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Skills Framework for the Information Age (SFIA®)

Presenter : Susan Bailey Principal Lecturer & Field Chair Information Sciences (ISc) University of Northampton. Cert Ed. MSc. CITP. Chartered Fellow BCS.

Course leader MSc and PG Cert in IT Service Management. Trained in ITIL and SFIA® accredited .

Worked in IT industry for 40 years

Member of SFIA® Council
Northamptonshire Branch Member of Chartered Institute for IT (BCS).

Member itSMF and the itSMF Qualifications & Certification Executive Steering Committee
Vice Chairman of the itSMF Special Interest Group (SIG) for Education.



What is SFIA®

- It stands for “The Skills Framework for the Information Age ”
- It is a “High level competency framework describing the skills needed by IT professionals; adopted Worldwide by industry and Government, including UK Government”
- It is presented as a two-dimensional framework defining responsibility on one axis and areas of work on the other
- Its purpose is to provide “a standardised view of the wide range of professional skills needed by people working in Information Technology (IT)”
- Currently at version SFIA® v4G but latest release will be **SFIA®v5 in September 2011 which will be available in Spanish before the end of the year.**

Vital links and facts about SFIA®

- A Spanish translation of the SFIA® framework is available through this link : http://www.SFIA.cl/access_framework/index.shtml
- A Spanish version of the chart is available at: [SFIA_A3_chart_v4_Spanish.pdf](#)
- Hard copies of these two documents are available and there is a complete SFIA® Spanish website at : <http://www.SFIA.cl/>
- SFIA® was devised and completed in 2000 and launched at the DTI conference in 2001
- It is was adopted by UK government and large organisations
- Now being adopted globally



Who helped create it ?

30 key organisations helped to devise SFIA® including representatives from :

- The British Computer Society (now The Chartered Institute for IT)
- Department for Education and Employment
- Department of Trade and Industry
- IBM
- Fujitsu Services
- Microsoft
- National Computing Centre (NCC)
- Oracle
- The Post Office

Why invent SFIA®?

SFIA® was devised as a way of providing :

- ✓ Right People
- ✓ Right Skills
- ✓ Right Place
- ✓ Right Time

How is this
achieved
using SFIA®
?





Why do organisations adopt SFIA®?

- SFIA® provides a common reference model of roles that exist in IT and the skills needed to perform them
- It has industry-wide recognition and is implemented by organisations such as Unilever, HM Customs and Excise , AVIVA, European Central Bank, Rolls–Royce, UK Government and Border Agency
- It is a consistent and evolving framework of skills used for defining job roles in the workplace, skills gap analysis , personal development, succession planning. It allows employers to measure the skills they have against the skills they need and identify skill gaps
- It quantifies the skills of the IT labour market and allows employers to formulate more accurate job descriptions
- SFIA®plus* product provides supporting information

*Available through The Chartered Institute of IT (BCS)
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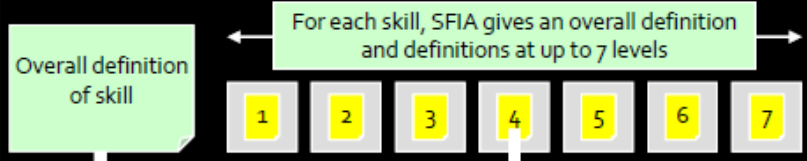
WHAT IS SFIaPlus ?



SFIaPlus provides additional information resources



90 skills and 7 levels



for each skill ...

for each level of the skill ...

- Related SFIA skills
- Technical overview
- Careers & jobs
- Professional bodies
- Standards, Codes of Practice
- Communities and Events
- Publications & Resources
- Training, development & qualifications overview

- Background
- Work activities
- Knowledge
- Training activities
- Qualifications
- Professional Development Activities



What is the Global appeal of SFIA®?

- A wide range of countries have adopted SFIA® including AUSTRALIA, CHILE, BELGIUM, ITALY, JAPAN, GERMANY, NEW ZEALAND, CROATIA, UNITED ARAB EMIRATES because it is an 'off the shelf' framework that is easy to understand, adopt and adapt.
- The SFIA® framework is available FREE upon registration –OVER 25,000 COPIES IN OVER 100 COUNTRIES HAVE BEEN PROVIDED SO FAR
- Translation is provided in SPANISH, GERMAN, JAPANESE AND MANDARIN CHINESE
- SFIA® is regularly reviewed and updated to reflect current industry needs



Stakeholders of SFIA®

THE SFIA® COUNCIL HAS REPRESENTATIVES FROM

THE CHARTERED INSTITUTE FOR IT (BCS)
 CABINET OFFICE
 DTI
 E-SKILLS UK
 HERTFORDSHIRE CC
 IBM
 THE IET
 IKM
 IMIS
 IRISH COMPUTER SOCIETY
 ITSMF
 MICROSOFT TRAINING ARENA
 NORTH CORNWALL DC
 PA CONSULTING
 PARITY TRAINING
 QA
 QEDIS
 RAF
 SALARY.COM
 SOCITM
 THE SFIA® FOUNDATION
 UNIVERSITY OF NORTHAMPTON
 BUSINESS SCHOOL

The SFIA Foundation is a not-for-profit organisation whose members are:



e-skills uk

IET

IMIS

itsSMF UK
 The IT Service Management Forum

SFIA® PARTNERS –GLOBAL REPRESENTATIVES INCLUDE:

AUSTRALIA

BELGIUM

CHILE

- SEGACY

ITALY

JAPAN

NEW ZEALAND

REPUBLIC OF IRELAND

UNITED KINGDOM (ALMOST 30 IN TOTAL INCLUDING)

- THE CHARTERED INSTITUTE FOR IT (BCS)
- e-skills UK
- IBM
- IET
- THE OPEN UNIVERSITY
- **UNIVERSITY OF NORTHAMPTON BUSINESS SCHOOL**

How does SFIA® work ?

SFIA® defines –**Levels of responsibility** which are defined generically and form the basis of the core competences.

There are 7 levels of responsibility :

1. Follow
2. Assist
3. Apply
4. Enable
5. Ensure, advise
6. Initiate, influence
7. Set strategy, inspire, mobilise

Levels of responsibility are also used in conjunction with 6 defined Skill Categories (and Sub-Categories) namely:

1. Strategy and architecture
2. Business change
3. Solution development and implementation
4. Service management
5. Procurement and management support
6. Client interface

SFIA® grid



Browse the SFIA Framework

Use the matrix below to browse the high-level SFIA framework.

You can also preview extended SFIPlus detail for two of the skills and tasks. (Highlighted in grey)

More about SFIA and SFIPlus is at www.bcs.org/sfiplus

One of the 6 Skill Categories

Levels of responsibility associated with each category

Subcategories

Category/SubCategory	Skill	Code	Level							
			1	2	3	4	5	6		
Strategy and architecture										
Information Strategy	<u>Corporate governance of IT</u>	GOVN					6	7		
	<u>Information Management</u>	IRMG			4	5	6	7		
	<u>Information systems coordination</u>	ISCO					6	7		
	<u>Information policy formation</u>	DPRO					5	6		
	<u>Information security</u> SFIPlus4	SCTY		3	4	5	6			
	<u>Information assurance</u>	INAS		3	4	5	6			
	<u>Information analysis</u>	INAN				4	5	6		
	<u>Information content publishing</u>	ICPM		2	3	4	5	6		
	Advice and guidance	<u>Consultancy</u>	CNSL					5	6	7
		<u>Technical specialism</u>	TECH					5	6	7
Business / IT strategy and planning		<u>Research</u>	RSCH		3	4	5	6		
	<u>Innovation</u>	INOV						6		
	<u>Business process improvement</u>	BPRE					5	6	7	
	<u>Enterprise architecture</u>	STPL					5	6	7	
	<u>Business risk management</u>	BURM					5	6		
Technical strategy & planning	<u>Solutions architecture</u>	ARCH					5	6		
	<u>Emerging technology monitoring</u>	EMRG					5	6		
	<u>Continuity management</u>	COPL				4	5			
	<u>Software development process improvemt.</u>	SPIM					5	6	7	
	<u>Network planning</u>	NTPL					5	6		

Source : The Chartered Institute for IT (BCS) Website

Why is SFIA® important in Higher Education

- Although traditionally SFIA® has been used by organisations in the work environment to:
 - ✓ Support recruitment by defining job skills
 - ✓ Assess job requirements , objectives and professional capabilities
 - ✓ Measure levels of success and capabilities
 - ✓ Define development plans for staff
 - ✓ Aid pay and promotion based on measurable progress
 - ✓ Highlight skills gaps
- There is a role for SFIA® in Higher Education
 - ✓ The University of Northampton first recognised this in 2006 and was first Academic establishment to attempt the mapping of SFIA®.
 - ✓ The education sector is a now a growth area



Why align SFIA® to the Curriculum

People are autonomous

- Carry with them through their working life
 - ✓ skills
 - ✓ qualifications
 - ✓ experience
- Education should provide skills to underpin their working life
- Aligning the learning outcomes of degree programmes to a skills framework like SFIA® is a



Win Win solution

How to put SFIA® in to the Curriculum

- Analyse Learning outcomes
- Compare and align to SFIA® grid
- Set assessed work to prove the Learning Outcomes and therefore skills have been achieved
- Draw up a grid of SFIA® skills obtained at
 - ✓ Module level
 - ✓ Programme level
- Provide students with the defined set of SFIA® skills attained
- Keep abreast of changes and continually up to date delivery

University of Northampton model

Examples	Year 1		Year 2			Year 3					Msc				
	1026	1018	2005	2030	2031	3002	3011	3031	3032	4001	M003	M028	M020	M021	
SFIA CODES	P P	I M	H F	Q A S M	P M	S D A	A D	B I	C D P	D I S S	I S D	D I S S	K A M	A E M	
<i>Strategy and architecture</i>															
IRMG (Information Management)							4						4	4	
SCTY (Information Security)				3											
INAN (Information Analysis)					3			4							
ICPM(Information Content Management)		2							4						
CNSL (Consultancy)									5						
TECH (Technical Specialism)															
RSCH (Research)										3		3			
BPRE (Business Process Improvement)															
	IM = INFORMATION MANAGEMENT					BI =BUSINESS INTELLIGENCE					KAM =KNOWLEDGE & ASSET MANAGEMENT				
	QASM = QUALITY AND SECURITY MANAGEMENT					CDP =CONSULTANCY DEVELOPMENT PROJECT					AEM=ACCESS AND EVENT MANAGEMENT				
	PM = PROJECT MANAGEMENT					DISS =DISSERTATION UG AND PG									
	AD =ADVANCED DATABASES														

Win Win

- Embeds a professional industry lead framework into the curriculum
- Addresses the skills gap at the early stages in the education journey and is sustainable from UG to PhD
- Enhances current skill set of:
 - ✓ communication skills;
 - ✓ groupwork skills;
 - ✓ information skills;
 - ✓ problem solving;
 - ✓ use of IT;
 - ✓ application of number
-With an industry related skills set - SFIA®

Timeline for SFIA® at The University of Northampton

- **2007** – Understanding and Initial Aligning of SFIA® v3
- **2008** – 1st SFIA® Grid for UG presented at Learning and Teaching Conference at University of Northampton
- **2009** - Evolving course content to reflect industry needs and realignment of SFIA® v4. Aligned PG programmes to SFIA®.
- **2009** - Presented at SFIA® conference 2009 in London Embedding Skills Framework for the Information Age (SFIA®) into HE Programmes
- **2009** - Bailey, S; Aldis K;) October 2009 *"How do you solve a problem..use SFIA®"* Service Talk, Byfleet Surrey
- **2010** – Further realignment and lowering of skill levels. Considered 4G changes.
- **2011** – Lobbied for additional skills at Level 1 and 2 to assist our adoption of SFIA® in academia
- **2011** – Created a methodology for aligning SFIA® to the curriculum and refined the creation of transcript for graduating students
- **2011** – Visited INACAP to deliver methodology and assist with SFIA® adoption



Future?

- Alignment to SFIA® skills in schools?
- Government lead initiative to roll out the SFIA® framework across all education and training providers of IT courses –public and private sector?
- Wider Global roll out?
- Slow steady and consistent acquirement of skills wins the race !!



Useful Links and references

- SFIA® websites

Text from the Skills Framework for the Information Age quoted by kind permission of The SFIA® Foundation: www.SFIA.org.uk.

Overview chart v4

<http://scripts.bcs.org/sfiaplus/sfia.htm>

- ✓ Introducing SFIA® handbook

http://www.sfia.org.uk/public/File/SFIA_Foundation/SFIA_documentation_v4/IntroLeafletSFIAv4.pdf

University of Northampton- Business Computing Courses and MSc IT Service Management :

- ✓ <http://www.northampton.ac.uk/courses/302/business-computing-systems-bsc-hons/>
- ✓ <http://www.northampton.ac.uk/courses/501/it-service-management-university-diploma/>
- ✓ <http://www.northampton.ac.uk/courses/154/it-service-management-msc/>



Thank You

Any questions ?