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Actuary = Risk-Averse?

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The stereotype of an actuary is often associated with adjectives like “conservative,” “risk-averse” and “meticulous.” Indeed, most actuaries like to get things right and that means exactly right—quotation of numbers should be right down to the decimal point. Yet, this is certainly not all the talent that an actuary has to offer.

Recently, a colleague complained saying: “actuaries should never be in the room when we discuss new innovative products, they just scare all our partners away with their risk analysis!” As an actuary working in micro-insurance innovations and product development in Kenya, my colleague still has a long way to go in learning about the actuarial profession.

Indeed, innovation often goes hand-in-hand with risk-taking. Whilst actuaries are the experts of risk management, this does not translate to a zero-risk tolerance. Allow me to use pricing in micro-insurance products as a case in point. One of the greatest challenges facing micro-insurance product development is the constraint of data availability on similar products. The lack of past experience can lead to high risk loading in pricing as a result of the great level of uncertainty. If the premium rates are set higher than actual experience due to conservative assumption setting, low take-up will likely result. Not only will the product be perceived as unaffordable, it will provide poor value for low-income households with limited financial means. The risk of anti-selection also emerges as over-priced products will likely attract individuals with higher risk profile. So, how can actuaries over-come this mismatch between premium affordability and data restrictions on micro-insurance products?

All actuaries are trained on the well-known actuarial control cycle—specify, develop and monitor—which emphasizes on the importance of repeated feedback loop in product management. The use of pilot testing (i.e., a small, simple controlled experiment of the product) is fundamental to product development whilst limiting risk exposure level. Moreover, this is precisely an application of the actuarial control cycle in solving real world business problems. Not only does a pilot put your product to test in its operations and market demand, it will also provide valuable insight and collection of data which can then be used in pricing going forward. It is only through continuous



monitoring and revision that accurate pricing assumptions can be validated for scaled-up products. Whilst actuaries have much to offer in accurate calculations, the even greater value of an actuary lies in his/her judgment and decision of materiality during this iterative control cycle.

“The biggest risk is not taking any risk...in a world that is changing really quickly, the only strategy that is guaranteed to fail is not taking risks.” -Mark Zuckerberg

As actuaries—the natural leaders in risk—we are not opposed to taking risks, rather we strive to better manage risks in order for our stakeholders to succeed in an uncertain environment. ■



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