

Evaluation of IFRS17 Engine

IFRS17 Seminar

Jordan Insurance Federation

23rd of June 2021

Kempinski Aqaba

Jordan

Presented by:

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Managing Director





"Actuaries are multi-skilled strategic thinkers, trained in the theory and application of mathematics, statistics, economics, probability and finance. They have been called financial architects and **social mathematicians**, because their unique combination of analytical and business skills are used to address a growing variety of **financial and social** challenges worldwide."

Worldwide association, representing 70,000 actuaries in 110+ countries.

The IAA is the continuation of the "Comité Permanent des Congrès d'Actuaires" established in 1895 as an association of individuals. In 1998, the IAA was restructured. The major responsibilities of the IAA are now in the hands of local actuarial associations.

The International Actuarial Association (IAA) is an association of almost all actuarial association of the world. Its members are Full member association (FMA), Associate member association and observer member association. For an association to be admitted to become **FMA** it is rigorous process not only based on the minimum actuarial education but also the code of conduct in place.

The most recognized actuarial designations/qualifications are Fellowship or Associateship that are granted by the actuarial profession in different countries.

In countries where actuarial education does not exist or underdeveloped, qualifications is sought from:

Society of Actuaries (**SOA**) and Casualty Actuarial Society (**CAS**)

Institute & Faculty of Actuaries (**IFOA**).

French Institute of Actuaries (**IAF**)

Swiss Association of Actuaries (**SAA**)

German Association of Actuaries (**DAV**)

and others

Ibrahim Muhanna's Brief Actuarial Credentials

I am pleased to confirm that that I am a Fellow of three actuarial association in (Cyprus, Swiss, Lebanon) which are all FMA of the IAA just as the SOA, & the IFOA.

Moreover. I have been on the IAA council since 1990 and served on its executive committee and chaired and vice chaired many other committees.

On the subject health expertise, it was I who founded the health section within the IAA insisting on the importance of having a separate health actuarial specialty. I am a speaker on Healthcare financing in most international actuarial conferences in the Americas, Europe, Africa & Asia.

On May 12 2020, I received the International Actuarial Consulting Association (IACA) Max Lander Lifetime Achievement Award, the most prestigious award given to a consulting actuary globally. The Max Lander Award is given to a member of the actuarial profession who has contributed to the public awareness of the work of the actuarial profession and the promotion of the business of consulting actuaries.

The award is given to only one actuary every two years by IACA in recognition of a lifetime of outstanding work and contribution to the profession globally. This marks the first time in the award's history that someone from Africa, Asia or the Middle East has been recognized.

The past six awardees have included giants of the actuarial field, including past presidents of the DAV in Germany, CAS in the US, the Institute in the UK as well presidents of the IAA.

Business Journey since 1976

Employment from 1976 to 1985

Insurance - Detroit Mutual US , SNA Group ME, Eagle Star MENA

Founded as of 1986

Consultancy - **i.e. Muhanna & co**

Insurance Companies – Omnilife UK, Omnirus Russia, Omnimu Lux

Software Co. - Insurasoft

Education & Research– **Muhanna Foundation**

Rating agency - **Muhanna & co**





Thirty Five Plus Years in the Business

Established in 1986 in Nicosia, Cyprus – we are the first independent actuarial firm in the MENA region.

Leading Actuarial Consultants in the Region

Led by industry thought leaders, we worked with public institutions and private organizations as actuaries and consultants.

Local Expertise, Global Reach, & World-Class Quality

From our offices in Cyprus, Lebanon, and Tanzania, we serve our communities with local expertise and world-class quality.

Robust Team of Actuaries & Consultants

We have a multidisciplinary & multicultural team of actuarial thought-leaders, actuaries in-training, database experts, and topic experts.

1986-NOW



2000-NOW



2015-NOW



01 CYPRUS OFFICE

We opened our doors in Nicosia, Cyprus in 1986. Immediately, our team began providing actuarial services to insurance companies and other organizations in Cyprus and the region.

02 LEBANON OFFICE

In 2000, we opened our second office in Beirut, Lebanon. For the past 17 years, we have served clients throughout the Middle East and North Africa from our hub in Lebanon.

03 TANZANIA OFFICE

After many years of servicing East Africa from our Beirut office, we made the decision to build a new branch in Dar Es Salaam to anchor our East African presence.





Eastern Mediterranean & Europe

Cyprus, Greece, Turkey, Malta, Russia.

Middle East

Algeria, Bahrain, Egypt, Iraq, Iran, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, UAE, & Yemen

East Africa

Burundi, Gambia, Ivory Coast, Kenya, Malawi, Rwanda, Sierra Leone,, South Sudan, Tanzania, Zanzibar, Zambia and Zimbabwe

i.e. Muhanna & co. is the oldest independent actuarial consulting firm based in the Middle East & East Africa with over 40 employees including 7 qualified actuaries and 12 assistant actuaries.

	Nicosia, Cyprus	Beirut, Lebanon	Dar es Salaam, Tanzania
Actuarial Consultants	5	13	1
Management Consultant	2	3	1
Legal Consultant	1	1	1
Investment Consultant	1	1	-
Economist	-	2	1
Marketing Consultant	1	2	1
Support staff	15 persons including computer analysts, accountants and others		
NETWORK OF ASSOCIATES / SUBJECT MATTER EXPERTS	20+ Local & Subject Matter Experts used regularly on projects: Kenya, Tanzania, Jordan, Qatar, Kuwait, Lebanon, Cyprus, Turkey, UAE, Saudi Arabia, Bahrain,		

Why Muhanna?

Regional Knowledge

Over **35** years of experience working with Healthcare Schemes in the Middle East & East Africa.

Recognized

Expertise in Region

Local Talent

World Class Quality

Our team's work is recognized for being first-class on an international level.

1st Class Experts

30+ years experience

International Credentials

Language Fluency

Ability to deliver without the need for translators or a middle man. Nothing lost in translation.

Arabic

English

French/Greek/Swahili

On-Ground Availability

Close proximity of our team allows for minimal travel time and cost when servicing Kuwait.

Middle East

East Mediterean

East Africa

Because of this close resemblance, we do understand the preferred way of interaction and communication as well as the requirements and therefore we will assure that the transfer of knowledge process to the appointed team will be completed to the fullest extent



SOCIAL PROTECTION

**SOCIAL SECURITY
HEALTHCARE
UNEMPLOYMENT**

- Reform Public Pension Plans
- Social Health Insurance Valuations & Coverage Reform
- Unemployment Insurance & Income Transfers Programs
- Labor Regulations Review
- Integration of Labor Programs for Job Creation with other Economic policies and programs
- Reevaluation of Regulation and Supervision of Private Providers of Public Services

PRIVATE INSURANCE

**LIFE
NON-LIFE
MEDICAL
INVESTMENTS**

- Asset Liability Modelling,
- Statutory Actuarial Reserving & Pricing
- Product Design and Product Profit Testing,
- Valuations for Merger/Acquisition,
- Database system integrations,
- Financial Condition Report
- Reinsurance Optimization
- Business Plans and Application for License,
- Complete and Total Set-up of Life Insurance operations
- **Develop specific applications and Evaluate & audit IT systems**

EMPLOYEE BENEFITS

**PENSION
HEALTHCARE
STRATEGY**

- Funding Valuation of pre and post health care benefit funds,
- Actuarial Audit,
- Feasibility Studies for the Design and Establishment of Pension/Provident Funds/Schemes,
- Merger/Privatization of Pension Funds
- Statutory and ad hoc Valuations for Funding and Accounting purposes,
- Investment Managers Selection Advice,
- Asset Liability Modelling,
- IAS19 EOSI Valuation

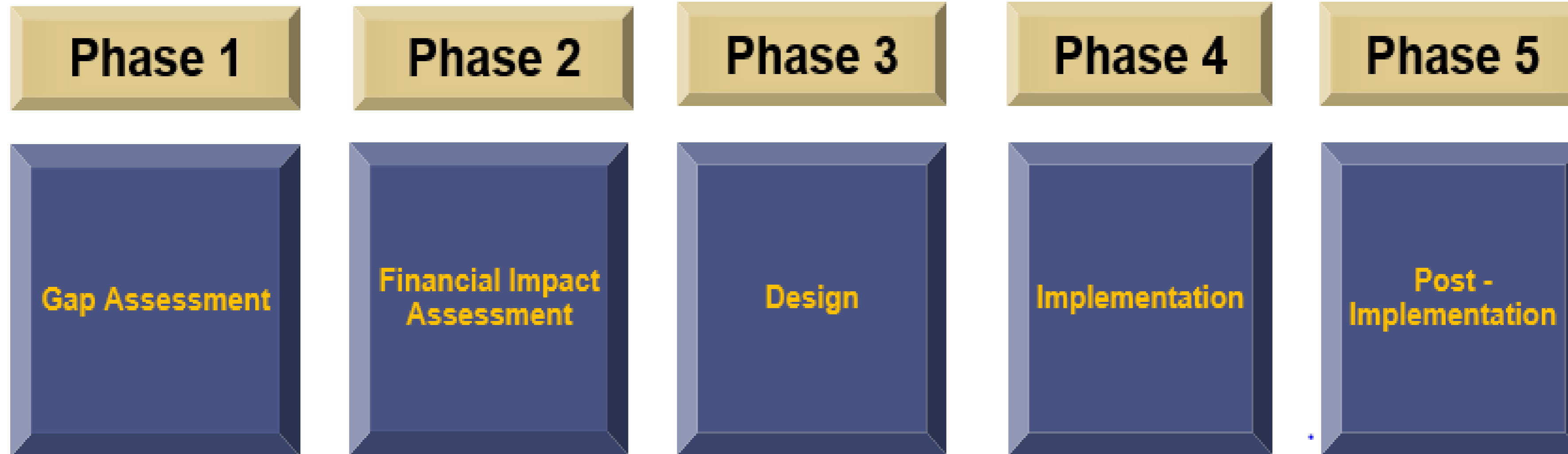


Evaluation of an IT product

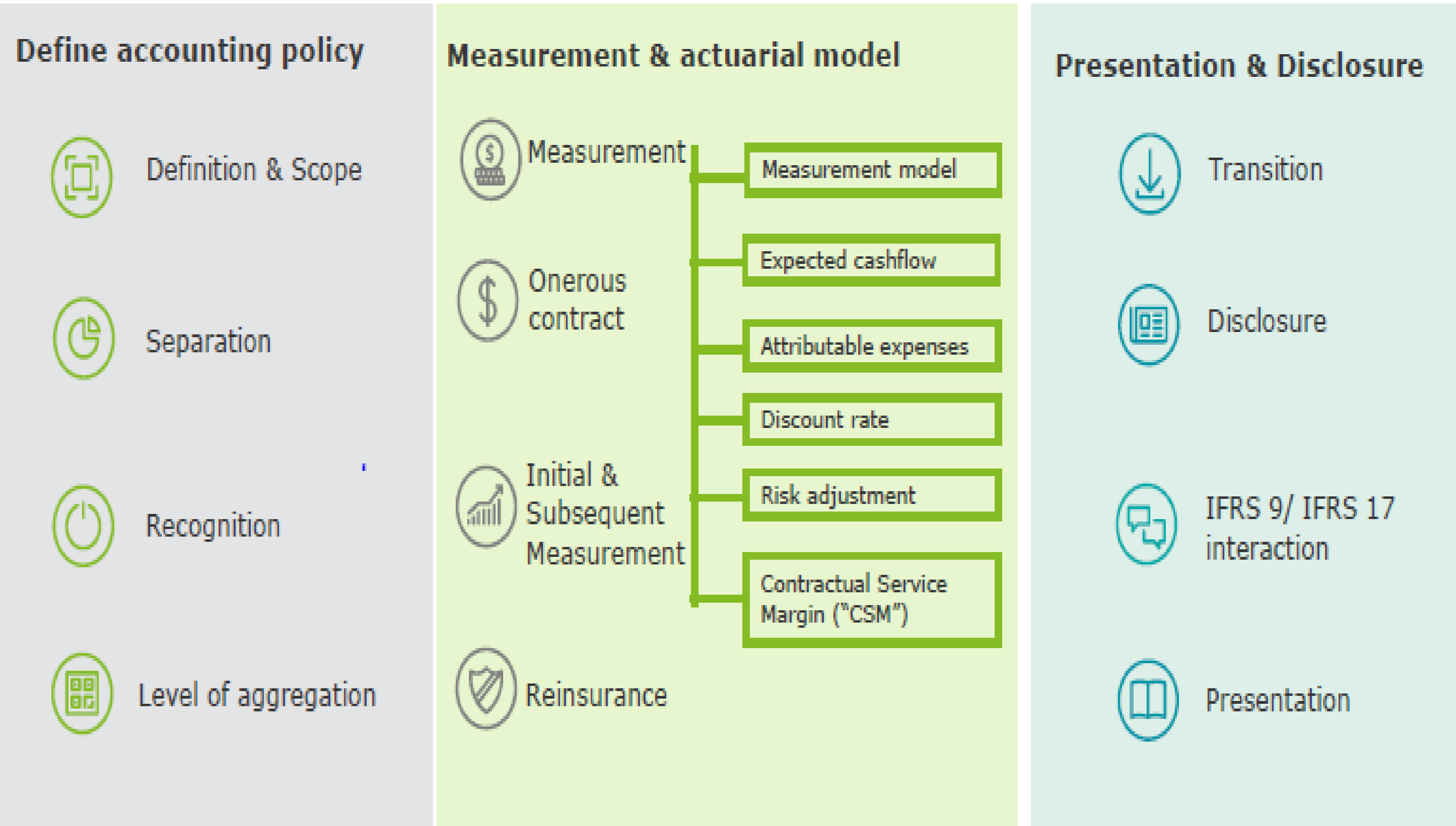
The IT within the Phases

IFRS 17 KEY PHASES

• Re



IT & IFRS17



One of the issues looked at in the Gap Assessment, phase #1, is whether the current IT system is IFRS17 compliant.

Prior to reaching IFRS17 implementation, phase #4, each insurance company should have decided on the IT solution.

If not, is its current vendor provider is upgrading the said system to be IFRS17 compliant.

If yes, by what time and at what cost and whether it has been vetted/audited by a third party expert.

If no, you should ask your IFRS17 implementation consultant for advice on a solution. One of which is the selection of an IFRS17 engine (tool) that will extract/migrate the treated output from your existing IT system and provide the required IFRS17 out put.

The decision should be based on the following criteria:



IFRS 17 Engine Scoring Methodologies

Interactive scoring - after a full demo

Non-Interactive scoring – based on public information & documentation

I will be qualifying my presentation with fact that we have not seen demos of most of the products on the sheet.

The scoring for this exercise is based on Non-Interactive Methodology



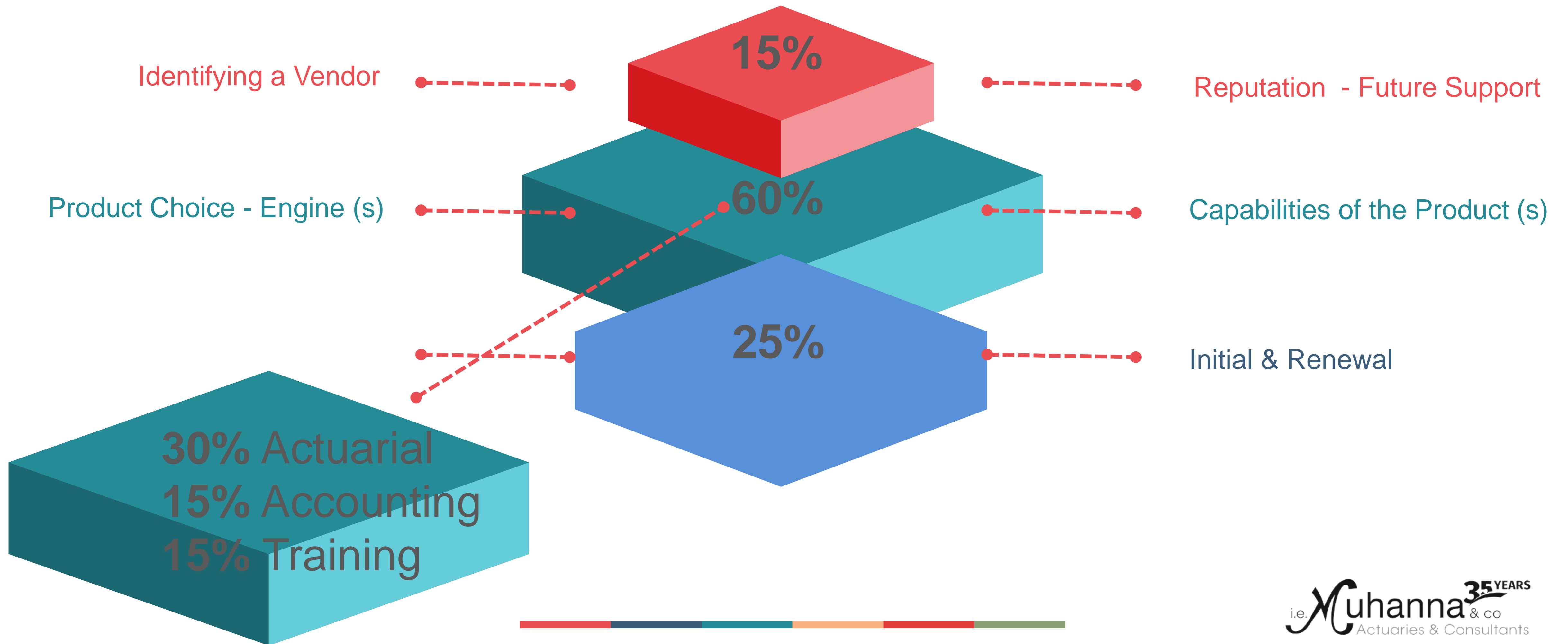
List of Vendors Providing IFRS17 Engine

	Name	Website	IRRS tool link
1	Addactis	www.addactis.com	https://www.addactis.com/solutions/ifrs-17/
2	Aptitude	www.apitudesoftware.com	https://www.apitudesoftware.com/product/ifrs-17-solution/
3	Asseco	https://ce.asseco.com/en/	https://ce.asseco.com/en/portfolio/insurance/financial-reporting/solution-for-ifrs-17-893/
4	CCH	www.tagetik.com	https://www.tagetik.com/no/product/solution?aid=/solutions/insurance-contracts-ifrs-17
5	Equisoft	www.equisoft.com	Not Available
6	Green13	www.green13solutions.com	https://green13solutions.com/
7	Oracle	www.oracle.com	https://www.oracle.com/industries/financial-services/analytics/ifrs-17-ldti.html
8	PWC	www.pwccn.com	https://www.pwccn.com/en/industries/financial-services/insurance/publications/ifrs-17-in-a-box.html
9	Willis Towers	www.willistowerswatson.com	https://www.willistowerswatson.com/en-LB/Insights/trending-topics/ifrs-17-solutions
10	EY	www.ey.com	https://www.ey.com/en_gl/insurance/ifrs-17-reporting-calculation-platform
11	Moore	www.moore-global.com	Not Available
12	Sinalys	www.sinalys.com	https://www.sinalys.com/en/ifrs-17-solution-calfitec
13	Technosys	www.technosysint.com	Not Available
14	Eskadenia	www.Eskadenia.com	a.samara.Eskadenia.com



Evaluation IFRS17 Engine

The three Stages of Valuations



Non-Technical Criteria & Points

Corporate		Points
1	Company	5%
2	Middle East level of support	5%
3	Client base – Regulator’s opinion	5%
Subtotal – 1		15%
Financial Valuation		
1	Initial Price	20%
2	Renewal	5%
Subtotal - 5		25%



Technical Criteria & Points

Actuarial	Points
1 The program clearly states the pre-requisites and assumptions needed to run and points out any potential errors	5%
2 The program allows the user flexibility over their IFRS17 methodology choices and does not constrain them.	5%
3 The program offers a variety of modelling options that take into account the nature of each product, and can supports BBA (General Method), VFA and PAA approaches.	5%
4 The program supports users with the allocation of contracts to IFRS17 groups on initial recognition.	5%
5 The program allows the user to explore and understand any given technical step in detail.	5%
6 The program allows the user flexibility over the outputs and these can be configured to users needs.	5%
Subtotal - 2	30%

Technical Criteria & Points (continued)

Accounting		Points
1	The program's output is clear and well-defined	10%
2	The program's output is easily extractable to the user's tool of choice (Excel, SQL,...)	5%
Subtotal - 3		15%
Support		
1	Training on appropriate and effective use of the program is provided.	5%
2	Continuous technical assistance is provided for effective program use.	5%
3	The program supports users with strong governance, controls and audit trail around results produced.	5%
Subtotal - 4		15%



Non- Interactive Scoring

	Name	Max Available Info.	Actual Points	As a percent
1	<i>Addactis</i>	65%	61%	94%
2	<i>Aptitude</i>	60%	58%	97%
3	<i>Asseco</i>	55%	43%	78%
4	<i>CCH</i>	55%	55%	100%
5	<i>Equisoft</i>	15%	15%	100%
6	<i>Green13</i>	75%	69%	92%
7	<i>Oracle</i>	60%	58%	97%
8	<i>PWC</i>	50%	48%	96%
9	<i>Willis Towers</i>	55%	55%	100%
10	<i>EY</i>	75%	63%	84%
11	<i>Moore</i>	15%	15%	100%
12	<i>Sinalys</i>	75%	60%	80%
13	<i>Technosys</i>	15%	13%	87%
14	<i>Eskandia</i>	75%	65%	80%



THANK YOU
FOR
YOUR TIME

Q&A

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