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Global Risk Management Network LLC Global Practices Leading LIVE RESEARCH Series

Posted:

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Amazon Web Services Partner; Global Risk Management Network, LLC; GIBC Digital, LLC (Earlier)

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Abstract

Future of Risk is [Already] Quantum, Are You Prepared?: Peek Preview of Next 30-Year Global Risk Evolution Already Happening: Based Upon Building and Leading the Digital Future of Global Risk Management of Global Risks for the Past 30-Years: From the Forthcoming Engineering Journal Research Paper: By The Global Risk Management Network, LLC, New York, USA. (SSRN Publication Release Motivated by the Latest Global Events Already Confirming the Projections - that "Legacy" Computational Quantitative Finance and Trading 'Players' May Need Help Understanding):

Latest Global Risk Events that inspired the early Peek-Preview of the Forthcoming Journal Paper:

Bloomberg, US Edition: EU Weighs Gas-Price Caps, Derivatives Halt as Crisis Worsens:

<https://www.bloomberg.com/news/articles/2022-09-04/eu-to-debate-radical-energy-intervention-tools-as-crisis-worsens>

ABSTRACT

ISO 31000 Standard on Risk Management (RM) recently re-defined Risk as the effect of uncertainty on an organization's ability to meet the objectives. Earlier, it defined Risk as a combination of the probability and scope of the ['predicted'] consequences. The 'revised' ISO Risk advances beyond a static world guided by prediction and pre-determination based on historical data to a dynamic world characterized by uncertainty and complexity focused on business outcomes over data inputs. Our Knowledge Management (KM) R&D adopted by global organizations such as NASA and Big Banks is readily applicable to provide a 25-year head start to organizations in above ISO risk evolution. Over the last two decades, we have developed theoretical and applied frameworks for the dynamic world characterized by uncertainty and complexity, with business outcomes as drivers of real-time performance rather than data inputs. Our forward-looking 'Anticipation of Surprise' focus of KM drives future "organizational adaptation, survival and competence in face of discontinuous environmental change" at organizations such as Goldman Sachs. Our KM focus manages change, uncertainty and complexity as primary [outcome] targets in contrast to 'data-driven' [input] approaches. Its focus on dynamic uncertainty is complemented by adversarial uncertainty from cyber-adversarial environments. Quantum uncertainty – encapsulating the two uncertainty types – and time-space complexity from increasingly non-deterministic and statistically non-normal and non-linear environments are the focus of our KM R&D underpinning development of Quantum minds. Our latest AI-Cybersecurity KM practices are advancing the future of Pentagon's C4I-Cyber-Command-Control-Advanced Battle Management Systems and AWS Network-centric Agile-Resilient Cloud computing.

Keywords (Only up to 3 keywords allowed by the Journal): AI-Agility & Cyber-Resilience Engineering, Quantum Minds and Self-Adaptive Complex Systems, Quantum Uncertainty and Time Space Complexity .

SECTION 1: Risk Management Practices Leading ISO 31000 Risk Management Standards

SECTION 2: Uncertainty: The Only Certainty Since the Beginning of the WWW

SECTION 3: 'Why Knowledge Management Systems Fail?': How to Mitigate Risk of Such Failures

SECTION 4: Evolution of Uncertainty and Risk Management Over Three Decades Since the WWI

SECTION 5: ISO 31000: Beyond Classical to Financial to a New (Our Old) Definition of Risk

SECTION 6: Latest State-of-Art on Uncertainty and Risk Management KMS R&D Leading Practices

AI-Agility & Cyber-Resilience Engineering in Cloud Computing contexts continue to be focus of our latest “live research” with direct application in practices and formal presentations such as at the New York State Cybersecurity Conference Presentations. The 387-slide 2022 Presentation titled “How You Can Implement Well-Architected ‘Zero Trust’ Hybrid-Cloud Computing Beyond ‘Lift and Shift’: Cloud-Enabled Digital Innovation at Scale with Infrastructure as Code, DevSecOps and MLOps” and its conference presentation video are accessible from Author’s “live research” Web Sites listed under References. They share our latest focus on above Agility-Resilience issues. Two other themes that you will find in the latest presentations include our R&D building practices focus on Quantum Minds and Self-Adaptive Complex Systems, and, Quantum Uncertainty and Time Space Complexity. Related 2021 New York State Cybersecurity Conference Presentation titled “C4I-Cyber Command & Control Supremacy: Why It’s More Critical Than AI & Quantum Supremacy & What You Can Do about It? Security in Post-COVID Virtual Era Beyond Data, Models, Algorithms” and its conference presentation video are also accessible in the same “live research” Web sites for download. For latest R&D on the above issues, we recommend the reader to visit the Author’s LinkedIn “live research” page listed in the References and search for our LinkedIn posts containing hashtags #QuantumMinds and #QuantumUncertainty.

We share below a synopsis of the above concepts from the online “live research” reviewed above along with the proposed frameworks for the reader-researcher to study-build to further advance upon our related R&D and practices.

“Consciousness is not a Computation” – Roger Penrose: <https://lnkd.in/gx2UgvdI>

Since early days of WWI, aligned with our SACS Human-Machine Systems focus, we have underscored our KM, AI, and Quantum Computing focus in terms of Smart Minds Using Smart Tools Smartly, with greater emphasis on Smart Minds as the lasting non-commodity. This relates to our Quantum Mechanics focus on developing and building Quantum Minds that we have defined as “Human-Machine Complex Adaptive Systems that Can Help Us Navigate, Manage, and, Control Quantum Uncertainty.” The core central construct of Uncertainty, the construct of Quantum Uncertainty, is a composite construct of Dynamic Uncertainty and Adversarial Uncertainty discussed earlier. Inspired by Nobel laureate Roger Penrose’s related mathematical research, I have defined Quantum Uncertainty as Uncertainty that “Characterizes Multiple Parallel [Past & Future] Trajectories of Evolution of Systems across Diverse Time-Space Continua.” The multi-dimensional Time-Space is characterized in multiple ways based on Quantum Mechanics view of Quantum Uncertainty.

“Data is profoundly dumb.” - Judea Pearl: <https://lnkd.in/gn3QMDWQ>

We examine diverse ‘interpretations’ of Data as related to diverse ‘Real Time’ Outcomes resulting from diverse Decisions based upon such ‘interpretations’ such as resulting from creative Imagination, Intuition and Insight – Einstein himself had stated ‘Imagination is the mother of all Knowledge.’ One way is to focus on the discussed key notions of “interpretive flexibility” and “requisite variety” based on the respective foundational KM-Systems theories and research in how same specific Data may acquire different diverse Meanings – not only at a given point across the Time-Space continua [as a function of diverse interpretations of the same user or diverse users’ differing interpretations] but also at diverse points across Time [geographical time, network time, financial time, mathematical time – diverse notions] as well as diverse points across Space [geographical space, network space, financial space, mathematical space – diverse notions]. The classic notions of computational Time Complexity and Space Complexity as in the context of computer algorithms are representative examples of mathematical notions of Time and Space. Even across the same Space point (such as geographical space), variation of Time – such as across day and night, across seasons, and across other temporal dimensions, the same Space can assume different forms, shapes, colors, etc. resulting in vastly different mathematical maxima and minima scoping a specific diverse risk management ‘landscape.’ From the Financial perspective, actual securities and their underlying options, futures and derivatives – such as physical metal stored in warehouses or “rights” to buy or sell such metal – represent the diverse representations of “money” across diverse time and space points. The ‘disconnect’ between the physical commodities and respective financial markets and exchanges, often results in such anomalies as in ‘broken’ energy markets as in the case of oil markets wherein oil gets priced for “negative” money given excess of oil and shortage of storage facilities.

In the above Quantum Mechanics focus on Quantum Uncertainty, we view Quantum Minds as a function of Quantum Thinking, Quantum Computing and Quantum Uncertainty.

“What does it feel like to be both alive and dead?”: Scientific American: <https://lnkd.in/g3dNxpHK>

Building upon our prior foundational research focus on MEANING such as from PCP:

Personal Constructivism: Subjective Meanings – based on PCP: Making Quantum Real:

Meanings = f(Cognition, Affect, Action)

Reality = f(Constructs, Associations, Meanings)

Quantum Uncertainty = f(Dynamic Uncertainty, Adversarial Uncertainty)

Quantum Minds = f(Quantum Thinking, Quantum Computing, Quantum Uncertainty).

Q-Realities = f(Q-Constructs, Q-Associations, Q-Meanings) where Q- denotes Quantum.

REFERENCES: “LIVE RESEARCH”: Dr. Yogesh Malhotra “Yogi”

All of our listed published research papers, expert papers, industry keynotes, conference presentations mentioned in this paper and many more underlying our R&D program are accessible and downloadable in full-video and full-text without any need for sharing any kind of information or any kind of registration from the following online Web sites.

Biographical Page with All Links: <https://yogeshmalhotra.com/bio.html>

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