Maximizing Risk Mitigation for Humans

Understanding Risk Mitigation
Risk mitigation is a strategy to prepare for and lessen the effects of threats faced. Risk mitigation remains a fundamental approach adopted by businesses as against risk aversion. Risks contribute to opportunities, hence, identifying appropriate mechanisms to mitigate them enhances potential of such opportunities. In specific, **Risk Mitigation** in the **AAA system** environment aids in enhancing the wider utility of technology for enriching life in earth and outer space.

However, there exists an important aspect to consider while thinking of risk mitigation. Risks need to be mitigated for who will get impacted by the risk. For instance, in the case of a facial recognition system being biased (risk), the impacted party will be its users and the accountability falls on the organization. If the organization chooses to mention as part of terms and conditions that the results of the system may be biased, they are likely to deploy a pseudo mitigation for themselves, but not for the users who may get impacted by such bias. So, if the mitigation is not ensuring that a disclaimer regarding the potential biased results of the tool is not made apparent to the user and ensure that they are discouraged from using such tool for purposes that can cause harm, then such mitigations are pseudo mitigations from ForHumanity context.

For instance, Joseph Paul Cohen who developed an illustrative Machine Learning driven chest-xray interpretation tool and published them as open source (here). He ensured that the disclaimers associated with the use are made apparent to any reader and appropriate notifications are provided for anyone trying to use such a tool to test their hypothesis.

Maximizing risk mitigation
Risk mitigation is maximized wherein the potential of such risk is minimized to negligible levels. Organizations consider a risk-reward tradeoff while considering mitigations associated with risks. However, in the context of AAA systems, risk-reward tradeoff cannot be considered from an organizational perspective (accountable), but from the perspective of people who will get impacted by such risks. Risk mitigations should have a perspective of addressing the risk first and not the accountability to the risk occurrence first.

While maximizing risk mitigation, care shall be taken with reference to risk interactions (specifically with reference to interactions between risks, interactions between mitigation of one risk and other risk, and interaction between mitigations). Such interactions may compensate or accentuate the risk or its impact to humans, society and the environment. Hence, Maximizing risk mitigation cannot be considered in an isolated perspective.

An appropriate scale or measure shall be used to ensure that risk mitigation is attempted to be maximized to a reasonable degree. Reasonableness is a threshold to establish an acceptable level of risk mitigation efforts with reference to a specific risk scenario. The degree of maximization will be subject to specific risk scenarios, however, if reasonable risk mitigation is not undertaken, it is a failure of organization to prevent risk impacts to humans, society and environment.

Maximizing risk mitigation and minimizing risk exposure
Invariably, maximizing risk mitigation to a reasonable degree will inherently reduce organizational (accountability) risks, thereby minimizing the risk exposure from the organizational context. Put in the context of AAA systems, maximizing risk mitigation will reduce the risk impact to humans, thereby limiting the risk exposure of the organization.

Hence, **Maximizing Risk Mitigation from people perspective = Minimizing Risk Exposure from organizational perspective**