

Arab Actuarial Conference

STRATEGY FOR DEVELOPING UNIVERSITY & PROFESSIONAL ACTUARIAL CURRICULUM

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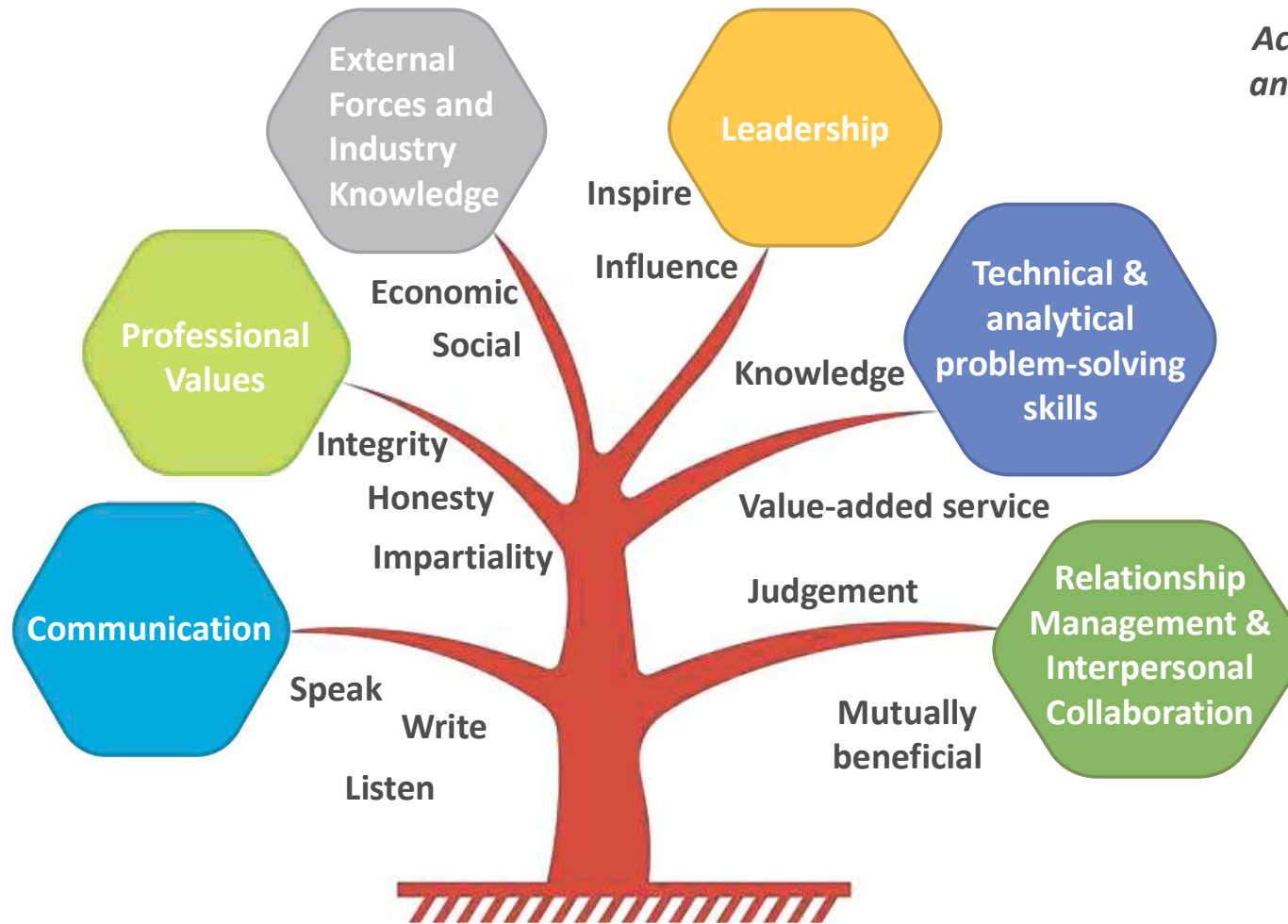
Executive Director & Resident Actuary - Lux Actuaries & Consultants, Kenya

Subject Leader Actuarial Science - Strathmore University

Member – Actuarial Education Network, International Actuarial Association (IAA)

President - The Actuarial Society Of Kenya (TASK)

Core competencies:



We aim for constantly developing these competencies as Actuarial practitioners and these are the skills we look for when employing at Lux Actuaries

Core competences:

- **Value added service:**

Risk management (and should not be limited to insurance, recall other ways of managing risk - Avoidance, Retention, Reduction - not enough emphasis is placed on this, and perhaps also a local knowledge of how risk is managed, e.g., in Africa rather than taking out retrenchment insurance, build a house in the village that one moves to during Covid.)

Minimum Knowledge & Experience: Actuarial graduates

- Actuarial science is more than just numbers.
- The actuarial science course requires diligent and conscientious study patterns to develop technical & specialist skills that will enable under & post graduates be prepared to enter the job market.

I am currently involved in developing the BSc University curriculum for Strathmore University, in line with IAA curriculum, and enhanced with wider framework for teaching style.

Minimum Knowledge & Experience: Actuarial graduates

- A 360-degree experience allows students to immerse themselves in a journey that solidifies their foundation.
- Apart from active course material study, activities such as mentorship programs, academic orientation, community outreach programs, industrial internships, local and international academic trips, participation in competitions, joining a club or relevant society, sports, games, participation in career development events and trainings, powerful networking etc. will allow a graduate to be well rounded and fit for the professional roles.

Minimum Knowledge & Experience: Actuarial graduates

- Actuarial graduates can play a vast role including: actuarial analysts, business analysts, investment analysts/bankers, wealth analysts, asset management, consultants, insurance industry experts, etc.

Minimum Knowledge & Experience: Actuarial graduates

- A BSc should allow the dissemination of Technical knowledge for entry level – core competencies.
- An MSc should allow for the transfer of Applicatory knowledge for higher levels – Core applications and specialized lessons however should also include more training in business strategy and management, and contextually relevant training e.g., Microinsurance for developing markets, Sustainability, etc.

Minimum Knowledge & Experience: Actuarial graduates

- To qualify as an actuary, apart from a BSc or MSc university qualification, professional examinations offered by an IAA accredited professional body are required.
- All course notes thus developed need to reflect the latest strategy.
I am currently developing the professional course material for certain subjects offered by the Institute of Actuaries of India.
- The aim is to be comprehensive and develop material that can be well understood and relevant for the changing times, as envisioned in the strategy (Curriculum).

Theory vs Practice embedment

- Theory is a proposed explanation of concepts while practice is the observation of these concepts.
- In the rapidly growing actuarial field, there has to be a hybrid of theory and practice that makes programs modern, applicable and up-to date.
- How is this theory of mathematics, finance and economics applied to solve problems in the real world? is a question we need to ask ourselves when developing a program.

Theory vs Practice embedment

- The science of uncertainty learned is used to minimize improbability faced vastly in today's world.
- Both academic and professional programs should have rich connotations that are constantly advanced and over time make it possible for actuarial professionals to discover a wide use of actuarial methods.
- For example:
I used my actuarial skills of data & risk management to solve an issue of statelessness in Kenya, a human rights issue, for which I was awarded a presidential honor.

Theory vs Practice embedment – Way forward

- Analytical grounding on wider application, and expectation of more practical work-based skills.
 - There practical skills are currently embedded via internship in academic curriculum and work-based skills requirements in certain professional curriculum.

Traditional vs Digital skills

- A digital strategy is core in actuarial advancement.
- Recent studies shows 91% of businesses are engaged in some form of digital activity.
- The covid-19 pandemic also triggered increased digitalization shielding productivity.
- Artificial Intelligence (AI) is also rapidly developing, and actuaries can harness this to make their models closer to reality allowing for better predictions to be made.

Traditional vs Digital skills

- We however also need to take into consideration who we are dealing with as actuarial professionals and existing age-gaps.
- What levels of digital literacy and access do clients have is a key understanding required by actuarial professionals.
- Our aim is to ensure that we can effectively communicate our results thus traditional skills are equally important.

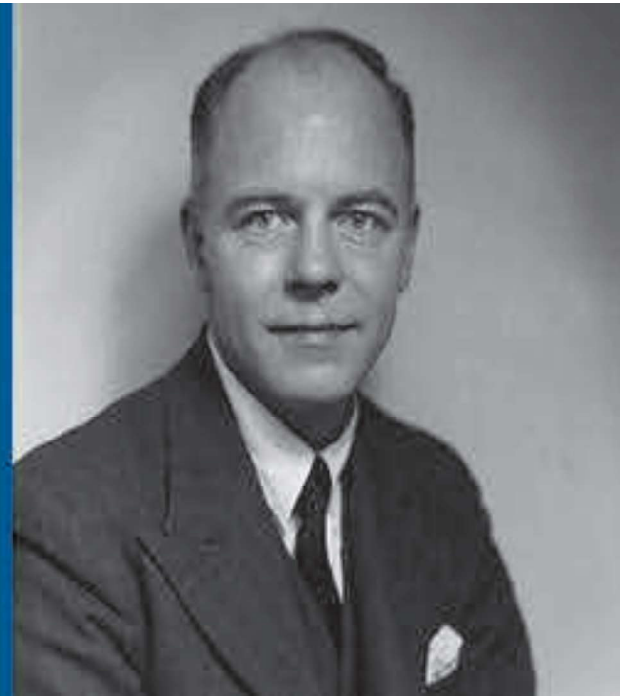
Traditional vs Digital skills – Way forward

- Analytical grounding is currently via advanced analytical tools. E.g., the recent inclusion of R works very well across all curriculum.
- More use of ML and AI is needed to provide value

Effective Leadership in the Actuarial Space

“ [Actuaries] should not be content merely to operate as backroom technicians. There is a duty to come forward and to speak out on these questions of national finance – to be prepared to contribute in a forceful if non-partisan way every time the pensions debate resurfaces.

- Frank Redington



“ An actuary who is only an actuary is not an actuary”

Effective Leadership in the Actuarial Space

Listening is a core communication skill:

Listening to peers and stakeholders:

IAA – African Continental conference 2022 in Ghana

FB's - Arab Regional conference 2023 in Egypt

As TASK:

We are working towards establish quality standards (curriculum, etc.) at all 30 Kenyan universities teaching actuarial science.