- Lisa Howdin
Capability Architect,
Australia Public Service Commission
- Jude Cosgrove
Joint Research Centre,
European Commission
- Ian Seward
The SFIA Foundation

It is rare that one framework, alone, can satisfy all your needs

Consider the context for your use

So ... it is likely you will draw on more than one framework

Consider pragmatic ways for frameworks to be Complementary

It's about ... equivalence / interoperability / alignment / complementing / usefulness:

- Frameworks are generally not equivalent ...
 - But ... Frameworks can work together and complement each other for capability development
 - We often even use the same words ... but rarely share the same meaning
 - **You really do have to look deep within the frameworks**
- A framework developed for one purpose is *usually not* useful for a different purpose
- Different types of frameworks – different uses

• Occupational Classification Frameworks	• Workplace Skills & Competency Frameworks
• (Educational) Qualification Frameworks	• Role Frameworks
• Certification Frameworks	• Career Path Frameworks
• Membership Frameworks	• Knowledge Frameworks

... but frameworks can work together to achieve some aim

SFIA & DigComp

DigComp: V1.0 : V2.0 (2016) : **V2.2 (2022)** : V3 (due 2025)

SFIA: V1 (2000) : V2 : V3 : **V9 (2024)** : V10 (2027)

DigComp

Jude Cosgrove



DigComp in 15 minutes

Jude Cosgrove, Joint Research Centre, European Commission



Overview



What is DigComp and who is it for?

How is it used?

How is the framework organised?

What is new in the latest version, DigComp 3.0?

Joint Research Centre

Science at the service of EU policies



ANTICIPATION



INTEGRATION



IMPACT

Our purpose

The JRC provides independent, evidence-based knowledge and science, supporting European Union policies to have a positive impact on society

Overview



European digital competence framework – knowledge, skills and attitudes from basic through to highly advanced

2013, 2016, 2017, 2022, 2025

For anyone who wants to identify and understand digital competence needs and support their development

Policymakers, employers, employment services, education and training leaders and practitioners, researchers and academics...

Non-prescriptive and technology-neutral

Overview



Used in a majority of EU countries and beyond, by international and European level organisations in education, training and employment settings

Used to

- guide digital skills policies
- develop or revise education and training content
- develop assessments
- enhance transparency or comparability of education and training courses
- recognise or validate learning (such as through digital skills certification)
- define profiles of digital competence in specific jobs or roles...



Ten Years of DigComp: A Framework more essential than ever

2025

HIGHLIGHTS

Developed by the European Commission's Joint Research Centre (JRC), **DigComp is the European framework for defining the knowledge, skills, and attitudes needed to engage confidently, critically, and responsibly with digital technologies** for learning, at work, and for participation in society. First published in 2013, it remains a cornerstone for digital skills development in learning, employment, and civic participation. Its **upcoming** iteration, **DigComp 3.0**, will be published in 2025, further adapting to emerging challenges such as AI, cybersecurity, misinformation, digital rights, and wellbeing.

DigComp's influence spans employment, education, and training digital skills initiatives across the EU, with adoption in at least 22 Member States, used as a basis or guide for 27 digital skills certification schemes in 25 countries, and also showing substantial academic impact. It supports key EU policies, including the Digital Decade Policy Programme and the Union of Skills, and is developed and implemented through extensive expert and stakeholder consultation and a Community of Practice.

This policy brief outlines **DigComp's adoption and key applications in education, training and employment contexts**, illustrated by research and use cases. It highlights how the framework continues to evolve to address rapid technological and societal changes, ensuring its relevance in an increasingly digital world.

To maximise DigComp's potential, **policymakers should** raise awareness of DigComp's relevance and usability, ensuring its integration into EU-wide digital skills policies; promote DigComp 3.0 adoption to foster digital skills development in response to current and future challenges; and plan for regular updates to the framework, leveraging stakeholder collaboration to align with technological advancements and societal needs. By doing so, **the EU can strengthen its digital transformation and skills ecosystem and empower citizens** to thrive in the digital age.

Forthcoming JRC policy brief (later this month)

- DigComp's adoption and key applications in education, training and employment contexts
- Illustrated by research and use cases
- Demonstrates how the framework's relevance is maintained, and growing

<https://publications.jrc.ec.europa.eu/repository/handle/JRC143430>

Definition: knowledge, skills and attitudes needed for *the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society.*

Competence areas

Competences

Proficiency levels



- 1.1 Browsing, searching, filtering
- 1.2 Evaluating
- 1.3 Managing



- 2.1 Interacting
- 2.2 Sharing
- 2.3 Engaging citizenship
- 2.4 Collaborating
- 2.5 Digital behaviour
- 2.6 Digital identity



- 3.1 Developing
- 3.2 Integrating and re-elaborating
- 3.3 Copyright and licenses
- 3.4 Computational thinking and programming



- 4.1 Devices
- 4.2 Personal data and privacy
- 4.3 Wellbeing
- 4.4 Environment



- 5.1 Technical problems
- 5.2 Needs and technological responses
- 5.3 Creative solutions
- 5.4 Digital competence needs

Basic

Intermediate

Advanced

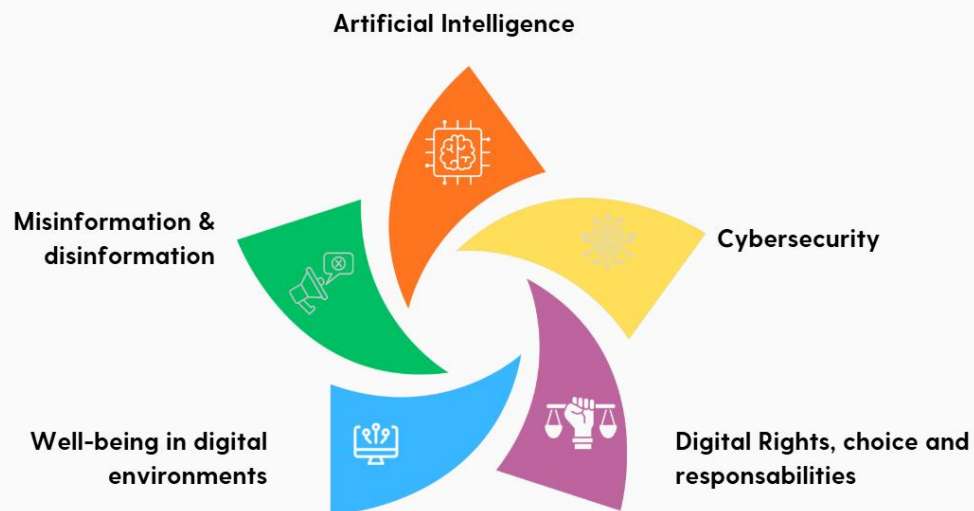
Highly advanced

DigComp 3.0 priorities and updates



Update balances **continuity** with DigComp 2.2 and **changes** to reflect developments since 2022

Priority themes



Structure

Changes to existing components: overall structure maintained



AI Competence

Systematic, transversal integration of AI competence



New Learning Outcomes

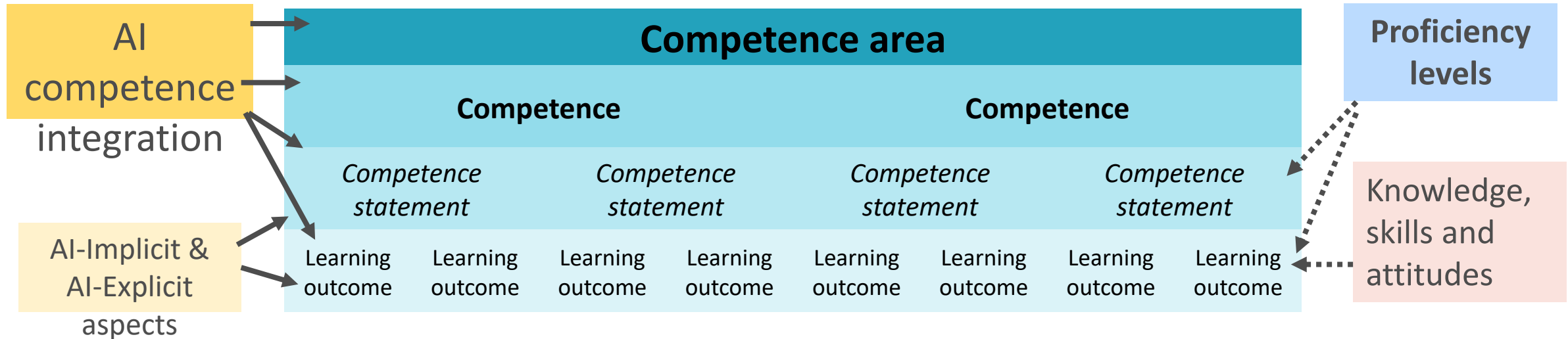
Short statements of what someone knows, understands or is able to do



Format

More flexible framework format

How DigComp 3.0 components come together



Publication of DigComp 3.0 – a collaborative effort



End of November 2025

- PDF
- Linked open dataset and spreadsheet versions
- Easy-to-understand web space

https://joint-research-centre.ec.europa.eu/projects-and-activities/education-and-training/digital-transformation-education/digital-competence-framework-citizens-digcomp_en

Thank you



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SFIA

Ian Seward

Independent Global Not-for-Profit Foundation – *driven by employers:*

- A true not for profit
- Lean Foundation
- Mobilise volunteers
- Altruistic aims
- Maintain the SFIA Framework
- Support the global ecosystem
- Enable the global community

Purpose

To enable greater capability and capacity within the global digital workforce

1. Active stewardship of the global skills and competency framework and its ecosystem to meet the needs of professionals and employers

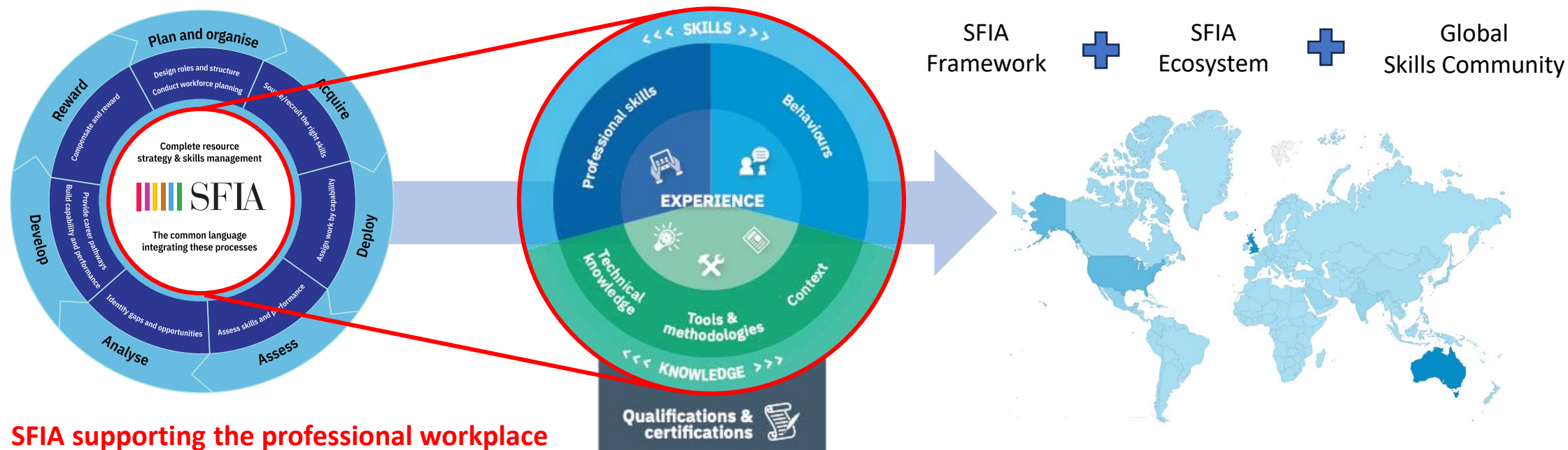
2. Increase visibility and adoption of SFIA globally

3. Facilitate effective use and consumption of SFIA via an engaged community and supporting ecosystem

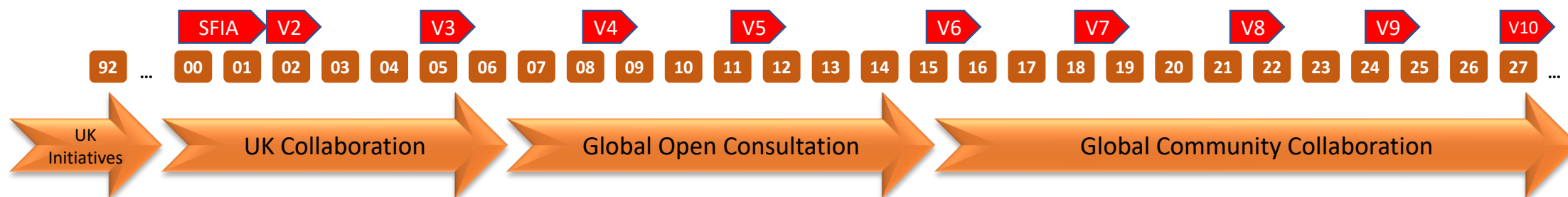
4. Ensure sufficient and sustainable funding to deliver the strategic imperatives

*... all SFIA use is under a licence – the vast majority of use by organisations and individuals for their own skills development is free-of-charge
... all commercial use incurs a modest licence fee*

SFIA's focus has always been supporting the professional workplace ...



SFIA supporting the professional workplace



25-Year Track Record and Sustainability → framework integrity, reliability, confidence and trust ...

... the global common reference model for skills and competency built by employers for employers!

SFIA addresses performing skills in the professional workplace:

SFIA 9 Summary Chart

Strategy and architecture							
Strategy and planning							
Strategic planning	ITSP	1	2	3	4	5	6
Information systems coordination	ISCO						7
Information management	IMMG						7
Enterprise and business architecture	STPL						7
Solution architecture	ARCH						7
Innovation management	INOV						7
Emerging technology monitoring	EMMG						7
Formal research	RSCH						7
Sustainability	SUST						7
Financial and value management							
Financial management	FMIT	1	2	3	4	5	6
Investment appraisal	INVA						7
Benefits management	BENM						7
Budgeting and forecasting	BUDF						7
Financial analysis	FINAN						7
Cost management	COMG						7
Demand management	DEMM						7
Measurement	MEAS						7
Security and privacy							
Information security	SCIV	1	2	3	4	5	6
Information assurance	INAS						7
Information and data compliance	PEDP						7
Vulnerability research	VURE						7
Threat intelligence	THIN						7
Governance, risk and compliance							
Governance	GOVN	1	2	3	4	5	6
Risk management	BURM						7
Artificial intelligence (AI) and data ethics	AIDE						7
Audit	AUDT						7
Quality management	QUMG						7
Quality assurance	QUAS						7
Advice and guidance							
Consultancy	CNSL	1	2	3	4	5	6
Specialist advice	TECH						7
Methods and tools	METH						7

Change and transformation							
Change implementation							
Portfolio management	POMG	1	2	3	4	5	6
Programme management	PGMG						7
Project management	PRMG						7
Portfolio, programme and project support	PROF						7
Delivery management	DEMG						7
Change analysis							
Business situation analysis	BUSA	1	2	3	4	5	6
Feasibility assessment	FEAS						7
Requirements definition and management	REQM						7
Business modelling	BSMO						7
User acceptance testing	BPTS						7
Change planning							
Business process improvement	BPIE	1	2	3	4	5	6
Organisational capability development	OCOV						7
Job analysis and design	JADN						7
Organisation design and implementation	ORDI						7
Organisational change management	OCPM						7
Organisational change enablement	OCEN						7

Development and implementation							
Systems development							
Product management	PROD	1	2	3	4	5	6
Systems development management	SDMG						7
Systems and software lifecycle engineering	SLEN						7
Systems design	DESN						7
Software design	SWDN						7
Network design	NTDS						7
Infrastructure design	IFDN						7
Hardware design	HWDE						7
Programming/software development	PROG						7
Systems integration and build	SINT						7
Functional testing	TEST						7
Non-functional testing	NFTS						7
Process testing	PRTS						7
Software configuration	PORT						7
Real-time/embedded systems development	RESO						7
Safety engineering	SFEN						7
Safety assessment	SFAS						7
Radio frequency engineering	RFEEN						7
Animation development	ADEV						7

Data and analytics							
Data management	DATM	1	2	3	4	5	6
Data modelling and design	DTAN						7
Database design	DBDS						7
Data analytics	DAAN						7
Data science	DATS						7
Machine learning	MLNG						7
Business intelligence	BSINT						7
Data engineering	DENG						7
Data visualisation	DATA						7

User centred design							
User research	URCH	1	2	3	4	5	6
Customer experience	CEXP						7
Accessibility and inclusion	ACIN						7
User experience analysis	UNAN						7
User experience design	UCV						7
User experience evaluation	USEV						7

Content management							
Content design and authoring	INCA	1	2	3	4	5	6
Content publishing	ICPM						7
Knowledge management	KNOW						7
Graphic design	GRDN						7
Computational science							
Scientific modelling	SCMO	1	2	3	4	5	6
Numerical analysis	NUAN						7
High-performance computing	HPCC						7

People and skills							
People management							
Performance management	PEMT	1	2	3	4	5	6
Employee experience	EEOP						7
Organisational facilitation	OFCL						7
Professional development	PDSV						7
Workforce planning	WPFL						7
Resourcing	RESC						7
Skills management							
Learning and development management	ETMG	1	2	3	4	5	6
Learning design and development	TMCN						7
Learning delivery	ETOL						7
Competency assessment	LEDA						7
Certification scheme operation	CSOP						7
Teaching	TEAC						7
Subject formation	SUBF						7

The global skills and competency framework for the digital world

Delivery and operation							
Technology management							
Technology service management	ITMG	1	2	3	4	5	6
Application support	ASUP						7
Infrastructure operations	ITOP						7
System software administration	SYSP						7
Network support	NTAS						7
Systems installation and removal	HSIN						7
Configuration management	CTMG						7
Release management	RELM						7
Deployment	DEPL						7
Storage management	STMG						7
Facilities management	DCMA						7
Service management							
Service level management	SLMO	1	2	3	4	5	6
Service catalogue management	SCMG						7
Availability management	AVMT						7
Continuity management	COPL						7
Capacity management	CPMG						7
Incident management	USUP						7
Problem management	PBMG						7
Change control	CHMG						7
Asset management	ASMG						7
Service acceptance	SEAC						7
Security services							
Security operations	SCAO	1	2	3	4	5	6
Identity and access management	IAMT						7
Vulnerability assessment	VUAS						7
Digital forensics	DGFS						7
Cybercrime investigation	CCIM						7
Offensive cyber operations	OCOP						7
Penetration testing	PENT						7
Data and records operations							
Records management	RMGT	1	2	3	4	5	6
Analytical classification and coding	ANCC						7
Database administration	DBAD						7

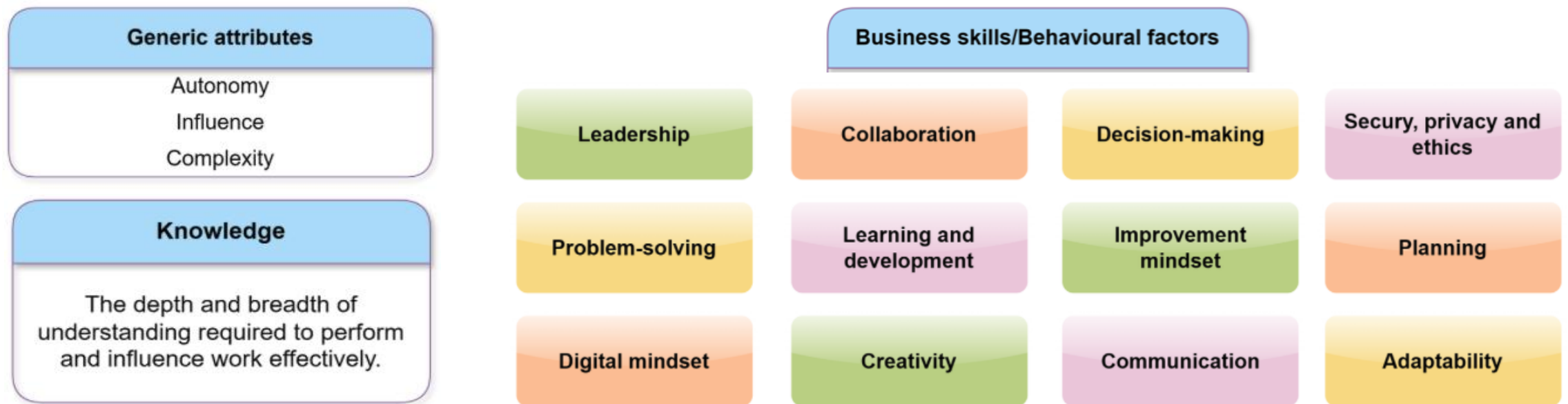
Relationships and engagement							
Stakeholder management							
Sourcing	SORC	1	2	3	4	5	6
Supplier management	SUPP						7
Contract management	ITCM						7
Stakeholder relationship management	RLMT						7
Customer service support	CSMG						7
Business administration	ADMN						7
Sales and bid management							
Bid/proposal management	BIDM	1	2	3	4	5	6
Selling	SALE						7
Sales support	SSUP						7
Marketing							
Marketing management	MKTG	1	2	3	4	5	6
Market research	MRCH						7
Brand management	BRMG						7
Customer engagement and loyalty	CCEO						7
Marketing campaign management	MRCH						7
Digital marketing	DIGM						7

SFIA defines the skills and competencies required by professionals who design, develop, implement, manage and protect the data and technology that power the digital world.

SFIA 9:

- 147 Professional Skills across the breadth of professional (digital) work
- So ... not just an 'IT' Framework
 - Not even just 'digital'

SFIA addresses the behaviours and attributes to be effective in the professional workplace:



SFIA 9: Generic Attributes

- Autonomy, Influence, Complexity
- Knowledge
- Business Skills / Behavioural Factors

SFIA integrates the professional skills and generic attributes into a framework of levels of responsibility reflecting the professional workplace:

SFIA Levels of responsibility	SFIA Level 1 Follow	SFIA Level 2 Assist	SFIA Level 3 Apply	SFIA Level 4 Enable	SFIA Level 5 Ensure, advise	SFIA Level 6 Initiate, influence	SFIA Level 7 Set strategy, inspire, mobilise
SFIA's attributes of Autonomy, Influence and Complexity are the key to determining level of impact, responsibility and accountability. Click the SFIA level to find the details.	Follows instructions, completes routine tasks under close supervision, and requires guidance. Learns and applies basic skills and knowledge.	Assists and supports others, works under routine supervision, and uses discretion to solve routine problems. Actively learns through training and on-the-job experiences.	Performs varied tasks, including complex and non-routine, using standard methods. Plans and manages own work, exercises discretion, and meets deadlines. Proactively enhances skills and impact in the workplace.	Performs diverse complex activities, supports and guides others, delegates tasks when appropriate, works autonomously under general direction, and contributes expertise to deliver team objectives.	Provides authoritative guidance in their field and works under broad direction. Accountable for delivering significant work outcomes, from analysis through execution to evaluation.	Influences the organisation significantly, makes high-level decisions, shapes policies, demonstrates thought leadership, fosters collaboration, and accepts accountability for strategic initiatives and outcomes.	Determines overall organisational vision and strategy, operates at the highest level, and assumes accountability for overall success.

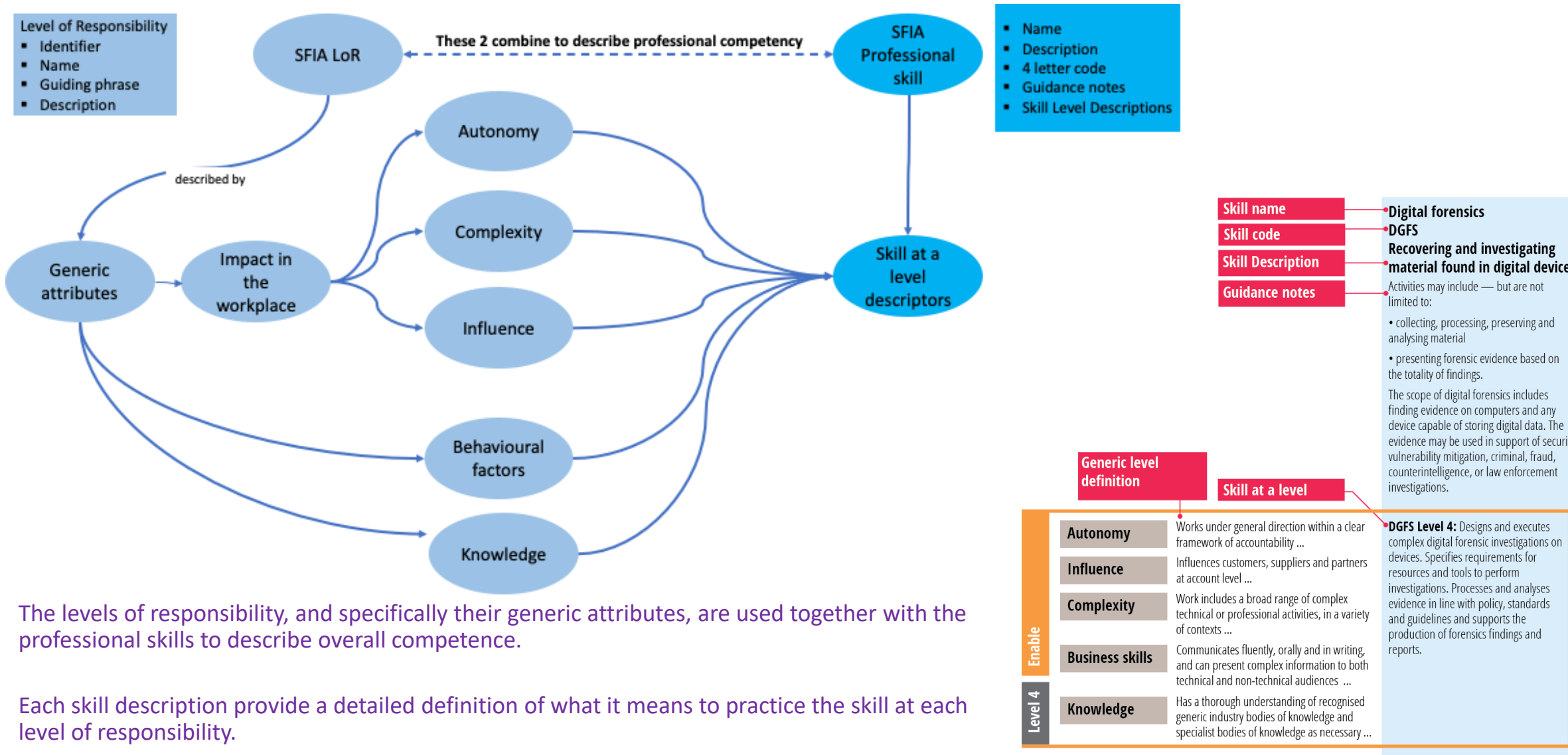
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www.sfia-online.org

SFIA: 7 Levels of Responsibility that reflect **impact** in the professional workplace

SFIA focusses on professional responsibilities – rather than individual personal competencies

SFIA – Bringing it all together



The levels of responsibility, and specifically their generic attributes, are used together with the professional skills to describe overall competence.

Each skill description provide a detailed definition of what it means to practice the skill at each level of responsibility.

SFIA & DigComp

Supporting pathways into in-demand jobs

So which framework?

So ... which one ?

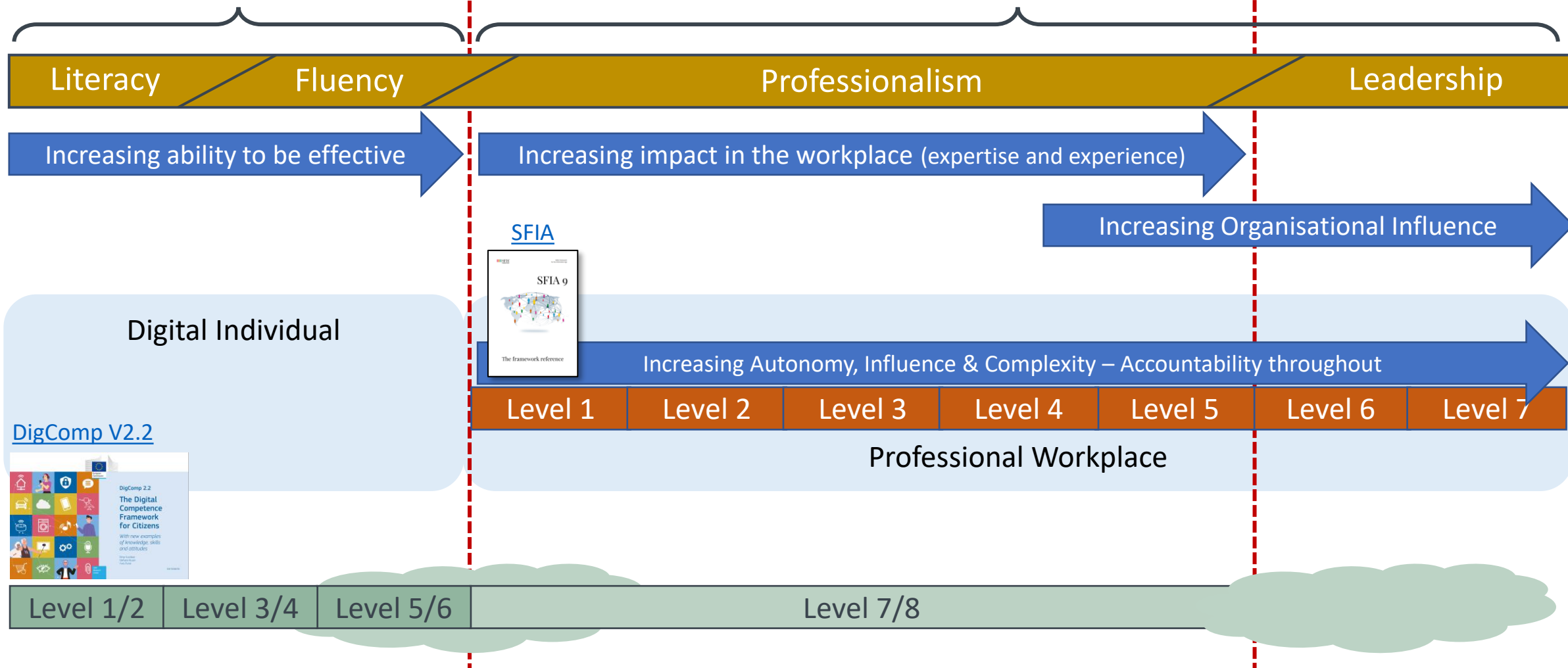
Rarely an OR ... More likely an AND

Exploring how these two frameworks can work together ...

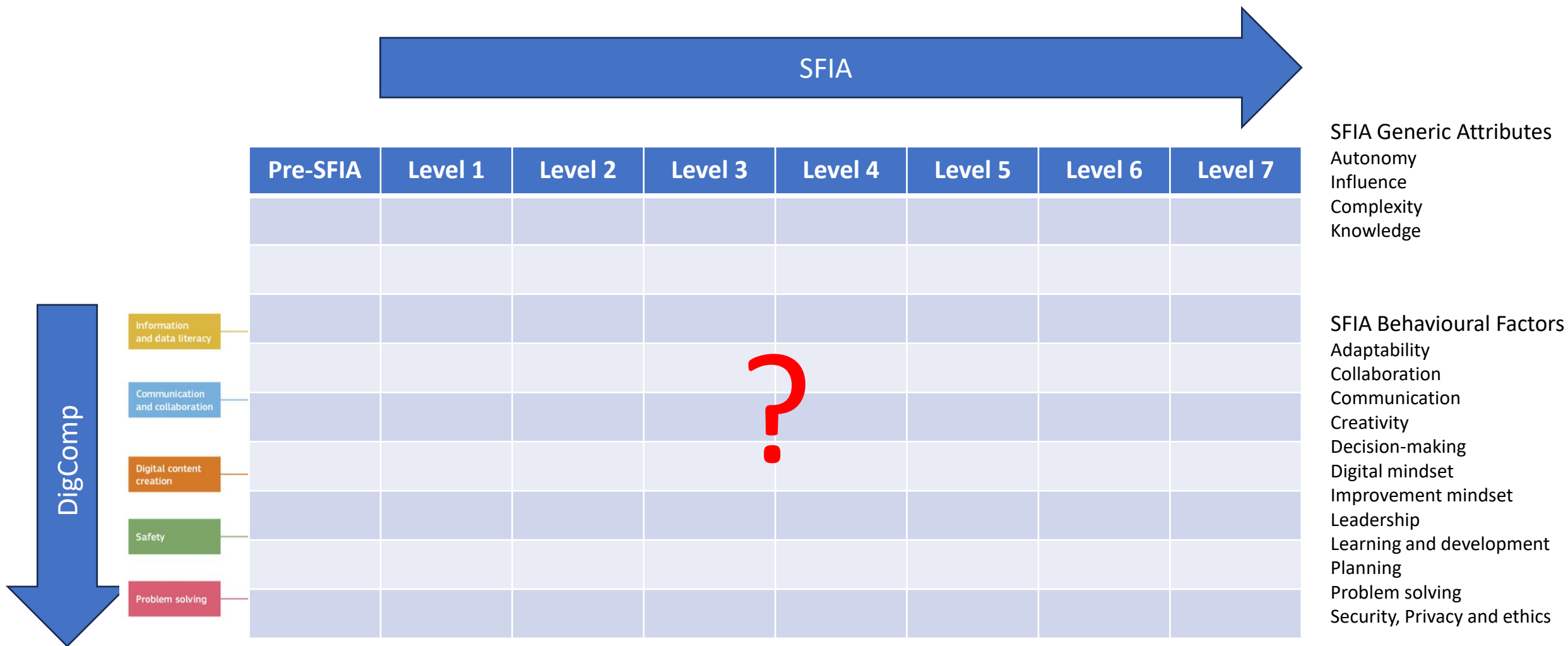
Capability spectrum

Generalisms

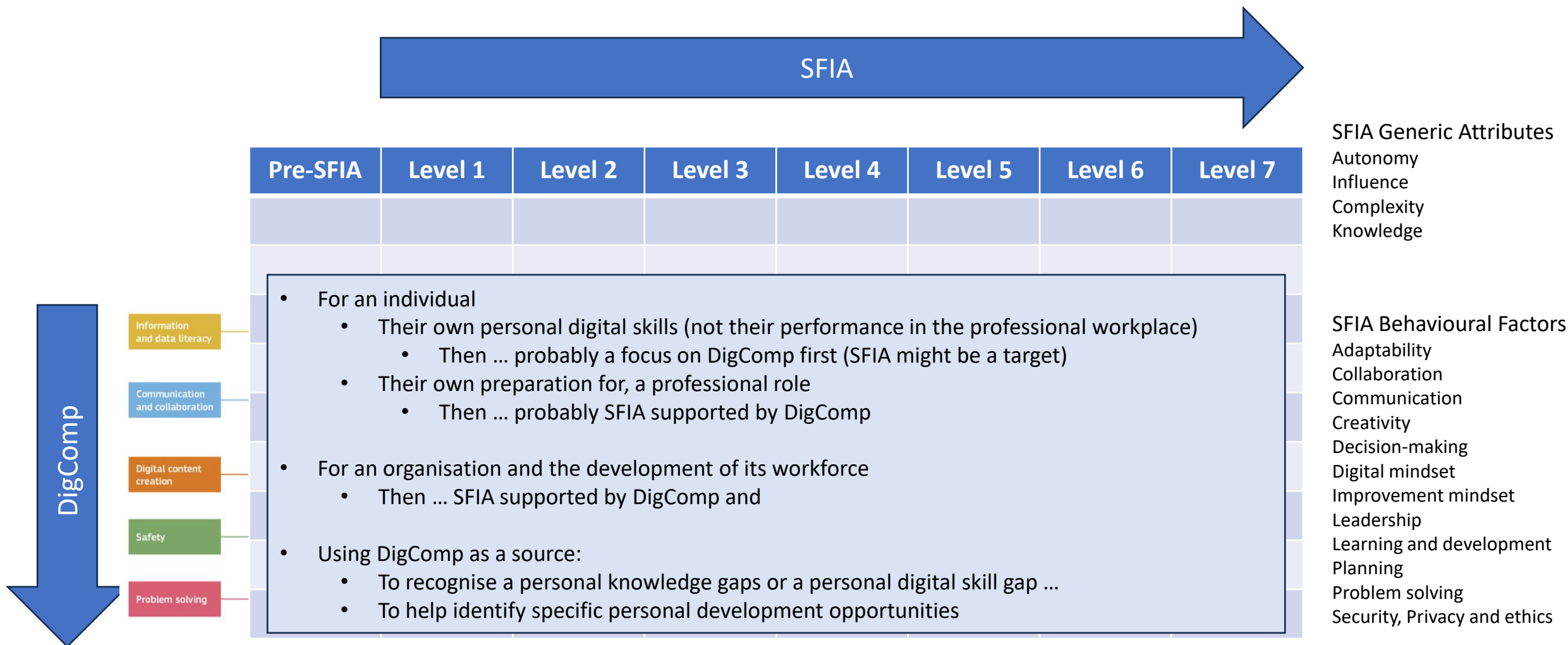
Specialisms



- DigiComp ‘Competencies’ ... Orthogonal to SFIA ‘Skills’



- DigiComp ‘Competencies’ ... Orthogonal to SFIA ‘Skills’



1. NOW ... opportunity for SFIA & DigComp to continue to exchange ideas
2. DigComp V3.0 due this month (current V2.2)
 - We will look again when published
3. SFIA (current V9)
 - SFIA 10 will be published in 2027
 - It's built by you, so have your say – first workshop on Friday
4. And ...
 - Tell us how you are using frameworks together
 - What issues are you encountering and how could we help



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