



# *Developing a Business Analysis Course for MBA Program*

IIBA South Florida Chapter  
Tuesday, April 12<sup>th</sup>, 2022. 7:00 pm (EST)

**Dr. Bhuvan UNHELKAR**  
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# AGENDA

- Presenter Introduction
- Motivation behind Business Analysis
- Intersection of Business Analysis and Business (Data) Analytics
- Business Analysis Course Contents:
  - Learning Objectives
  - Modules
  - Assessment tasks
  - IIBA Certifications
- CAMS – Composite Agile
  - The most practical Agile approach
- Summary and Q&A



# Presenter Profile - Dr. Bhuvan Unhelkar

(BE, MBA, PhD, **FACS**, **CBAP**<sup>®</sup>, **PSM**)

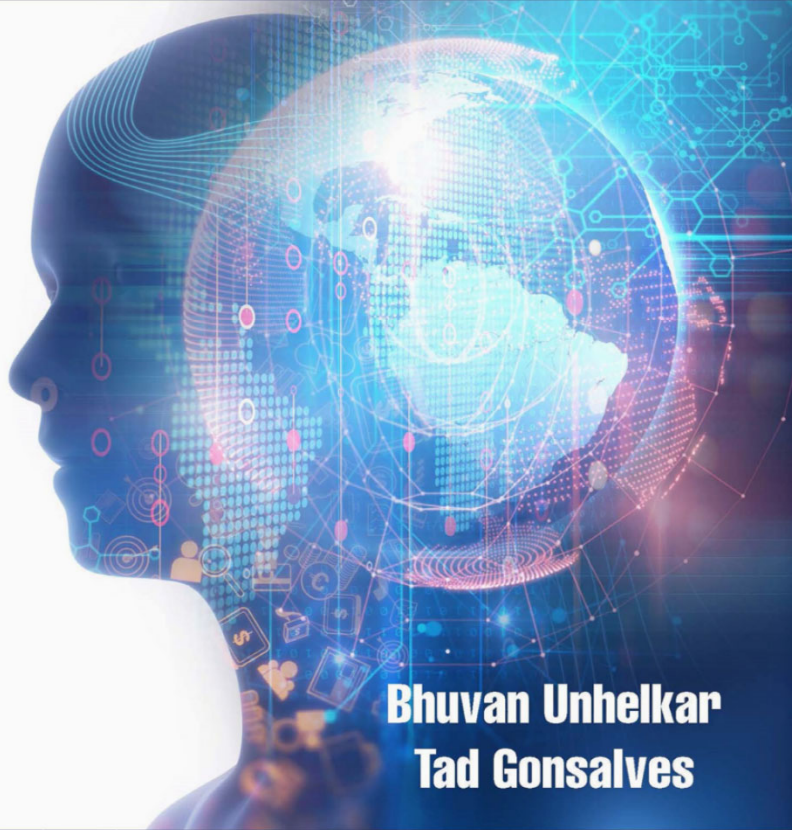


- Professor of IT, USF (Sarasota-Manatee Campus)
- Founder, MethodScience.com & PlatiFi.com
- Courses: Adv Prog. Design (UML), Agile PM, Data & Security Analytics, NoSQL, Sr. Project
- PhD from University of Technology, Sydney (UTS), 1997 “Effect of Granularity of OO Design in Modelling an Enterprise and its application to Financial Risk Management”; Guide: Prof. **Brian Henderson-Sellers**
- Author: **25** Books (AI, Mobile, Agile, Green ICT, and Big Data Strategies for Agile Business )
- Supervisor: **8** PhD Completions;
- **Fellow** of the Australian Computer Society; **IEEE Sr. member**, Life Member, Computer Society of India & BMA
- Hon. Prof. Amity Univ. (India), Western Sydney Univ. (Australia)
- Past President – Rotary club of Sarasota Sunrise; Rotary Club of St Ives, Paul Harris Fellow; AG); TiE;
- [www.unhelkar.com](http://www.unhelkar.com) & [www.methodscience.com](http://www.methodscience.com)



# Artificial Intelligence for Business Optimization

Research and Applications



**Bhuvan Unhelkar**  
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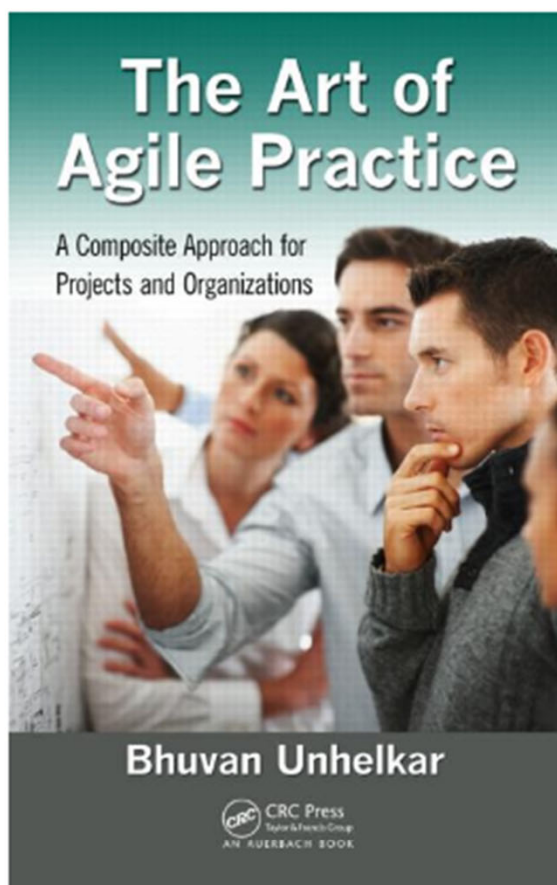
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## Book Description



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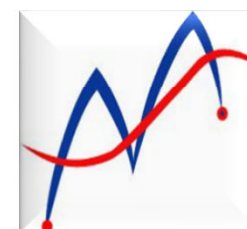
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### Features

- Presents a consistent, integrated, and strategic approach to achieving Agility in your business
- Describes metrics that are relevant to the entire CAMS lifecycle



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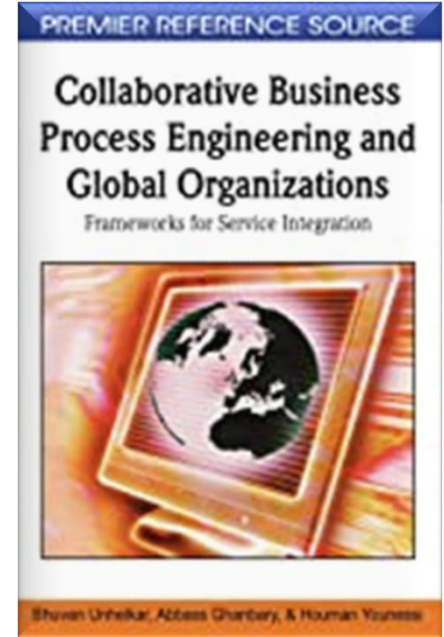
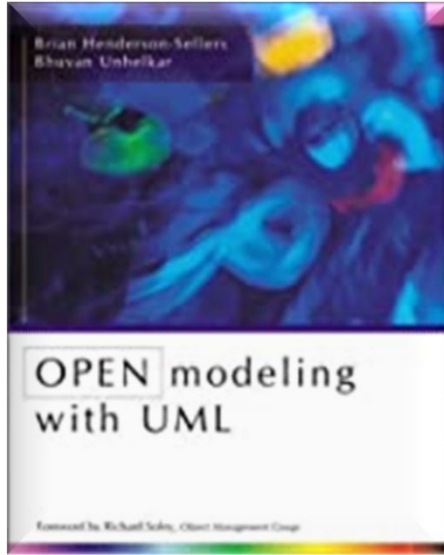
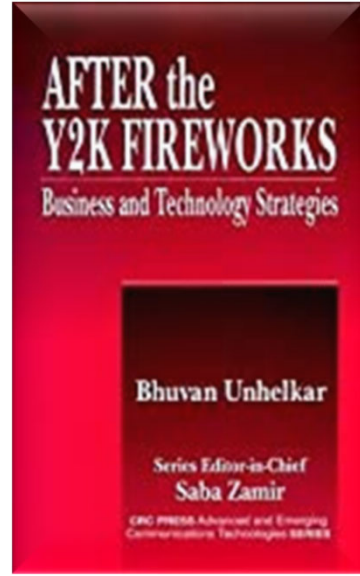
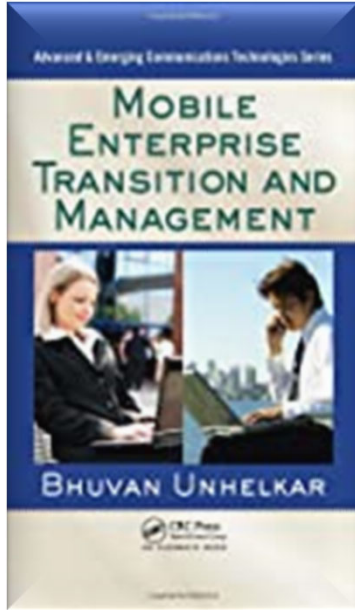
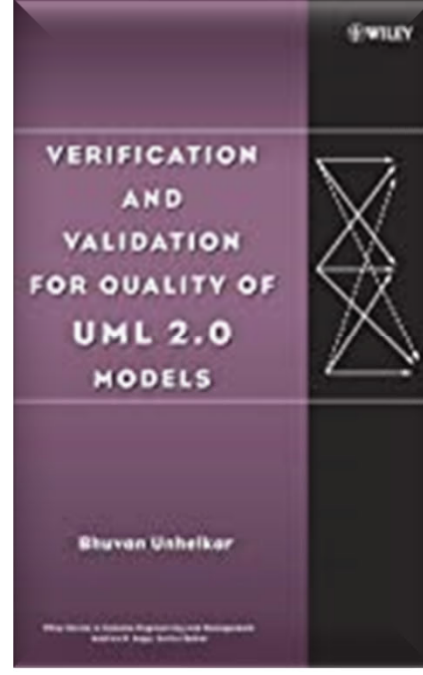
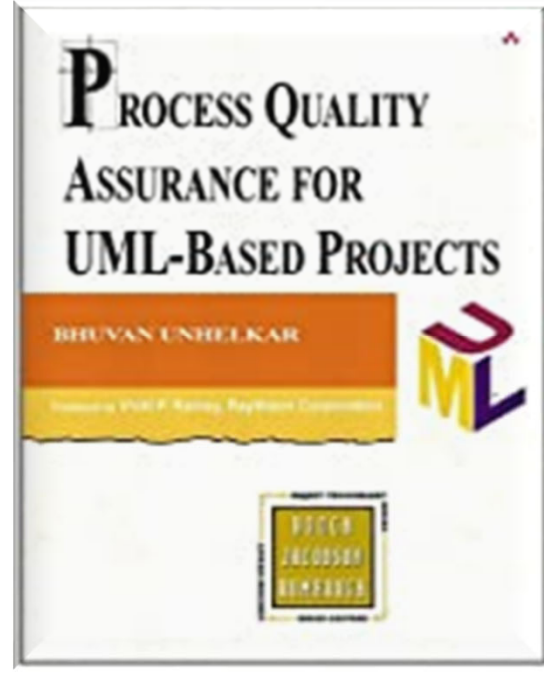
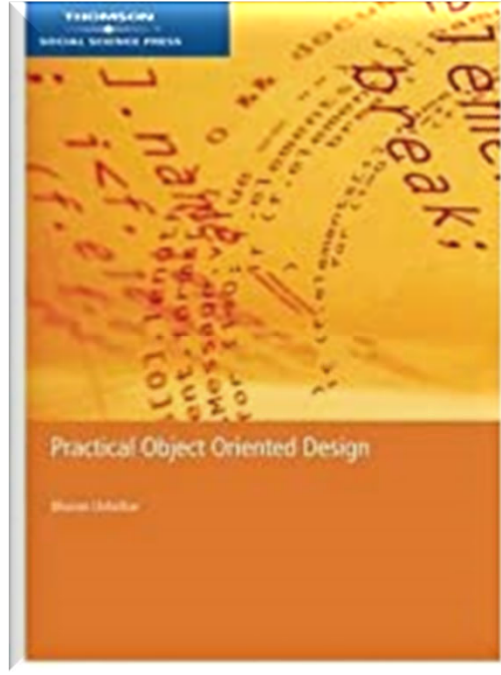
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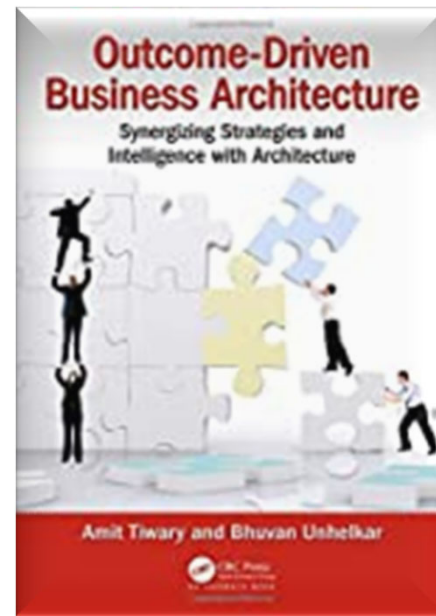
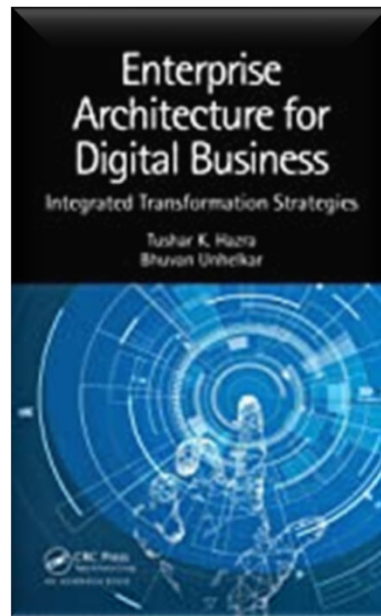
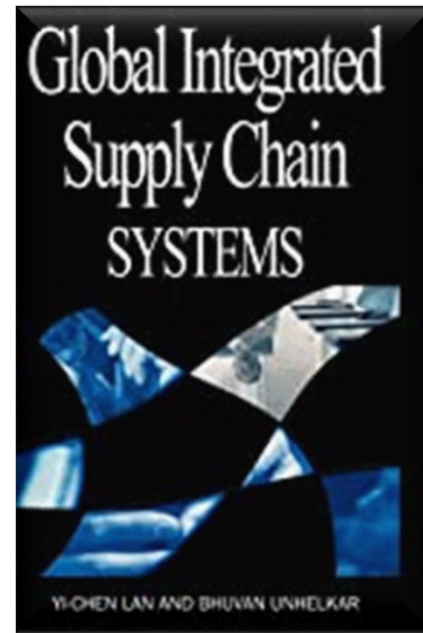
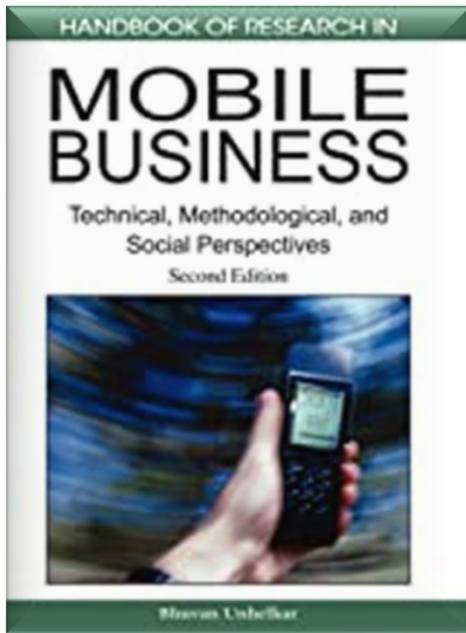
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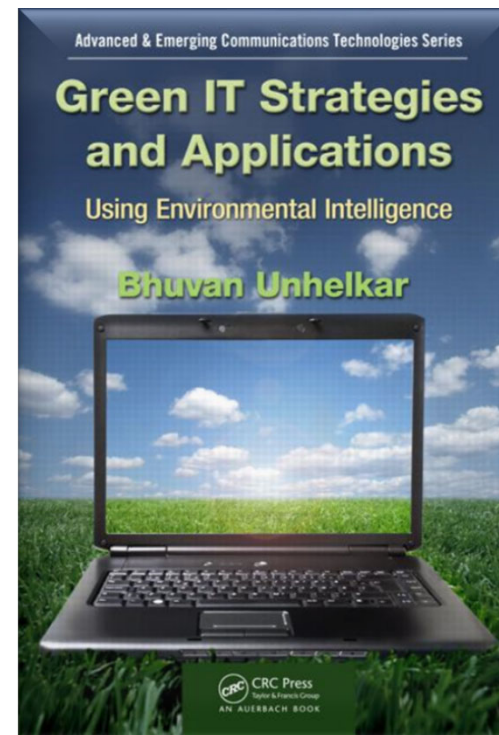
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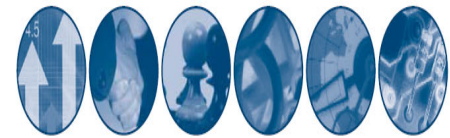












# Update



## Agile Outsourcing: Cross-Cultural, Cross-Regional Perspectives

by Bhuvan Unhelkar, Senior Consultant,  
Cutter Consortium

This Executive Report discusses the challenges and the value of using Agile methods in outsourced projects. The use of Agile — with its focus on individuals, their interactions, working solutions, and acceptance...

Agile Product & Project Management  
Executive Update Vol. 15, No. 5

## Lean-Agile Tautology

by Bhuvan Unhelkar, Senior Consultant,  
Cutter Consortium

of the Lean-based Toyota Production System (TPS).<sup>2</sup> Another example from Lean-Six Sigma is the technique of asking “why” five times by a business analyst undertaking root-cause analysis of a system problem. And the works of Mary and Tom Poppendieck in the area of Lean software development provides a shining example of the application of Lean in the software arena.<sup>3</sup>

# Agile Business Analysis: Part II — Organizational Adoption with Centers of Excellence

Senior Consultant,



## The Psychology of Agile: Fundamentals Beyond the Manifesto

by Bhuvan Unhelkar, Senior Consultant, Cutter Consortium

The destiny of Agile depends on contributions from many different disciplines and thought processes. The psychology of Agile aspires to make one such contribution by discussing the impacts and influences of

Report series on agile business analysis  
es relating to organizational adoption. This  
kers who may not necessarily be hands-on  
the organizational-wide responsibility for  
d project-level application, the report  
frameworks, BA centers of excellence





Business-IT Strategies Advisory Service  
Executive Update Vol. 13, No. 7

# Update

## Business Analysis in the Information Age: Mapping to an SFIA Skill Set

by Bhuvan Unhelkar, Senior Consultant,  
Cutter Consortium

- Positioning the right people at the right level of BA work within an organization
  - Enabling cross-organizational mapping of business analysts, as they move from one organization and industry to another; or alternatively, during M&As
  - Creating a roadmap for professional growth of business analysts
  - Outlining the training needs of business analysts, which enables the HR department to pave their growth path
-

Vol. 9, No. 10  
October 2009

"We at *CBR* like to practice the  
innovation that we preach."

— Gabriele Piccoli,  
Editor

## Green IT Metrics and Measurement: The Complex Side of Environmental Responsibility

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Green IT Metrics: Enhancing Brand Value While Meeting Compliance by Brian Donnellan .....	5
Creating and Applying Green IT Metrics and Measurement in Practice by Bhuvan Unhelkar .....	10
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Business-IT Strategies

Vol. 13, No. 2

**CUTTER**  
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## Environmentally Responsible Business Strategies for a Green Enterprise Transformation

by Bhuvan Unhelkar, Senior Consultant,  
Cutter Consortium

As presented in this *Executive Report*, an Environmentally Responsible Business Strategy (ERBS) for green business transformation starts with four drivers — sociocultural/political, regulatory/legal, enlightened self-interest, and responsible business ecosystem — and is followed by four dimensions — economy, technology, process, and people. This report presents the policies, practices, systems, and support of an ERBS architecture. Particularly, this *Executive Report* suggests the expansion of business intelligence (BI), using Web services and the cloud, toward what is called environmental intelligence (EI).

Executive

Report



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Access to the Experts

# AI Adoption in Business Processes: The Agile Way

*by Bhuvan Unhelkar, Senior Consultant, Cutter Consortium*



effectively execute #analysis...  
<https://t.co/dfHkBXETyi>



## Welcome to the IIBA® Birmingham Chapter website

International Institute of Business Analysis™ (IIBA®) is the independent non-profit professional association to serve the growing field of business analysis. Through a global network, IIBA® connects Members, Chapters, Corporations and Partners around the world to advance the business analysis profession by uniting a community of professionals to create better business outcomes.

### Upcoming Events

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#### August 2021: The Role Of Business Analysis In A Data-Driven Organization - Hunting For Value!

Business Analysis (BA) as a profession has its roots in capturing requirements for a software solution. BA has then evolved into a strategic role requiring skills in envisioning strategies, offering alternatives for solutions, modeling requirements, validating and verifying solutions, and...

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## Join us for some down home Southern Hospitality!



This year's 2021 Southeastern BADD is brought to you by the Birmingham IIBA and Palmetto IIBA Chapters with support from Cprime. We are excited to offer our 4th Annual Business Analysis Development Day (BADD) on August 27th. This will be a virtual event so you can join us from anywhere in the world. Sessions will be recorded for on demand access for 6 months. Earn up to 11 IIBA CDUs and PMI PDUs for attending.

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- \* Career Competency

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Congrats to all who successfully completed our [IIBA South Florida Chapter](#) BABoK Study Group – for CCBA® or CBAP® Certification Preparation. This 35-hour program was led by Dr. [Bhuvan Unhelkar](#), whose dedication and skill in facilitating each session was impeccable. It was a great pleasure to work with Dr. Unhelkar, [Watermark Learning](#), Canvas by [Instructure](#) and the [IIBA](#) to present and participate in this program. If you are interested in joining our next study group, please contact [education@southflorida.iiba.org](mailto:education@southflorida.iiba.org) for more details.



[Randi Inniss, CSPO, IIBA-AAC](#)



# Congrats!

*for completing our 35-hour Study Program  
from May 15, 2021 - July 15, 2021*

LED BY

*Dr. Bhuvan Unhelkar, CBAP®*

## PARTICIPANTS

*Bethany Hanson  
Cynthia Deppen  
Danielle Pelletier*

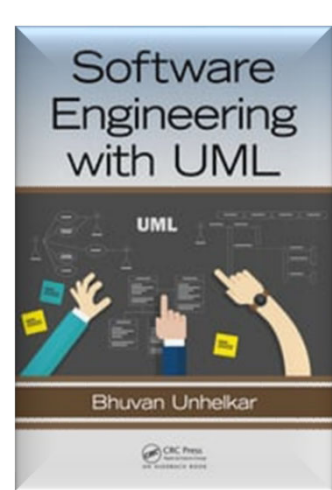
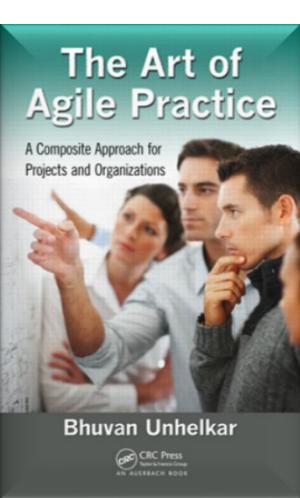
*Dhwani Thakkar  
Donna Yap  
Joshua Baker*

*Michelle Goldman  
Nosakhare Agbogun  
Randi Inniss*

# Research Interests “Data Science”:

- Software Modeling with UML
- Composite Agile Method & Strategy (CAMS)
- Business ‘Digital’ Analysis / Cybersecurity Analysis (IIBA certifications, Industry-driven)
- Big Data Strategies & Business Agility
- AI and Business Optimization
- Green ICT & Environmental Sustainability
- Cloud-based Enterprise Architectures





# Sub-Module

## WHY ?

Reasoning for Business Analysis

# Oh Yes!! I can Communicate!!



How the customer explained it



How the Project Leader understood it



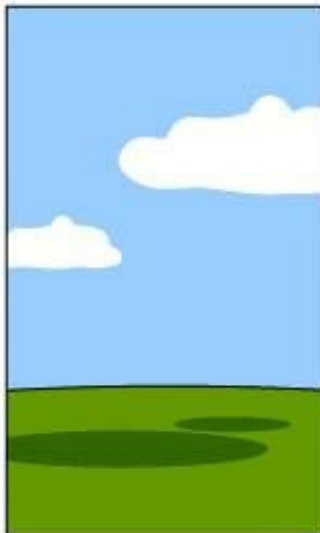
How the Analyst designed it



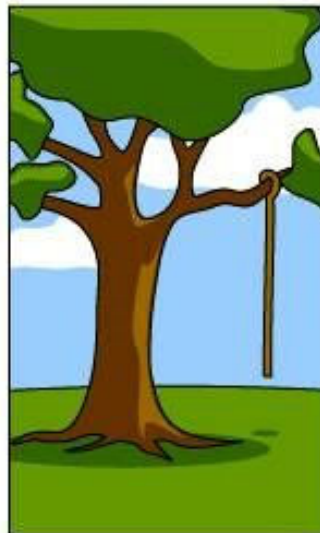
How the Programmer wrote it



How the Business Consultant described it



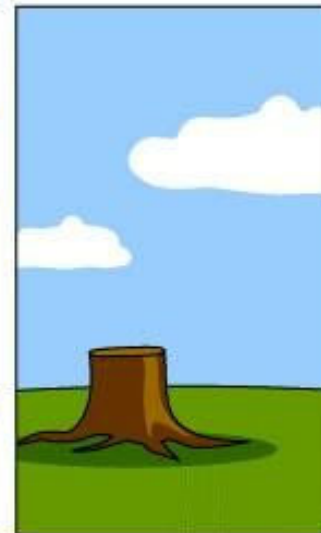
How the project was documented



What operations installed



How the customer was billed



How it was supported



What the customer really needed

<https://www.opendoorerp.com/the-standish-group-report-83-9-of-it-projects-partially-or-completely-fail/>



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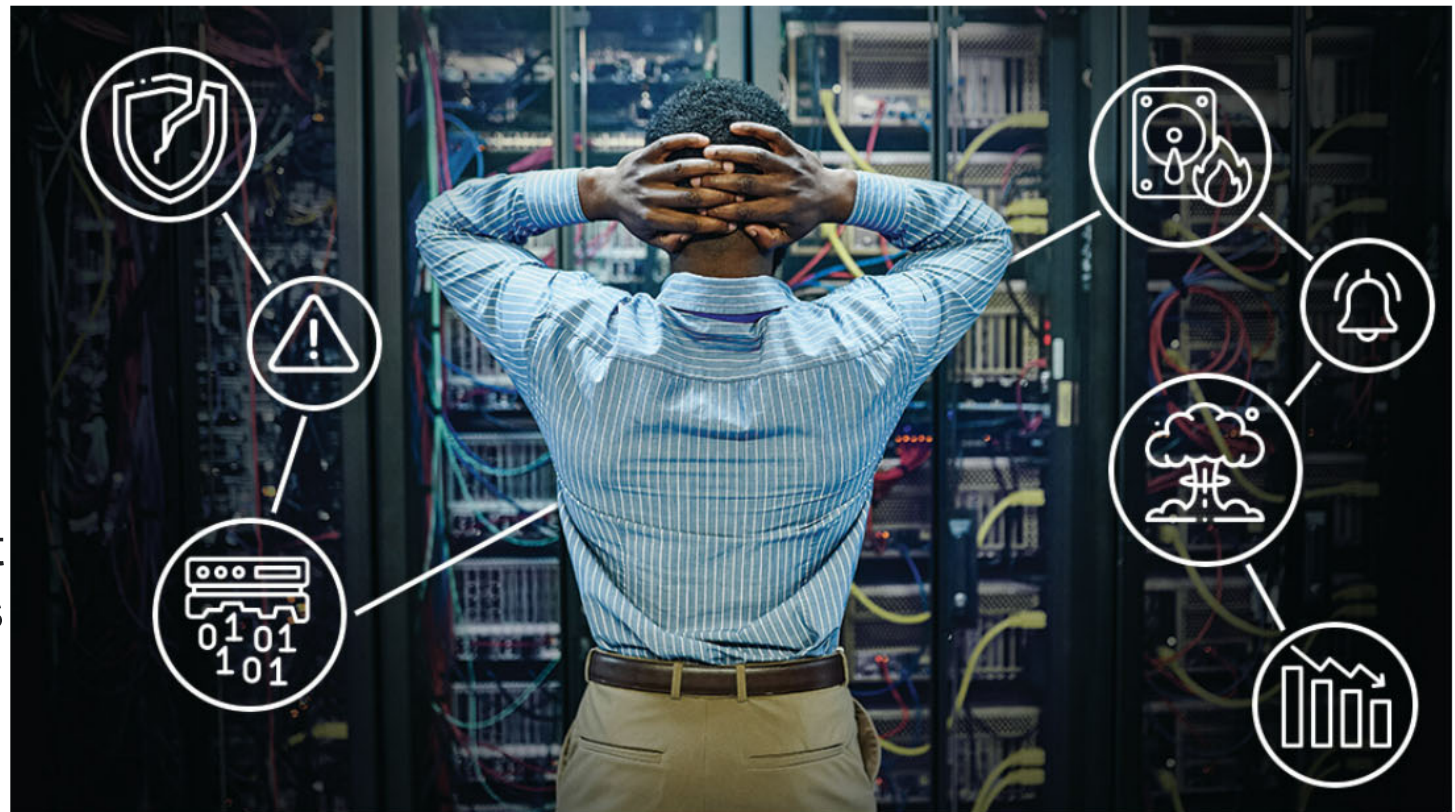
November 25, 2021 •



Project Success

## The Standish Group's 2020 CHAOS that **around 66% of software projects fail**

A 2020 CISQ report>> total cost of project failures in US firms is an estimated \$260B & operational failures caused by poor quality is estimated at \$1.56 trillion.



According to a previously published report by **The Standish Group**, only 16.2% of IT projects were deemed successful by being completed on time and budget, with all the promised functionality. A



# Top Five Factors in Successful IT Projects

1. User involvement
2. Executive management support
3. Clear Statement of Requirements
4. Proper planning
5. Realistic expectations



# Top Five Indicators in Challenged IT Projects

1. Lack of user input
2. Incomplete Requirements & Specifications
3. Changing Requirements & Specifications
4. Lack of executive support
5. Technical incompetence

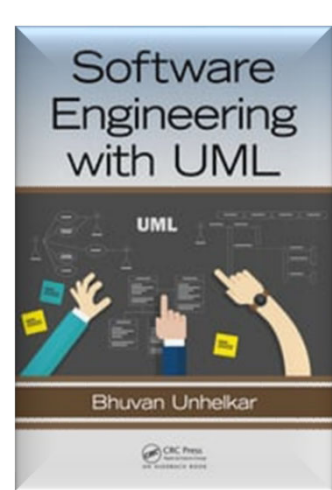
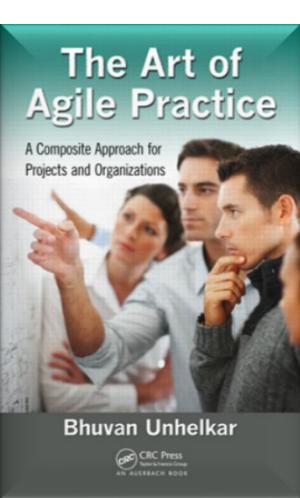


# Top Factors in Failed IT Projects

1. Incomplete Requirements
2. Lack of user involvement
3. Lack of resources
4. Unrealistic expectations
5. Lack of executive support
6. Changing Requirements & Specifications
7. Lack of planning
8. Didn't need it any longer
9. Lack of IT management
10. Technical illiteracy







## Sub-Module

# WHAT IS BUSINESS ANALYSIS?

Analysis (Breakdown); Synthesis (Together); HOLISTIC

# Business Analysis , Agility

- Data, technologies and analytics >> Insights >> Decisions
- Requiring "Agility" and "Business Analysis".
- Business Analysis (BA) :
  - ANALYTICAL – Breaking down a Problem into Smaller parts to understand it
  - SYNTHESIS – Looking at the problem as a complete entity
  - HOLISTIC – Examining Problem and Solution in its Structure & Behavior
- CAMS – Composite Agile
  - The most practical Agile approach (an Art form)
  - Balance between agile and planned
  - Essential for Data Analysis and Use

# Analysis

- Analysis – Breaking down things (Problems, Opportunities) in their Elements in order to:
  - Understand them
  - Fix them
- Business Problems are Complex
  - As the CONTEXT changes all the time
  - Governance & Legal Compliance mandatory (more challenging due to global nature of business)
- Unexpected, Unplanned Risks
  - Covid19, War



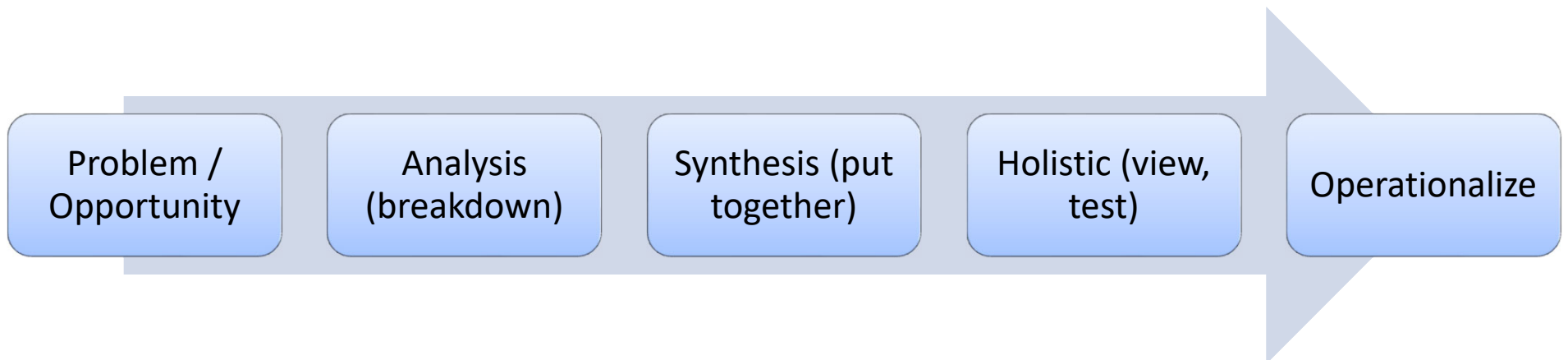
# Synthesis

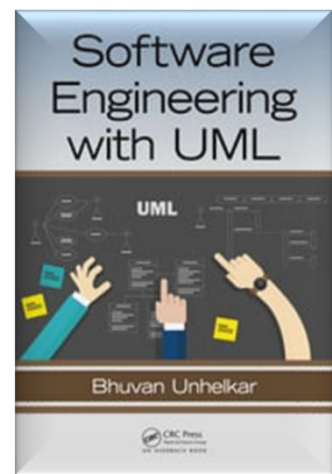
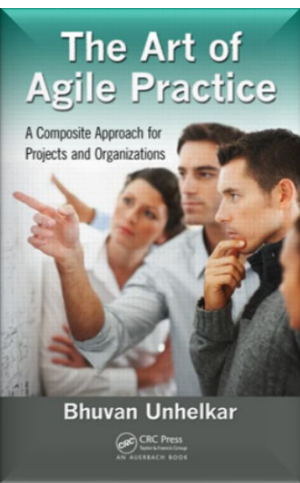
- Combining elements together
  - In order to view them as a whole and to see how they work together
- Synthesis >>
  - More than simply the addition of elements



# HOLISTIC

- Viewing the Solution in the context of the Organization and Business Environment
- Holistic View:
  - Structurally through Synthesis
  - Dynamically



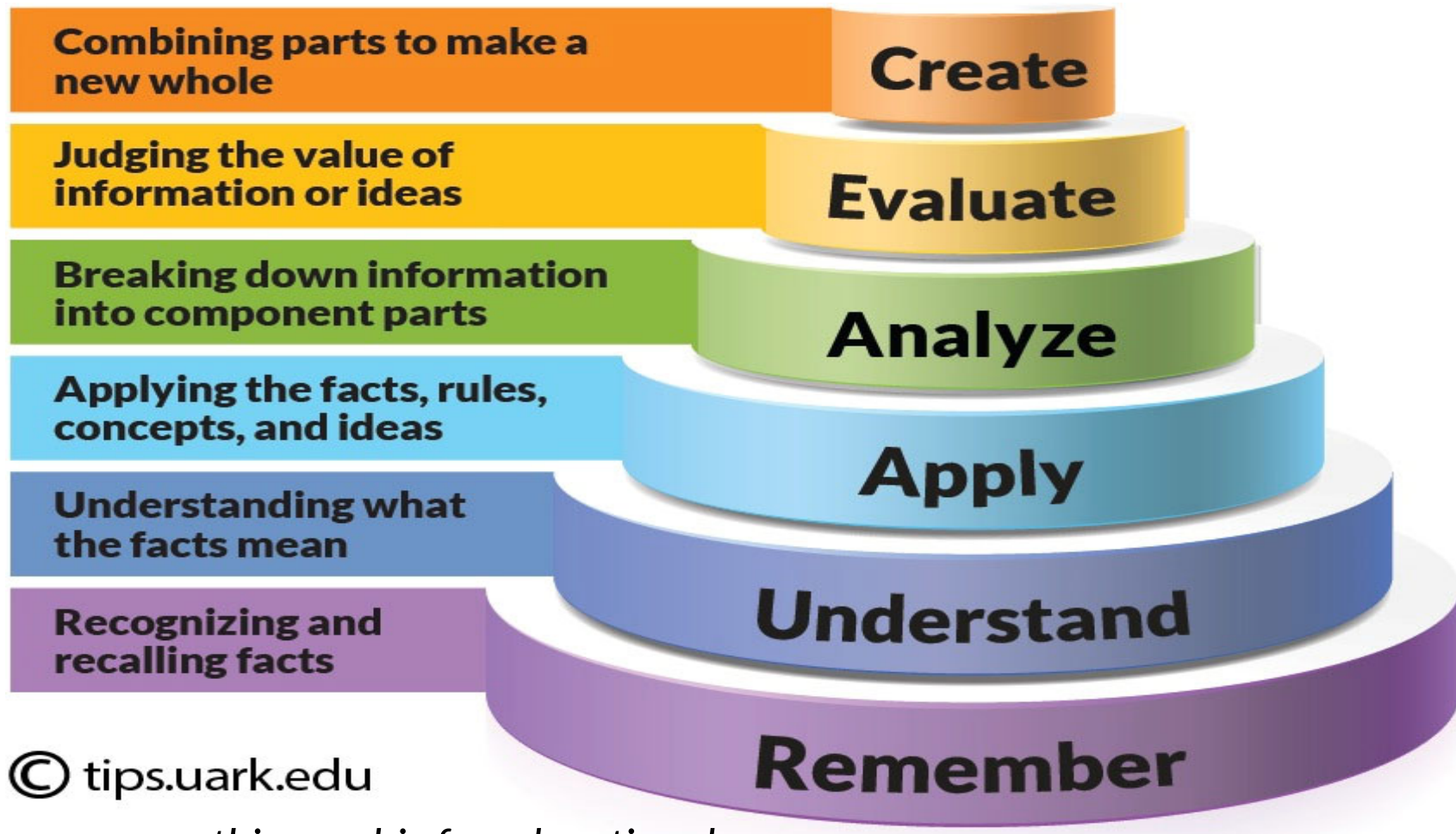


## Sub-Module

# BA COURSE PEDAGOGY

Thinking behind the Structure

# Good Old Blooms Taxonomy (In setting course Learning Objectives)

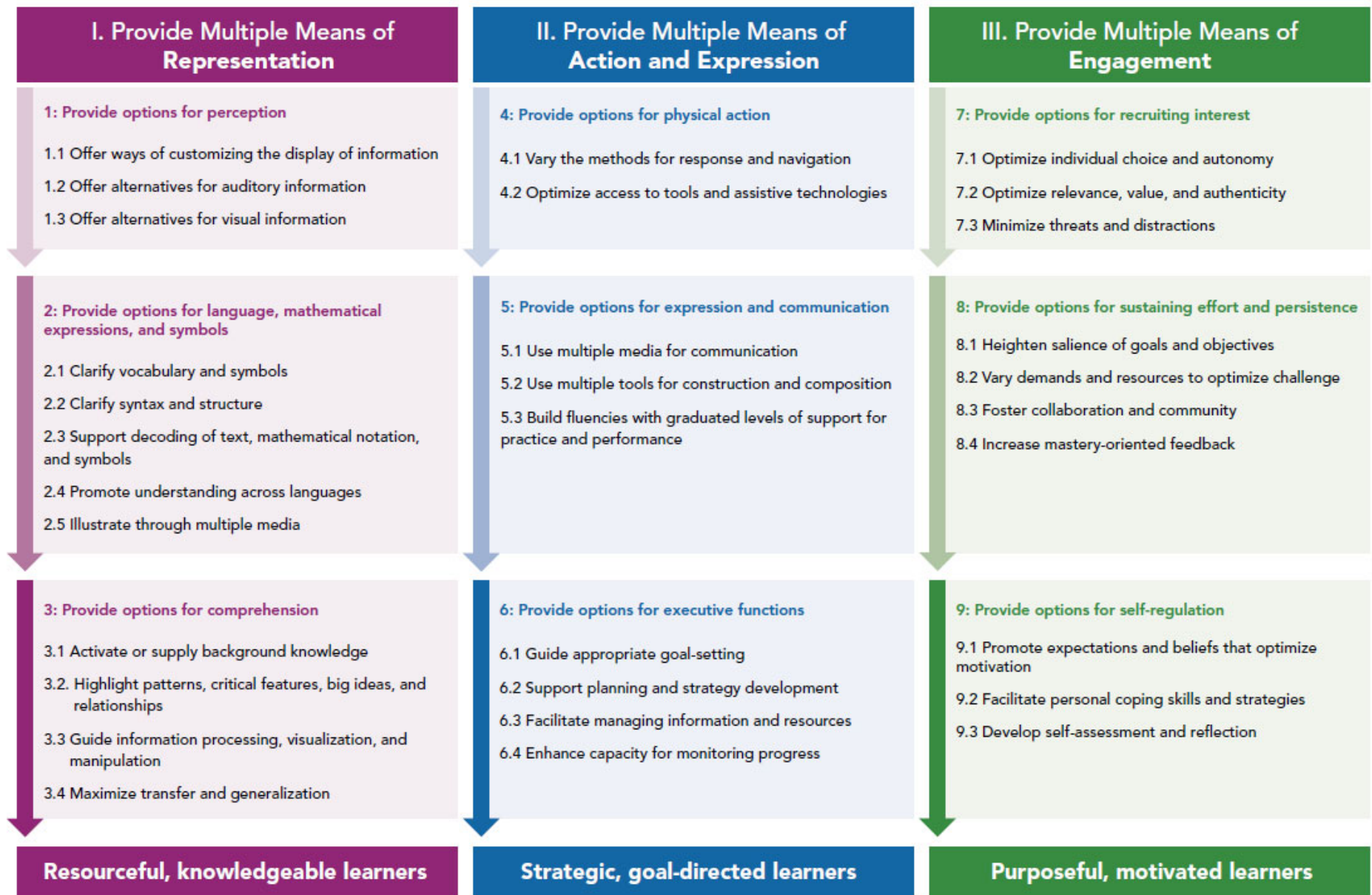


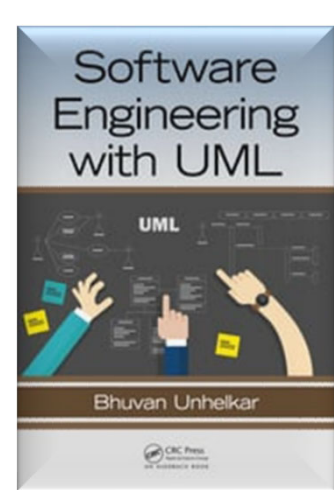
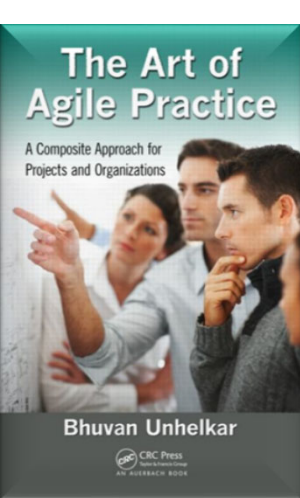
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# Universal Design for Learning Guidelines





## Sub-Module

# SFIA 8 – SKILLS FRAMEWORK FOR INFORMATION AGE

How it is used /incorporated in developing this BA course.

# https://sfia-online.org/en/sfia-8

## SFIA 8 Summary Chart

The global skills and competency framework for the digital world

### Strategy and architecture

Strategy and planning		1	2	3	4	5	6	7
Strategic planning	SPF					1	2	3
Information systems coordination	ISCO					1	2	3
Information management	IMM					1	2	3
Enterprise and business architecture	SEBA					1	2	3
Software architecture	SWA					1	2	3
Innovation	INO					1	2	3
Emerging technology marketing	ETM					1	2	3
Research	RES					1	2	3
Demand management	DCM					1	2	3
Investment appraisal	IPA					1	2	3
Financial management	FMT					1	2	3
Measurement	MAL					1	2	3
Sustainability	SUS					1	2	3
Continuity management	CPM					1	2	3

Security and privacy		1	2	3	4	5	6	7
Information security	SCTI					1	2	3
Information assurance	IAS					1	2	3
Personal data protection	PDP					1	2	3
Subsidiary research	SR					1	2	3
Threat intelligence	THI					1	2	3

Governance, risk and compliance		1	2	3	4	5	6	7
Governance	GOV					1	2	3
Risk management	RUM					1	2	3
Audit	AUD					1	2	3
Quality management	QUM					1	2	3
Quality assurance	QUA					1	2	3

Advice and guidance		1	2	3	4	5	6	7
Consulting	CON					1	2	3
Specialist advice	SAC					1	2	3
Methods and tools	MET					1	2	3

### Change and transformation

Change implementation		1	2	3	4	5	6	7
Portfolio management	PMO					1	2	3
Programme management	PMG					1	2	3
Project management	PMO					1	2	3
Portfolio, programme and project support	PPPS					1	2	3

Change analysis		1	2	3	4	5	6	7
Business situation analysis	BISA					1	2	3
Feasibility assessment	FAS					1	2	3
Requirements definition and management	RDM					1	2	3
Business modelling	BMD					1	2	3
Acceptance testing	APT					1	2	3

Change planning		1	2	3	4	5	6	7
Business process improvement	BPI					1	2	3
Organisational capability development	OCD					1	2	3
Organisation design and implementation	ODI					1	2	3
Organisational change management	OCM					1	2	3
Benefits management	BEN					1	2	3

### Development and implementation

System development		1	2	3	4	5	6	7
Product management	PROD					1	2	3
Systems development management	SDMG					1	2	3
Systems and software life cycle engineering	SLCE					1	2	3
Systems design	SDN					1	2	3
Software design	SWD					1	2	3
Network design	NETD					1	2	3
Hardware design	HWD					1	2	3
Programming/software development	PROG					1	2	3
Systems integration and build	SIB					1	2	3
Testing	TEST					1	2	3
Software configuration	SWC					1	2	3
Real-time/embedded systems development	RESD					1	2	3
Safety engineering	SENG					1	2	3
Safety assessment	SASA					1	2	3
Radio frequency engineering	RFE					1	2	3
Automation development	ADV					1	2	3

Data and analytics		1	2	3	4	5	6	7
Data management	DAM					1	2	3
Data modelling and design	DMD					1	2	3
Database design	DBD					1	2	3
Data engineering	DENG					1	2	3
Database administration	DBAD					1	2	3
Data science	DAS					1	2	3
Machine learning	MLNG					1	2	3
Business intelligence	BI					1	2	3
Data visualisation	DV					1	2	3

User experience		1	2	3	4	5	6	7
User research	URCH					1	2	3
User experience analysis	UEA					1	2	3
User experience design	UED					1	2	3
User experience evaluation	UEE					1	2	3

Content management		1	2	3	4	5	6	7
Content authoring	CA					1	2	3
Content publishing	CP					1	2	3
Knowledge management	KM					1	2	3

Computational science		1	2	3	4	5	6	7
Scientific modelling	SCM					1	2	3
Numerical analysis	NAN					1	2	3
High-performance computing	HPC					1	2	3

### Relationships and engagement

Stakeholder management		1	2	3	4	5	6	7
Sourcing	SRC					1	2	3
Supplier management	SUPM					1	2	3
Contract management	CM					1	2	3
Stakeholder relationship management	SRM					1	2	3
Customer service support	CSS					1	2	3
Business administration	BADM					1	2	3

Sales and marketing		1	2	3	4	5	6	7
Marketing	MKT					1	2	3
Selling	SAL					1	2	3
Sales support	SASP					1	2	3

### Delivery and operation

Technology management		1	2	3	4	5	6	7
Technology services management	TSM					1	2	3
Application support	ASP					1	2	3
IT infrastructure	ITP					1	2	3
System software	SSP					1	2	3
Network support	NWS					1	2	3
Systems installation and renewal	SIMR					1	2	3
Configuration management	CFM					1	2	3
Release and deployment	R&D					1	2	3
Storage management	STM					1	2	3
Facilities management	FMA					1	2	3

Service management		1	2	3	4	5	6	7
Service level management	SLM					1	2	3
Service catalogue management	SCM					1	2	3
Availability management	AVM					1	2	3
Capacity management	CFM					1	2	3
Incident management	IM					1	2	3
Problem management	PRM					1	2	3
Change control	CCM					1	2	3
Asset management	ADM					1	2	3
Service acceptance	SAC					1	2	3

Security services		1	2	3	4	5	6	7
Security operations	SO					1	2	3
Vulnerability assessment	VAS					1	2	3
Digital forensics	DF					1	2	3
Penetration testing	PT					1	2	3

### People and skills

People management		1	2	3	4	5	6	7
Performance management	PM					1	2	3
Employee experience	EE					1	2	3
Organisational facilitation	OF					1	2	3
Professional development	PD					1	2	3
Workforce planning	WP					1	2	3
Recruiting	REC					1	2	3

Skills management		1	2	3	4	5	6	7
Learning and development management	LDM					1	2	3
Learning design and development	LDD					1	2	3
Learning delivery	LD					1	2	3
Competency assessment	CA					1	2	3
Certification scheme operation	CSO					1	2	3
Training	TRN					1	2	3
Subject formation	SUF					1	2	3

### Levels of responsibility

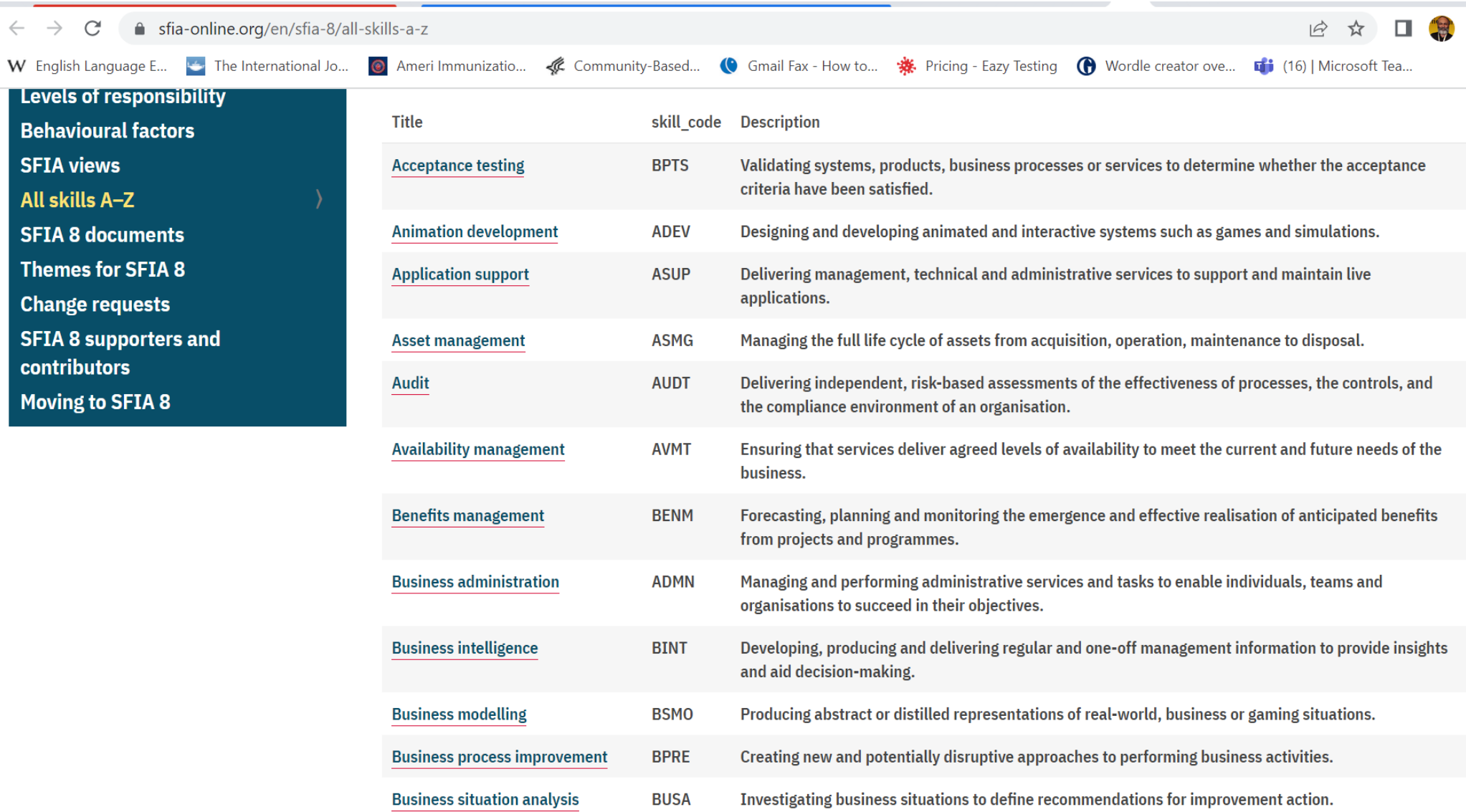
The SFIA framework describes seven levels of increasing responsibility, accountability and impact from level 1, the lowest, to level 7, the highest.

Each of the seven levels is labelled with a guiding phrase to summarise the level of responsibility.

- Level 1 - Follow
- Level 2 - Assist
- Level 3 - Apply
- Level 4 - Create
- Level 5 - Innovate, advise
- Level 6 - Initiate, influence
- Level 7 - Set strategy, inspire, realise

<https://sfia-online.org/en/sfia-8/sfia-views/full-framework-view?path=/glance>;

<https://sfia-online.org/en/sfia-8/all-skills-a-z>



The screenshot shows a web browser displaying the SFIA 8 website. The address bar shows the URL <https://sfia-online.org/en/sfia-8/all-skills-a-z>. The page features a dark blue sidebar on the left with navigation links: Levels of responsibility, Behavioural factors, SFIA views, All skills A-Z (highlighted in yellow), SFIA 8 documents, Themes for SFIA 8, Change requests, SFIA 8 supporters and contributors, and Moving to SFIA 8. The main content area displays a table of skills with columns for Title, skill\_code, and Description. The skills listed include Acceptance testing, Animation development, Application support, Asset management, Audit, Availability management, Benefits management, Business administration, Business intelligence, Business modelling, Business process improvement, and Business situation analysis.

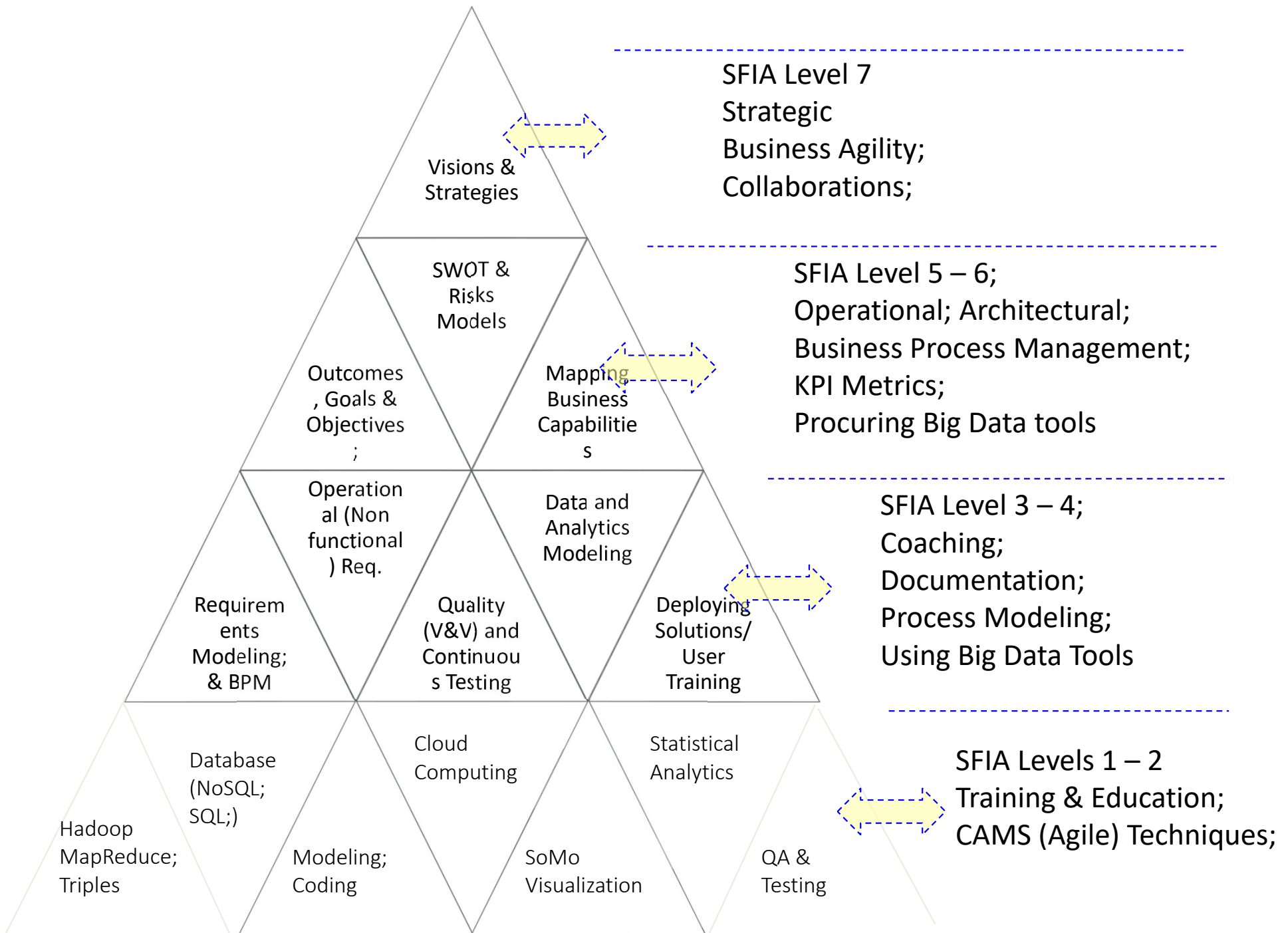
Title	skill_code	Description
<a href="#">Acceptance testing</a>	BPTS	Validating systems, products, business processes or services to determine whether the acceptance criteria have been satisfied.
<a href="#">Animation development</a>	ADEV	Designing and developing animated and interactive systems such as games and simulations.
<a href="#">Application support</a>	ASUP	Delivering management, technical and administrative services to support and maintain live applications.
<a href="#">Asset management</a>	ASMG	Managing the full life cycle of assets from acquisition, operation, maintenance to disposal.
<a href="#">Audit</a>	AUDT	Delivering independent, risk-based assessments of the effectiveness of processes, the controls, and the compliance environment of an organisation.
<a href="#">Availability management</a>	AVMT	Ensuring that services deliver agreed levels of availability to meet the current and future needs of the business.
<a href="#">Benefits management</a>	BENM	Forecasting, planning and monitoring the emergence and effective realisation of anticipated benefits from projects and programmes.
<a href="#">Business administration</a>	ADMN	Managing and performing administrative services and tasks to enable individuals, teams and organisations to succeed in their objectives.
<a href="#">Business intelligence</a>	BINT	Developing, producing and delivering regular and one-off management information to provide insights and aid decision-making.
<a href="#">Business modelling</a>	BSMO	Producing abstract or distilled representations of real-world, business or gaming situations.
<a href="#">Business process improvement</a>	BPRE	Creating new and potentially disruptive approaches to performing business activities.
<a href="#">Business situation analysis</a>	BUSA	Investigating business situations to define recommendations for improvement action.



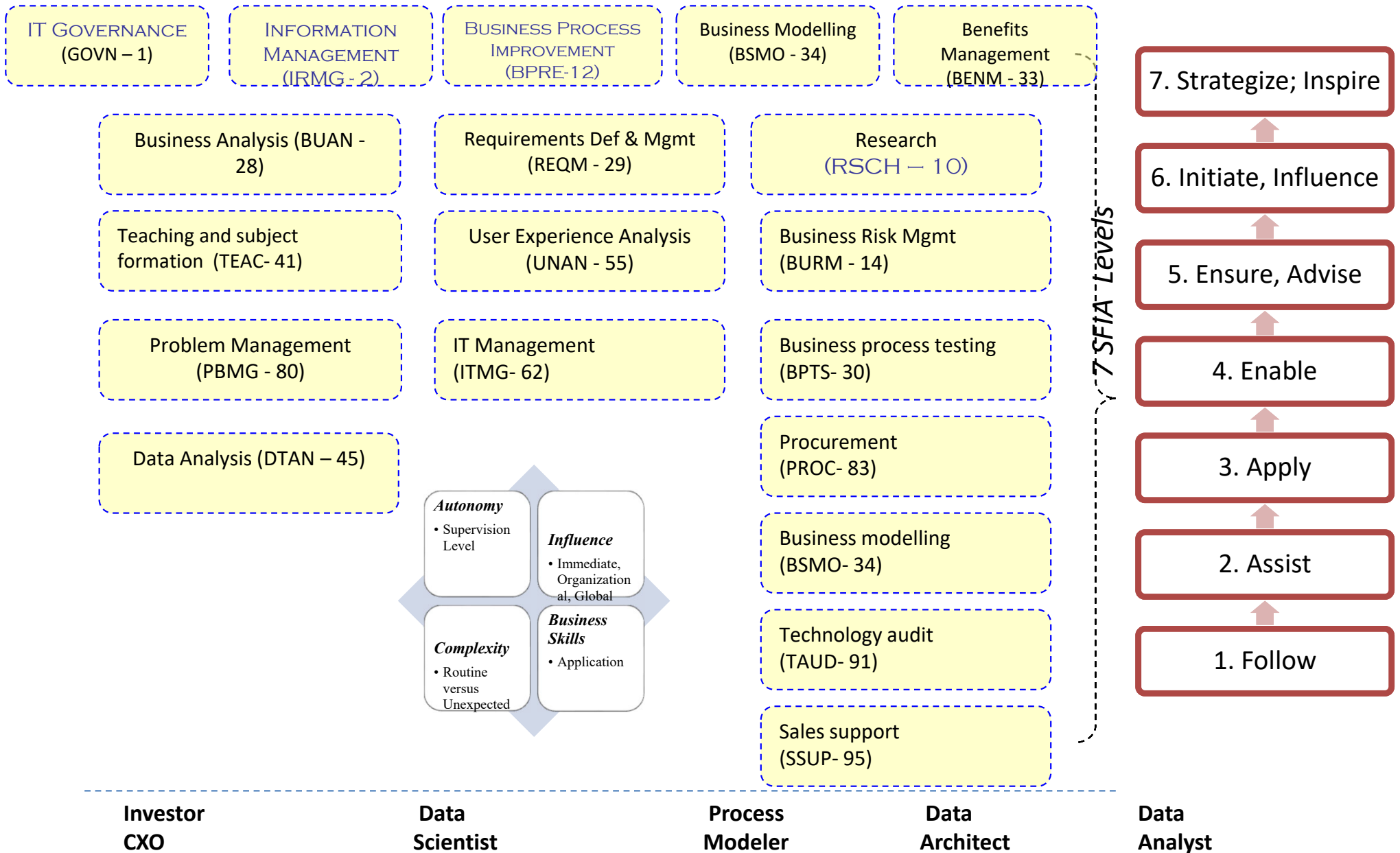
# SFIA Themes

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- T . ) 9) #. \$ < ) # 3 ) 8+) ( #853 # / 9' ; 99/54 9# : SFIA #  
C5 ; 4 ' / 2) < ) 4 : 9n
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  - I 4 : ) 8 4 ) : # \* # . / 4 + 9 # I 5 T f
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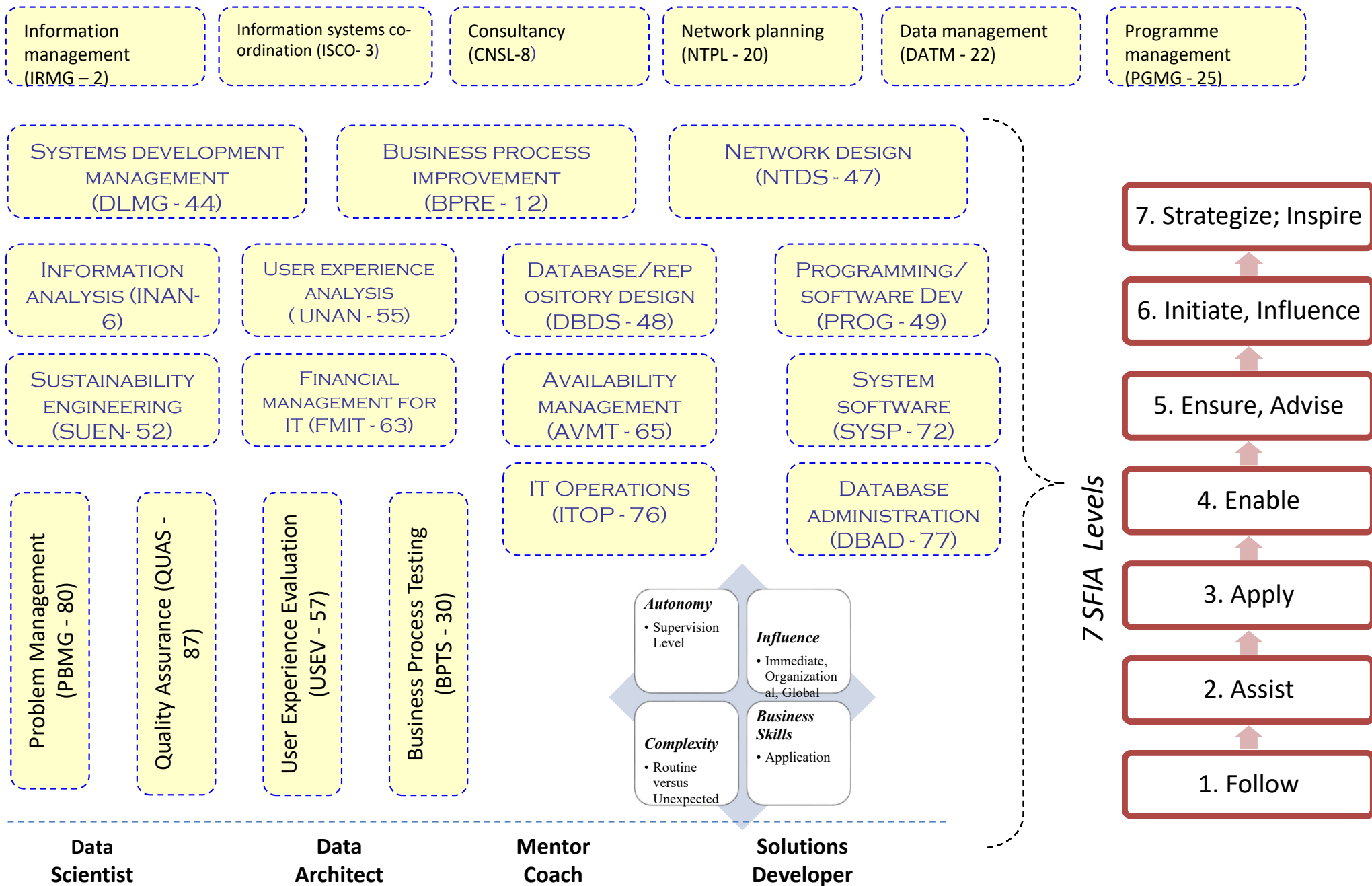
# Mapping the Organizational level Big Data and Agile Capabilities (Business Analysis focus) with the 7 levels of SFIA



# Business Skills required in Adoption of Big Data and Agility at Organizational level based on the SFIA framework

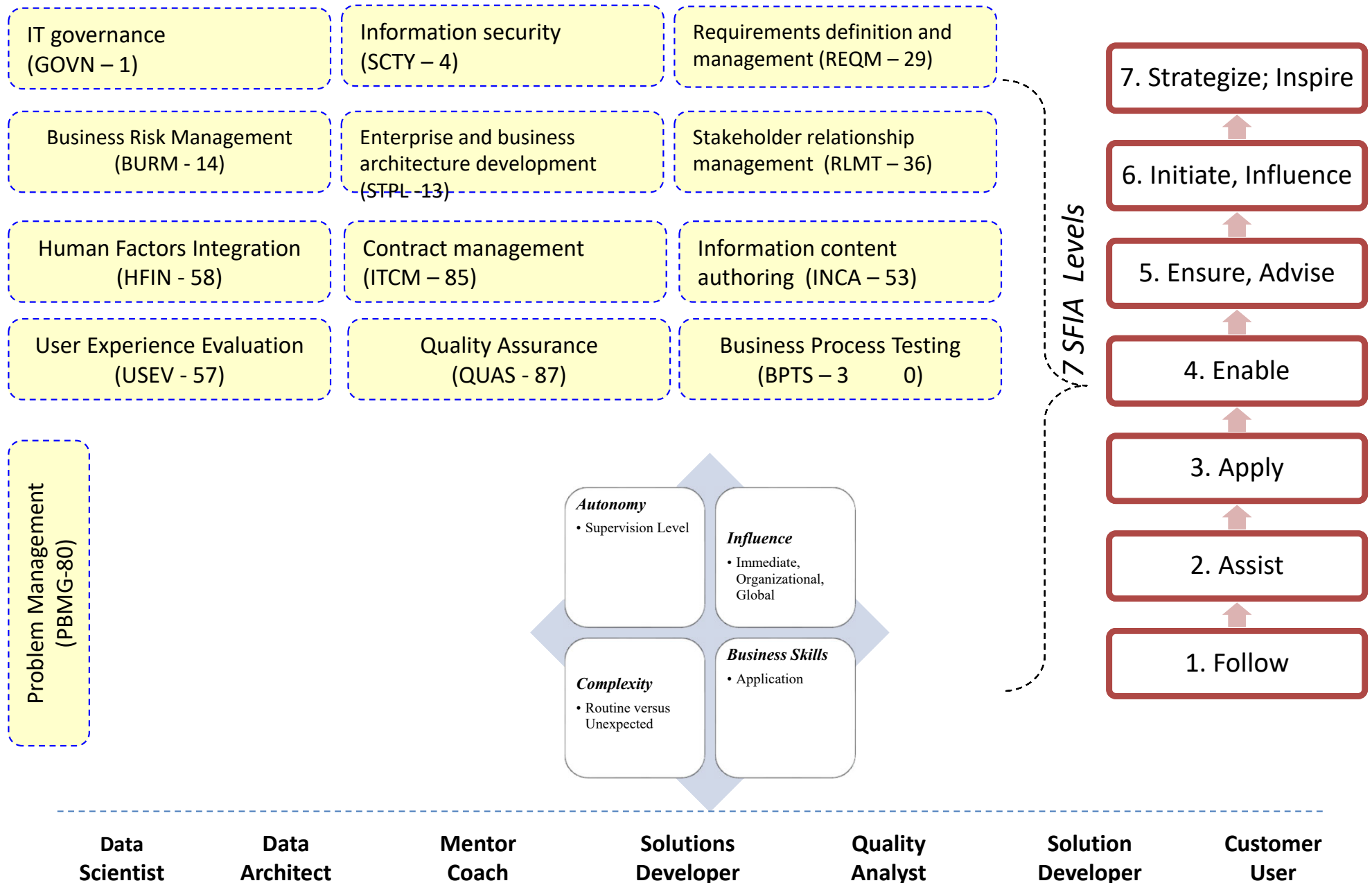


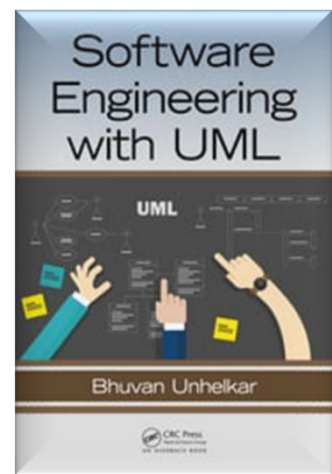
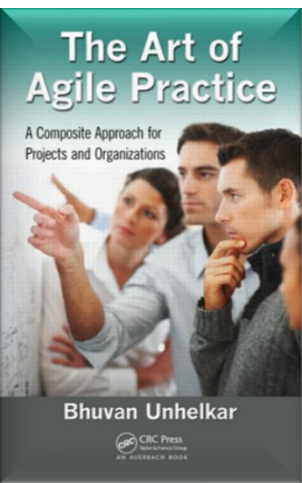
# Technical (Data Management Hadoop and NoSQL) Skills required in Adoption of Big Data and Agility at Organizational level based on the SFIA framework





# Governance, Quality and Testing Skills required in Adoption of Big Data and Agility at Organizational level based on the SFIA framework





# Sub-Module

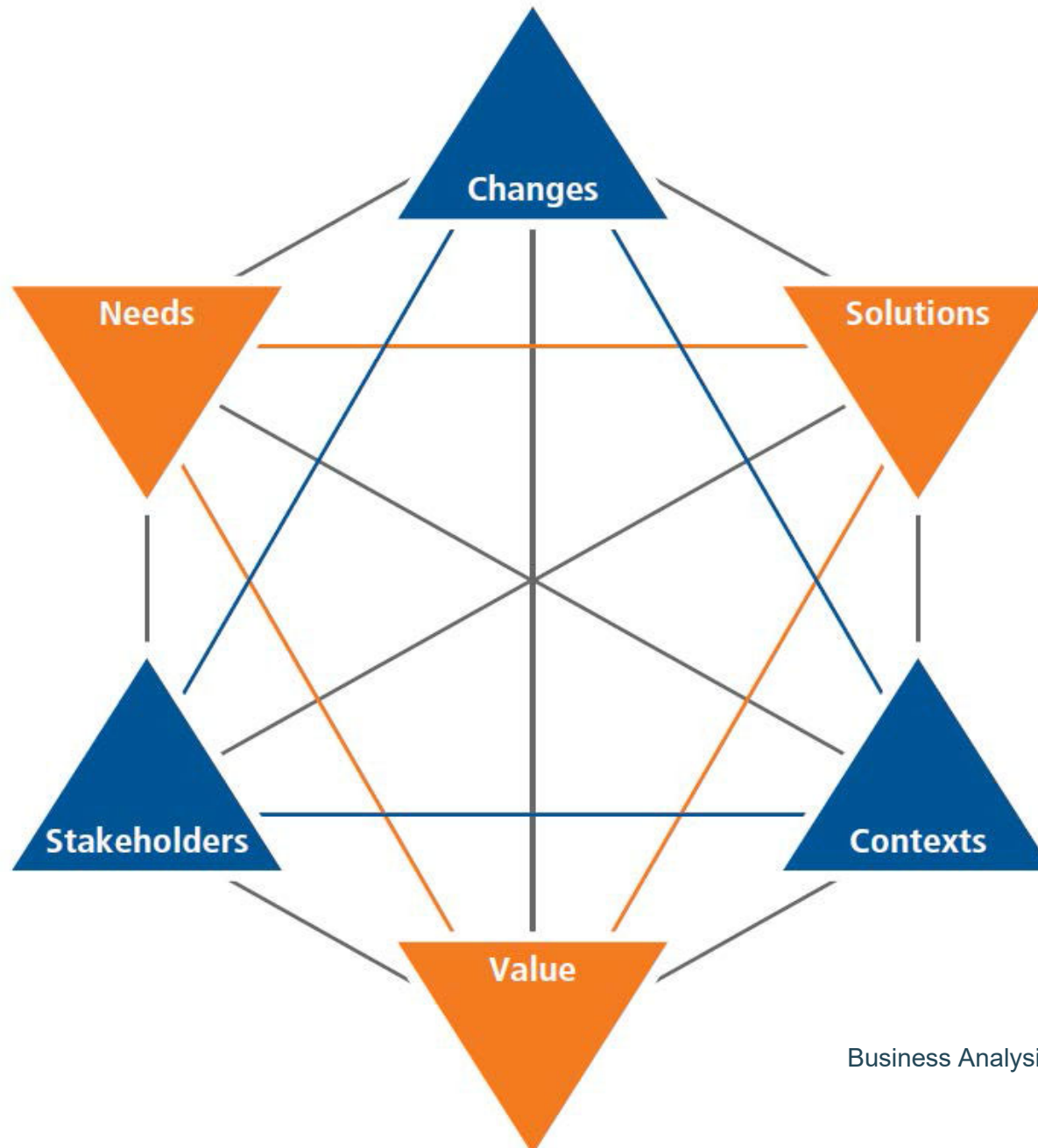
# BABOK 3.0

IIBA's Flagship Global Standard for  
Business Analysis

## 2.1 THE BUSINESS ANALYSIS CORE CONCEPT MODEL

© IIBA'S BABOK

### Business Analysis Key Concepts



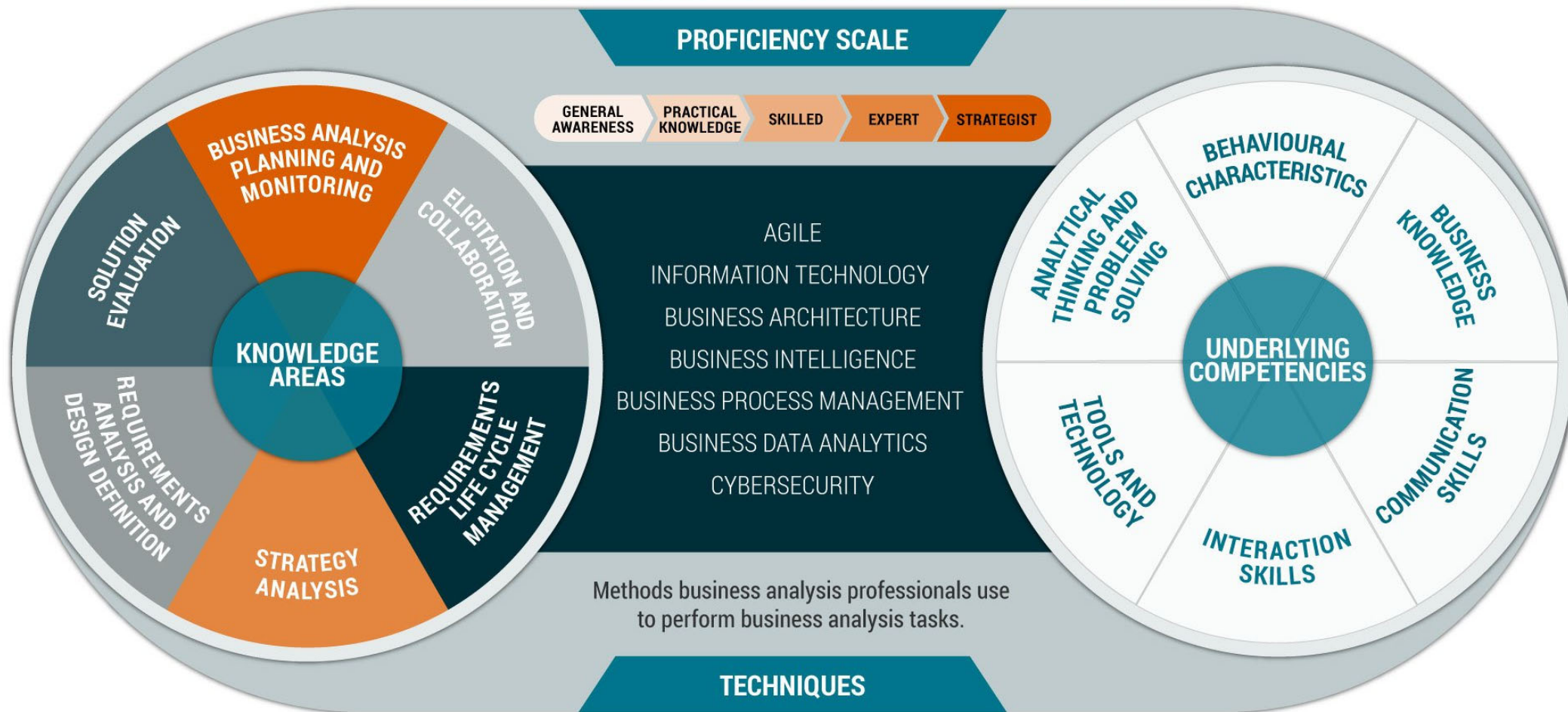
Business Analysis Key Concepts





[https://www.iiba.org/professional-development/business-analysis-competency-model?\\_ga=2.269115505.1665097946.1649665464-](https://www.iiba.org/professional-development/business-analysis-competency-model?_ga=2.269115505.1665097946.1649665464-)

## BUSINESS ANALYSIS COMPETENCY MODEL



# Starting point for Application in Data (Big Data/AI) Projects

## Business Analysis (BABOK)

Knowledge  
Areas x 6

Competencies x  
6

Techniques x 50

Perspe  
ctives  
x 5

Elicitatio  
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Collabor  
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Require  
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Analysis  
and  
Design  
Definitio  
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Analytica  
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Problem  
Solving

Commun  
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Skills

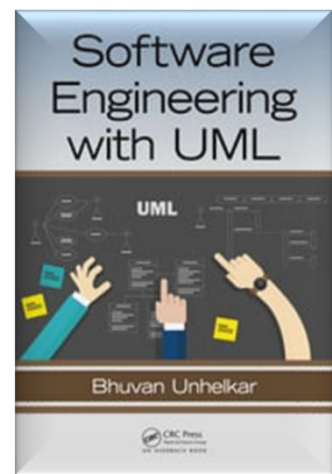
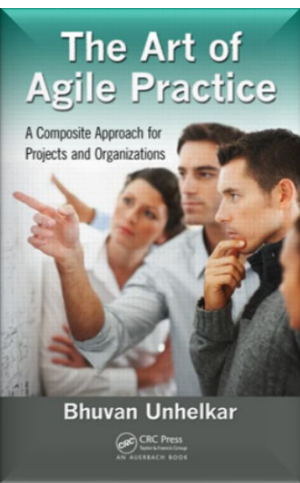
Decision  
Modelin  
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Mind  
Mapping

Non-  
Function  
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Require  
ments  
Analysis

Process  
Modelin  
g

BI; Agile;



## Sub-Module

# BA COURSE - CONTENTS

Learning Objectives, Assessment tasks

# Welcome Note

- Welcome to the Course: Business Analysis. This course is designed to help you appreciate, understand and apply contemporary Business Analysis techniques with substantial emphasis on Agility. You will find the practical aspects of this course highly relevant to your study and your future career.



# Pre-reqs

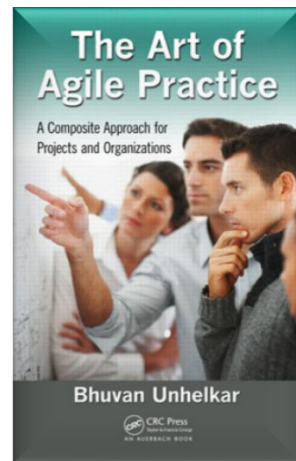
- This course has no set pre-requisites. Students are, however, expected to have basic understanding of how work happens in a project and in an organization. This course is focuses on learning to capture requirements, managing stakeholders and enhancing the quality of all deliverables in an organization. Please note that this course does not deal with analytics and, therefore, does not contain any machine learning concepts or statistical techniques.

# Course Purpose

- The purpose of this course is to provide students with a practical understanding of Business Analysis with particular focus on its application in business organizations. Business Analysis (BA) is a critical thinking and problem-solving discipline. The Business Analysis Body of Knowledge (BABOK ® v3.0 of the International Institute of Business Analysis) is the internationally recognized benchmark for BA. This course covers all essential aspects of the function of Business Analysis in an organization, including skills and capabilities in modeling requirements, managing stakeholders, understanding the context of a business problem, managing change and providing value.

# Learning Outcomes

1. Explain the profession of Business Analysis (BA) and its relevance in developing practical business solutions
2. Undertake a business NEEDS analysis based on stakeholders Analysis and stakeholder management in an Iterative and Incremental (AGILE) manner
3. Apply the BA techniques (business and technical) in an AGILE manner in order to undertake effective Business Analysis activities
4. Map the capabilities of Business Analysts with the IIBA's BABOK v3.0 (Business Analysis Body of Knowledge version 3.0) framework in order to ensure the capabilities are developed according to a global industry standard for the profession of BA
5. Communicate, negotiate, elicitate and ensure the quality of requirement models (including Functional, Non-Functional and Usability models) during the development of a solution
6. Demonstrate the applicability of Business Analysis in practice and the challenges of
7. Undertake team work and communicate effectively and REGULARLY in a team environment to enable delivery of project outputs



## Sub-Module

# COURSE ASSESSMENT TASKS

From the Syllabus

# Overview of Tasks

- Discussion Questions x 6 (Individual)
- Team Project: (Group – single grade for entire group)
  - Report
  - Presentation
- Team Project Collaboration x 4 (Individual)
- Quizzes x 2 (Individual)
- *Important Note: This course requires you to attempt ALL assessments listed above (Discussion questions, Team Collaboration updates, Team Project and Quizzes). Leaving any of these assessment items un-attempted will mean an “I” for Incomplete grade. For example, sometimes, a student has excellent points in some assessment tasks and that he/she will proceed with an assumption that a “0” point score for a quiz or team project is okay because overall points are good. This is **not** an acceptable situation in this course. All assessment items **MUST** be attempted in all honesty by the students with a minimum of 40% points.*



# Discussion Questions 20%

## (Communication). Weeks 2, 4, 6; 8, 10, 12

- These are essay style posts; you apply your critical thinking skills in order to discuss and reflect on the issues and challenges of project management.
- What is learnt in the class modules AND what is explored/researched by students is together used in making these discussion posts.
- These discussion questions are posted at the end of the current and previous class module. Students read the question carefully, think, reflect, research and post an answer.
- After posting the answer, they can see the posts from their fellow students and, they are required to provide a critique of fellow students' answer. This posting and counter-posting of discussions is an important learning mechanism. Through participating in these discussion questions students are able to consolidate their knowledge as they also observe how fellow students are thinking and interpreting the material similar (or different) to how they do it themselves.
- Communications skills are further sharpened especially in an online format through this exercise.

# Team Project 30% (Critical Thinking, Team Work, Communication)

- A team (typically 5 students) develop a detailed project based on a case study problem statement provided. Students apply the knowledge they have learnt to work through the case study and put together the deliverables:
  - a **Report** (20%) - in Word (12 font, 1.5 spacing) is approximately 30 pages. Structure of the report is decided by you but in general follows the weekly Modules.
  - **Presentation** (10%) Accompanying your will be a professional PPTx presentation deck (approximately 25 slides) that pitches your project to a typical IT Advisory Board of a large organization (CEO/CIO panel).
  - Report/Presentation has NO THEORY (i.e. please don't start with *What is Project Management?* To add a voice-over or video-delivery of your presentation is OPTIONAL but the submission of the slide deck itself, free from basic English errors, spelling mistakes, formatting errors etc. is mandatory.
  - You are **not** required to make a live/online presentation to me of this project.

---

# Appendix A: Case Study Problem Statements for Team Projects

---

## Common Note for All Case Study Problem Statements:

GoodMead Hospital's hospital management system (HMS)—part of the running thread for examples in this book for modeling with the UML.

OzAir Airline, Agro Farm, and Desi Travels—experiential learning for medium- to large-sized team projects for modeling with the UML.

Lucky Insurance—experiential learning for large and collaborative team projects for modeling with the UML.

*The case study problem statements appearing here are as close to real-life software engineering projects as is possible in an educational setting. Based on the underlying philosophy of experiential learning, these problem statements are put together for students learning UML-based modeling in all three modeling spaces (Model of Problem Space [MOPS], Model of Solution Space [MOSS], and Model of Architecture Space [MOAS]).*

*An important part of these case studies is that they are geared toward students working on a team of software engineers. The emphasis in these projects is on the word “team.” This is because students need to learn early and quickly that a large amount of real-life modeling and software development work is undertaken in teams.*

## A-1: OzAir—Airline Booking System

### *OzAir LLC*

OzAir is a **hypothetical** airline operating in a geographically vast yet sparsely populated country in the southern hemisphere (say, in Cairns, Australia). The airline has a loyal customer base that comprises business, tourists, and student communities within the country. OzAir senior management has decided to develop a new airline booking system (ABS) that will be used for ticketing by:

- Individual customers logging directly on the airline's web site itself,
- Staff using the ABS to book customers and their own travel,
- Travel agents booking tours, and
- Business partners (hotels, car rentals, and credit card companies cross-selling air travel).

## GoodMead—Hospital Management System

*[Special Note: This particular case study on a hospital management system (HMS) is the running example in the book. Reading this case study problem statement gives you, the reader, the background for the examples. Advanced students can further read and modify this case study problem statement and use it to develop more detailed and additional examples.]*

GoodMead is a **hypothetical** large hospital in a metro city within a fully developed country (say, Sydney, Australia). This hospital provides diverse types of health-related services in pediatrics, gynecology and obstetrics, orthopedics, radiology, dentistry, sports medicine, and so on.

A detailed review of the current systems and methods of the hospital was carried out. The review is a part of a comprehensive e-business strategy aimed at modernizing the hospital's information technologies and systems. This included a review of the following functions: patient admission, staff scheduling, maintaining patient records, managing laboratory tests, identifying and utilizing historical medical records, managing drugs, managing investments, and utilizing facilities.

### *Key Players*

There are number of players (also called stakeholders) in the IMS. These players are typically the people responsible within an organization for the creation and maintenance of insurance products. There are also administrative functions wherein IMS IT staff is responsible for entering and maintaining insurance-related data. Furthermore, it is expected that partnering, collaborative organizations will be accessing the IMS portals to interact, exchange information, and provide combined services.

In addition to the aforementioned end users, there are also administrators of the system, both within the organization and external to the organization, who will be maintaining the data, information, and applications.

### *Client Portal*

The CP is organizational client's portal that will be used by both corporate and individual clients to undertake business transactions with the organization.

## A-4: Lucky Insurance—Insurance Management System

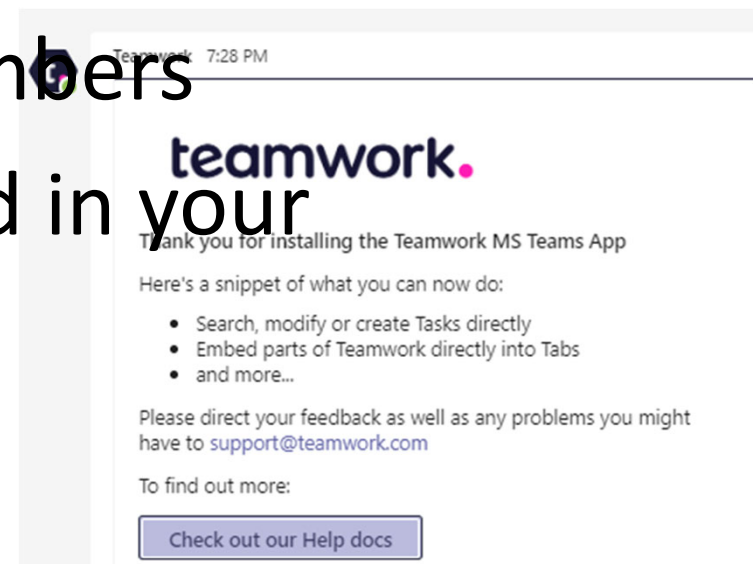
### *Lucky Insurance Co.*

Lucky Insurance is a **hypothetical** company operating out of the insurance capital of the world (say, Hartford, CT, USA). The company has a wide and loyal customer base that ranges from parents of young families to corporations. The last two decades have seen phenomenal growth in the company base through two large acquisitions and compliance-driven corporate insurances.

Lucky is now finding that the lack of appropriate and sufficient customer service is causing it to increasingly lose its valued clients. Competition from rivals is intense—especially as many competitors have implemented the latest technologies including cloud-based hosting and highly sophisticated customer call centers fully integrated with descriptive and predictive analytics within their customer relationship management systems (CRMS). Lucky Insurance realizes that it is now in h-up mode and, subsequently, its board has taken an executive decision to proceed with an off-shelf, Internet- and mobile-enabled, analytics-driven new insurance management system (IMS).

# Using MS Teams for Collaboration during Team Project

- Go to MS Teams; Create a Team with ALL your Group Members
- Search for Apps; Add Teamwork to your MS Teams
- You should now be able to start Collaborating with Team members
- Include your Teamwork board in your final Project report and PPTx





# **Team Project Collaboration 10%** **(Team Work, Communication)**

A crucial aspect of Team Project Collaboration is your ability to reach out to fellow students in your team, collaborate with them (electronic media is fine).

Your mutual collaboration on the project topic, development of a project plan, identification of the risks and “execution” of the project gets regularly reported in this exercise.

Since this is an online course, it’s vital that students start collaborating with each other online as soon as they start the study. Reaching out to fellow students in the team and responding to their messages is integral to a good, collaborative online work environment.

There are 4 check-points for the Team Project collaboration update that appear in Discussion format in the course. Each of these check-points require you to collaborate and then update on how it went.

## **2 Quizzes (Mid-term & Final) 40%** **(Critical Thinking)**

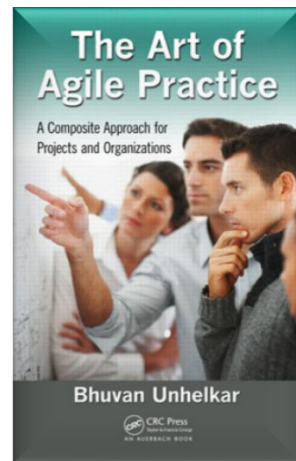
These two quizzes are multiple-choice online quizzes which are based on the material covered in the Modules.

Students apply critical thinking to the questions asked in the quiz and, thereby, validate as well as consolidate their knowledge of Project Management with Agility.

Quizzes are drawn from a pool of questions – therefore questions may change for each student in each attempt of the quiz.

# Schedule

- Please keep checking Canvas Course (under Schedule) for the latest.



## Sub-Module

# CERTIFICATIONS

Review of Existing / Popular Agile  
Certifications (External) and my  
Recommendations  
Your Options and Thoughts?

# Background Thinking

- Professional Certifications in the Industry related to Business Analysis immensely boost career
- Many a times, employers look ‘actively’ for these certifications
  - Even though certifications in themselves may not be enough
- Certifications (external) in your Resume indicate your practical interests - beyond academic studies
- Earning a certification is NOT an official requirement of this course
  - But if you can ‘double dip’ than it’s the best value for you



<https://www.iiba.org/business-analysis-certifications/iiba-certifications/>



### Level 1

Individuals entering the BA field.

**ECBA™** Entry Certificate in Business Analysis™

### Level 2

Recognizes BA professionals who have 2-3 years of BA experience.

**CCBA®** Certification of Capability in Business Analysis™

### Level 3

Recognizes BA professionals who lead and have over 5 years of BA experience.

**CBAP®** Certified Business Analysis Professional™

# <https://learning.whizlabs.com/mod/quiz/view.php?id=123456789>

## PMI-ACP® Free Test

[Home](#) / [My courses](#) / [PMI-ACP® Free Test](#) / [Full Test\(s\)](#) / [Free Test](#)

### Exam Instructions

1. This exam comprises of 20 questions and you have 20 minutes to complete the exam, including the review.
2. You need to score at least 80 % to pass the exam.
3. The exam comprises of the following types of questions :
  - Multiple Choice Single Response (MCSR)
  - Multiple Choice Multiple Response (MCMR)
4. There is no negative marking.
5. There is a timer at the upper-right corner of the exam screen that indicates the time remaining for the completion of the exam.
6. **Pause Quiz** - You can pause the ongoing quiz anytime by clicking on "Pause Quiz" button next to timer on the upper right corner. The timer/quiz will pause and resume only after you click on "Continue the last attempt" button.
7. You can go to any question in random by clicking on the question number displayed on the left hand side.
8. **Mark for Review** - The question box will be marked as RED and is used for revisiting the question, if required, later during the exam.
9. At any point of time during the exam, you can go back to any question and modify your choice(s) by clicking on the **Previous** and the **Next** buttons or Select the question number from the left side.
10. You can stop the Quiz by clicking on the "**Finish Attempt**" button.
11. Click the **Attempt Quiz Now** to start the exam.

# Sample Question

(Correct answer on next slide)

QUESTION 1

NOT YET ANSWERED

 MARK FOR REVIEW

What does agile triangle contains?

Please select :

- A. Time, Cost and Scope
- B. Value, Quality and Risk
- C. Time, Cost and Value
- D. Value, Quality, Constraints (time, cost, scope)

QUESTION 1 INCORRECT MARK 0.00 OUT OF 1.00 MARK FOR REVIEW

What does agile triangle contains?

Please select :

- A. Time, Cost and Scope
- B. Value, Quality and Risk ✘
- C. Time, Cost and Value
- D. Value, Quality, Constraints (time, cost, scope)

Explanation :

Correct answer is option D.

Agile triangle contains value, quality and constraints. Traditional projects constraints (time, cost, scope) are important project parameters but these are not the project's goals. In agile philosophy, value (Extrinsic quality to the customer) and quality (Intrinsic quality) are very important. The goal is to maximize customer value rather than conforming to the plans.

Source: Agile project management : Creating Innovative products by Jim Highsmith, Chapter 1

The correct answer is: Value, Quality, Constraints (time, cost, scope)

[Feedback about this question and answer](#)

Quiz navigation

Show one page at a time

Show all correct answers

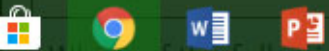
Show all incorrect answers

Finish review

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20



QUESTION 2 INCORRECT MARK 0.00 OUT OF 1.00 MARK FOR REVIEW





# Professional Scrum Master – I (Best option)



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[ABOUT](#) [TRAINING](#) [CERTIFICATION](#) [OPEN ASSESSMENTS](#) [COMMUNITY](#)

## PROFESSIONAL SCRUM MASTER I

[PSM II ASSESSMENT](#)

[PSM III ASSESSMENT](#)



### Prove Your Knowledge of Scrum

The Professional Scrum Master™ Level I (PSM I) assessment is available to anyone who wishes to validate his or her depth of knowledge of the Scrum framework and its application. Those who pass the assessment will receive the industry recognized PSM I Certification to demonstrate their mastery of the content.

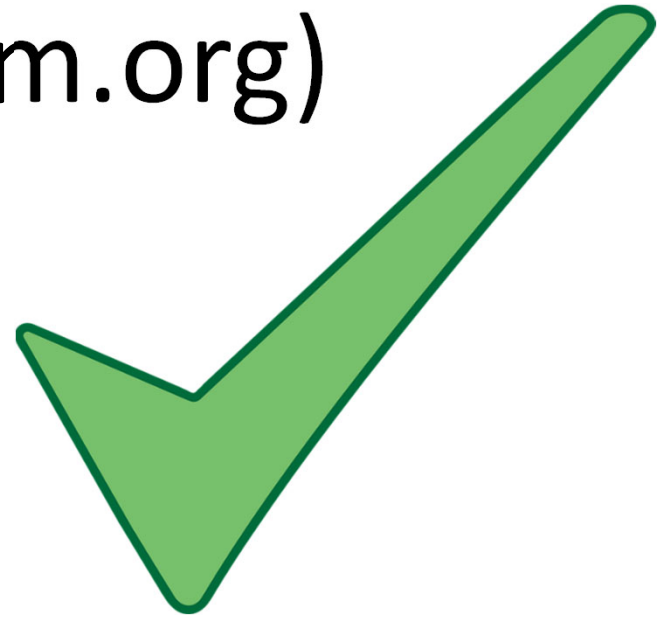


are agreeing to the [Privacy Policy](#) and [Terms of](#) X

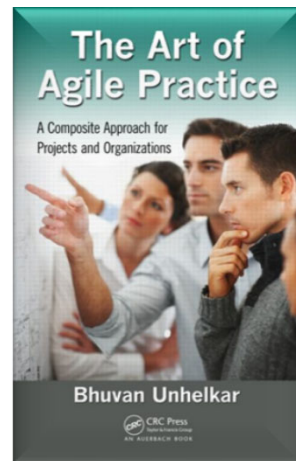
quired and if you feel that you already  
scrum knowledge and understanding of the

# PSM-I (from Scrum.org)

- Jeff Sutherland
- No need to Purchase a Class
- \$150 for one attempt
- PSM-II and PSM-III may not be value-for-time and value-for-money
- *PSM-I can be further improved upon by SAFe Certification*







## Sub-Module

# CAMS – COMPOSITE AGILE METHOD & STRATEGY

And a Practical Agile Manifesto

*Agile Extension  
to the  
BABOK® Guide*

Version 1.0

Complimentary IIBA® Member Copy.  
Not for Redistribution or Resale

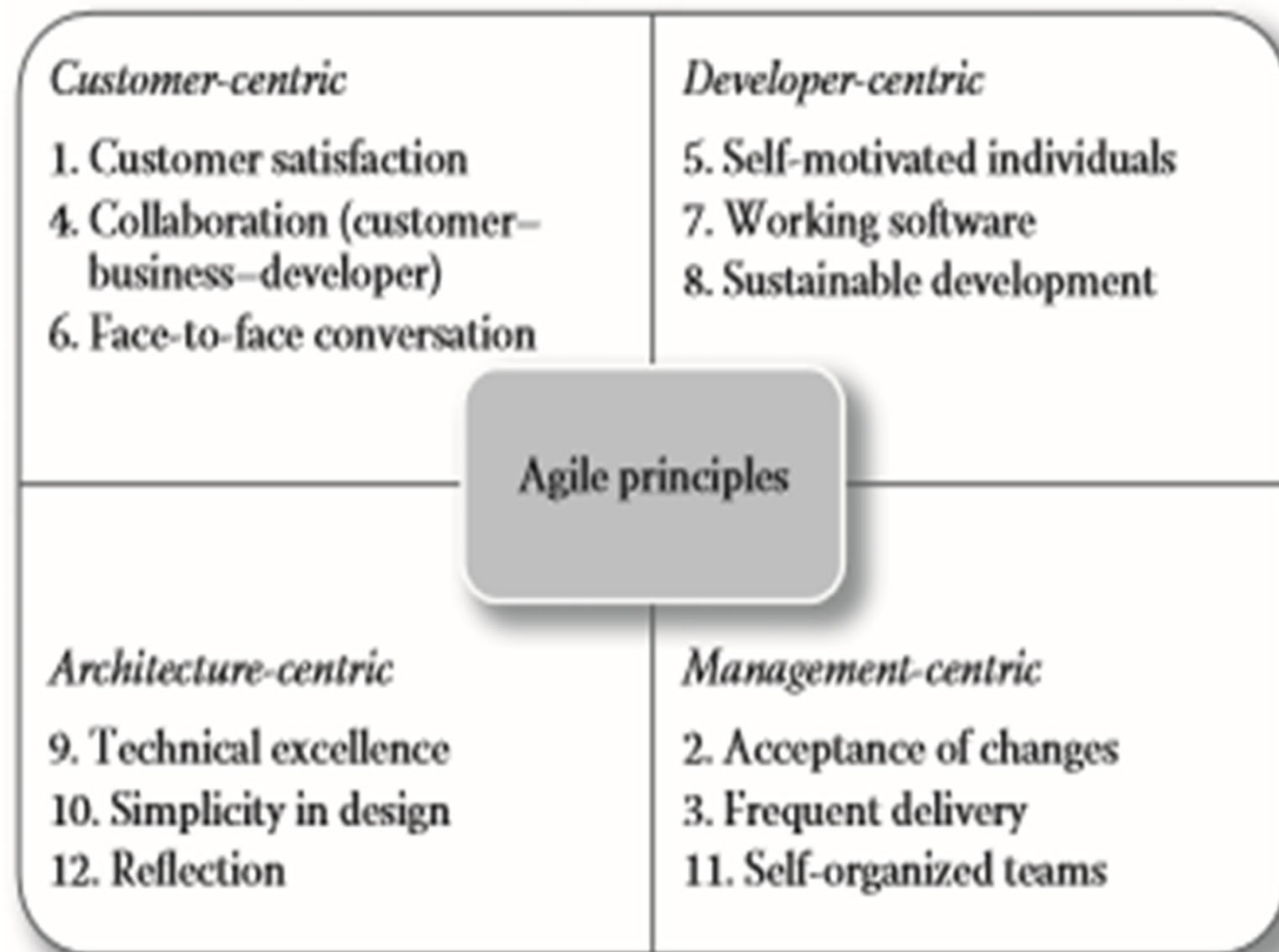
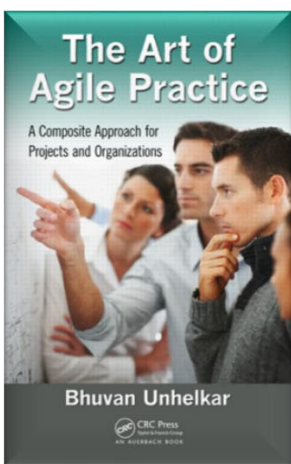


Business analysis in an agile environment may be performed by a business analyst, product owner, or by others on the agile team.

Business analysts are active members of agile teams.

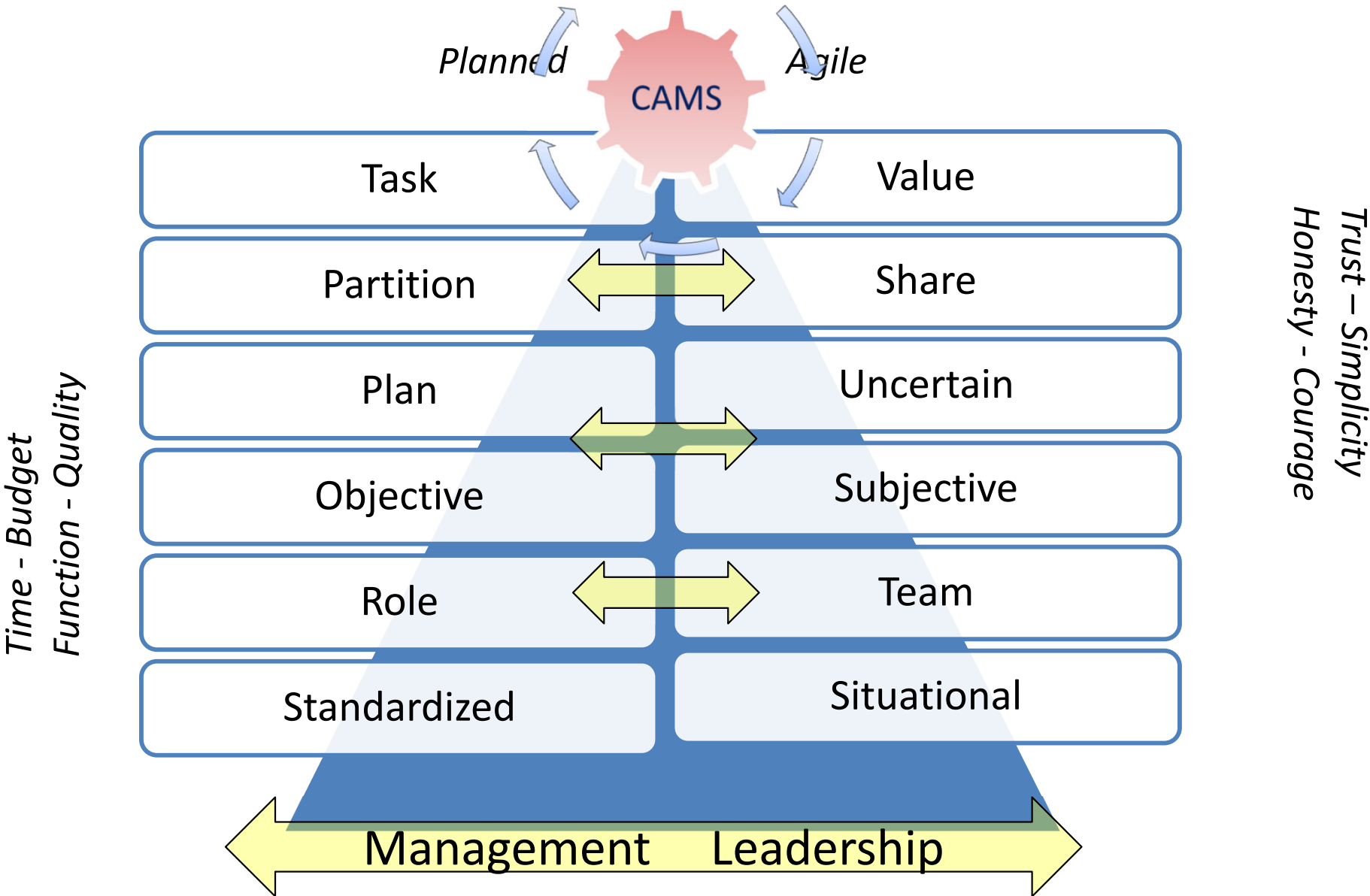
Facilitate planning, analysis, and other events and activities.

Help the team to identify and adapt to changes in requirements and assumptions as they emerge.



**Figure 2.2** Contextual groups for Agile principles.

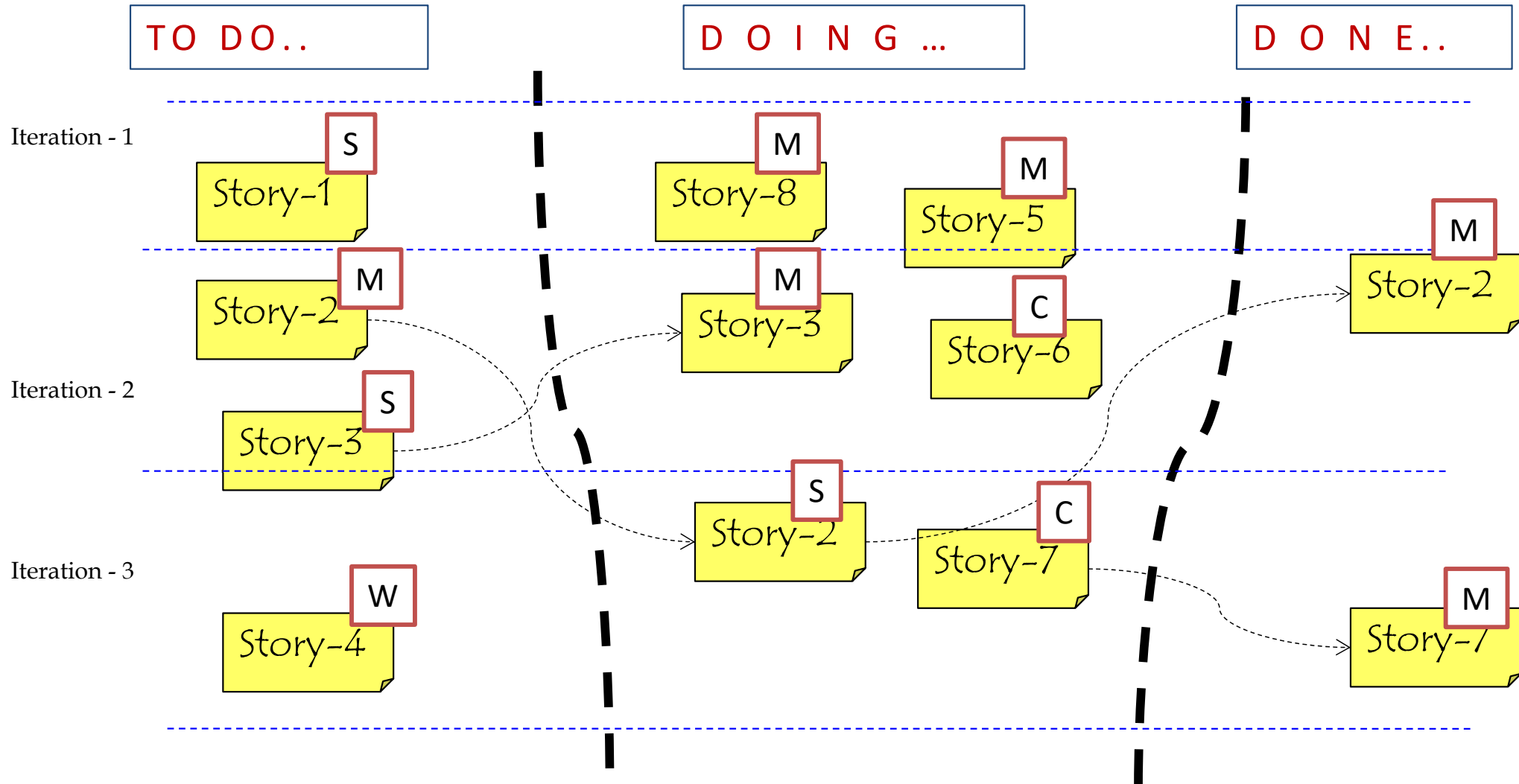
# Combining Planned and Agile Factors in CAMS-based projects



## Table 2.7 A Practical, Revised View of the Agile Manifesto

- Individuals and interactions *together with* processes and tools
- Working software *together with* comprehensive documentation
- Customer collaboration *together with* contract negotiation
- Responding to change *together with* following a plan

# Priorities and Iterations on Agile Project Charts



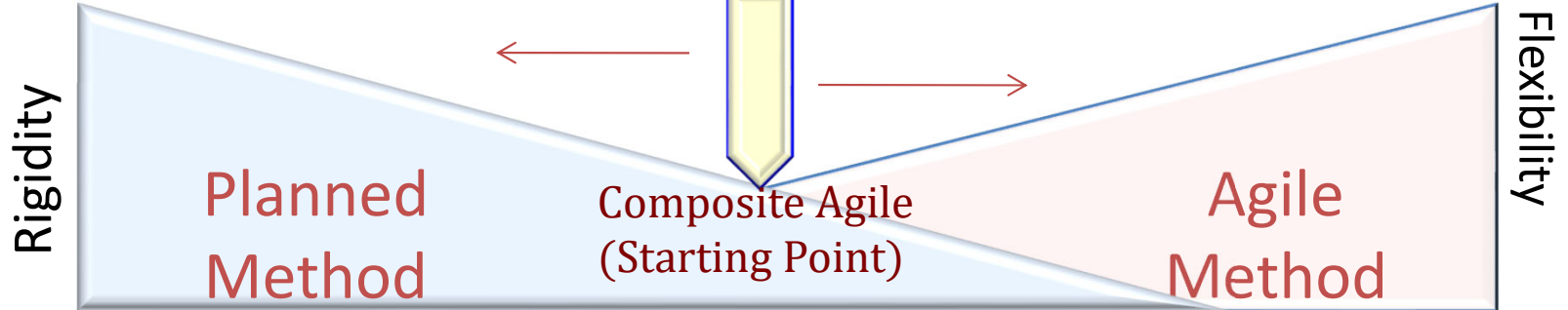


# Variation & Extend of Planned and Agile Elements in a Composite Method Configuration depending on Organizational and Project Characteristics

Mindset

CAMS Configuration varies according to Organizational & Project Characteristics

(a) Variation



(b) Extend

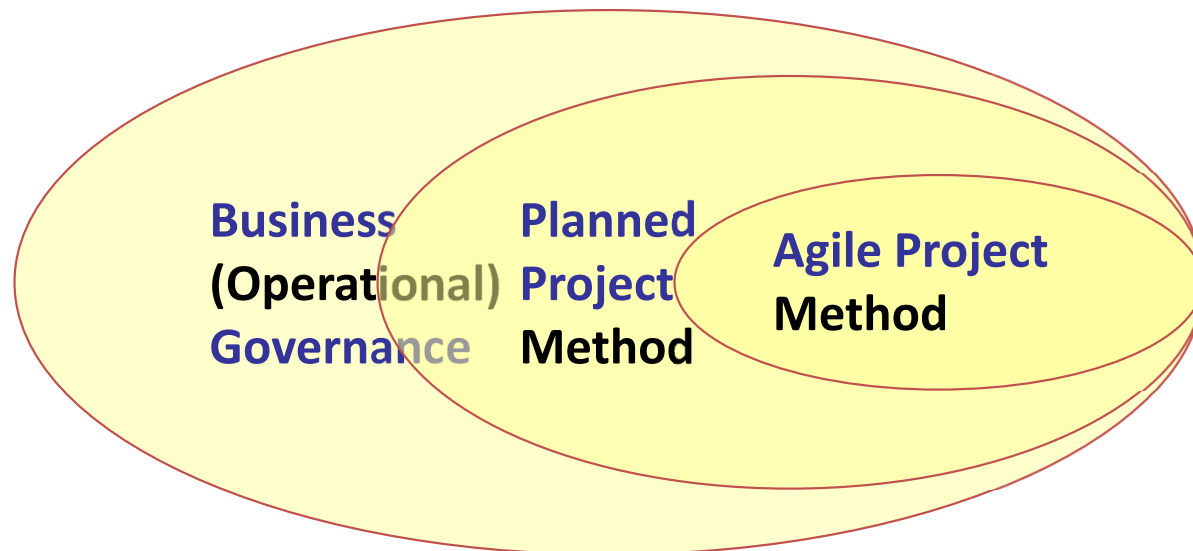
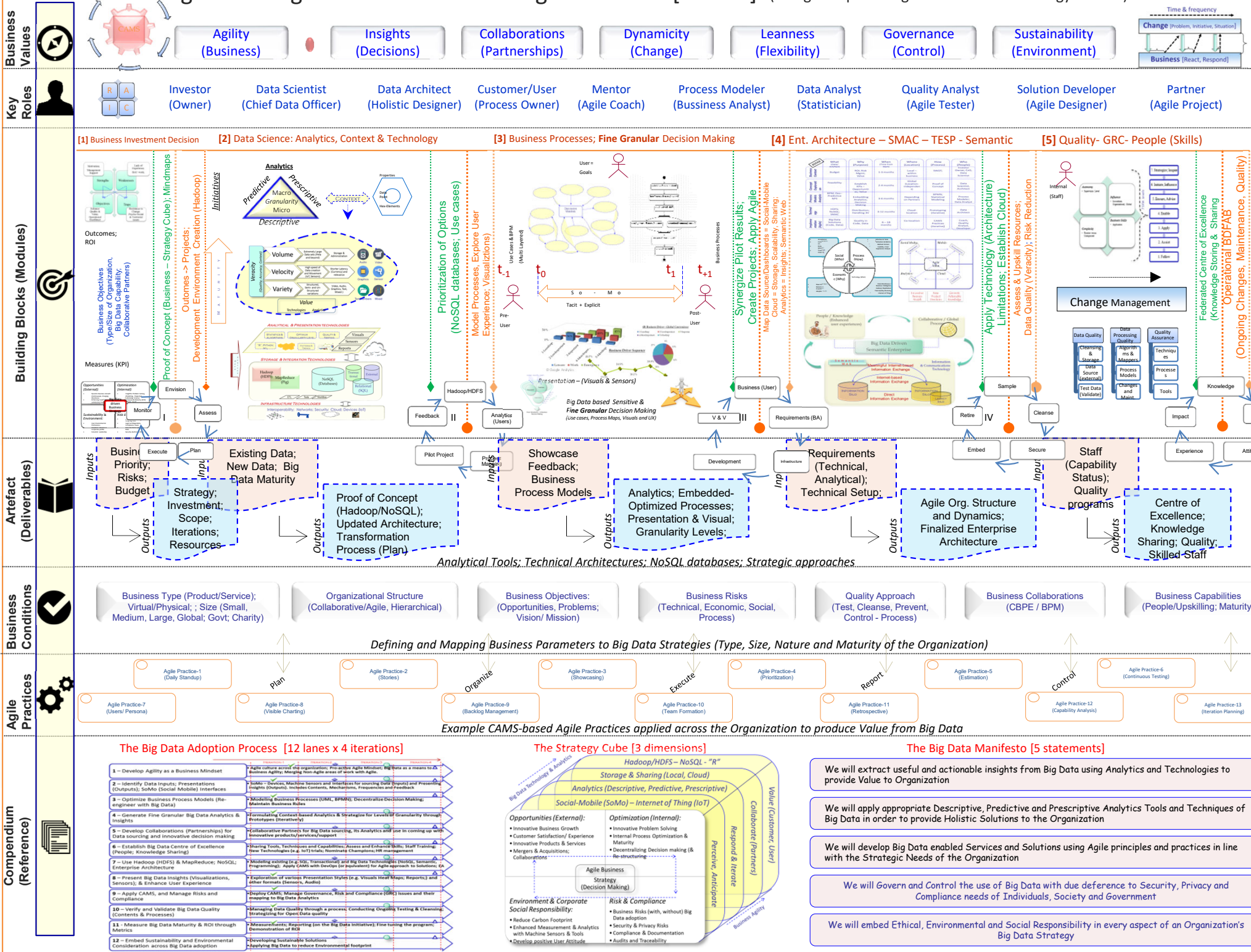


Figure 2.0 Big Data Framework for Agile Business [BDFAB]: (Using Composite Agile Method and Strategy - CAMS)

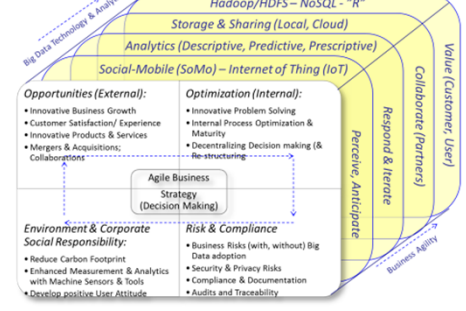
© MethodScience; Big Data Framework for Agile Business (BDFAB)



**The Big Data Adoption Process [12 lanes x 4 iterations]**

- 1 - Develop Agility as a Business Mindset
- 2 - Identify Data Inputs; Presentations (Outputs); SoMo (Social Mobile) Interfaces
- 3 - Optimize Business Process Models (Re-engineer with Big Data)
- 4 - Generate Fine Granular Big Data Analytics & Insights
- 5 - Develop Collaborations (Partnerships) for Data sourcing and innovative decision making
- 6 - Establish Big Data Centre of Excellence (People, Knowledge Sharing)
- 7 - Use Hadoop (HDFS) & MapReduce; NoSQL; Enterprise Architecture
- 8 - Present Big Data Insights (Visualizations, Sensors); & Enhance User Experience
- 9 - Apply CAMS, and Manage Risks and Compliance
- 10 - Verify and Validate Big Data Quality (Contents & Processes)
- 11 - Measure Big Data Maturity & ROI through Metrics
- 12 - Embed Sustainability and Environmental Consideration across Big Data adoption

**The Strategy Cube [3 dimensions]**

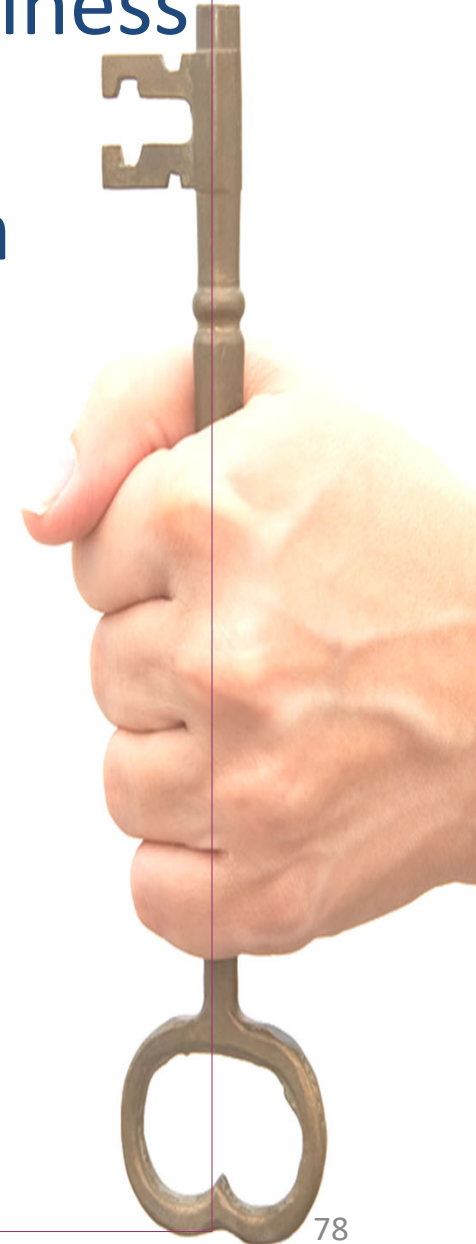


**The Big Data Manifesto [5 statements]**

- 1 - We will extract useful and actionable insights from Big Data using Analytics and Technologies to provide Value to Organization
- 2 - We will apply appropriate Descriptive, Predictive and Prescriptive Analytics Tools and Techniques of Big Data in order to provide Holistic Solutions to the Organization
- 3 - We will develop Big Data enabled Services and Solutions using Agile principles and practices in line with the Strategic Needs of the Organization
- 4 - We will Govern and Control the use of Big Data with due deference to Security, Privacy and Compliance needs of Individuals, Society and Government
- 5 - We will embed Ethical, Environmental and Social Responsibility in every aspect of an Organization's Big Data Strategy

# KEY POINTS (SUMMARY)

- Project success depends highly on Business Analysis Competencies
- Graduate students **NEED** those skills in **PRACTICE**
- Mapping to SFIA provides an excellent reference point for up-skilling
  - It's a Change Management Strategy
- IIBA's CBAP Certification is **HIGHLY COVETED** in the industry
- USF's course in Business Analysis is a **Practical** course





Many Thanks!!



Questions??

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