R&M Physics of Failure Handbook and Digital Evolution Plan

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In the past, many of our Physics-of-Failure (PoF) reliability application activities have been adhoc in nature, whether doing empirical Strength vs Stress statistical analysis, deterministic fatigue analysis, or doing PoF related simulations through an engineering tool/platform. Since then, from a Reliability perspective, we have moved the ball forward by beginning to integrate our PoF body of knowledge as part of a NASA Guidebook, which will be available digitally and provides a potential common portal to access needed information for particular PoF reliability applications. It is this Digital Portal that provides the basis for a new NASA framework to continually build our PoF body of knowledge that includes actual use-case examples across the life cycle. Whether it be early design, screening, or inspection criterion development, etc., this framework will provide a digital transformed way to apply necessary PoF approaches/techniques.