



QUANTUM MECHANICS FOR THE ENTERPRISESM – APPLYING PHILOSOPHICAL LESSONS FROM MODERN PHYSICS TO YOUR BUSINESS

In the early 20th century enlightened scientists observed that classical Newtonian Physics failed to properly describe and predict the world at the atomic level.



Classical Physics does a superb job of predicting everyday events that occur at a much larger and observable level than that of atoms. However, it is a flawed theory, and seriously flawed when dealing with matter and energy at the atomic level. To describe the universe accurately at the most fundamentally discrete level, **Quantum Mechanics**, a revolutionary new philosophical branch of math and physics, was developed.

The same philosophical concepts are applicable to business management. Traditional accounting principles and standards provide good tools for measuring an organization's overall performance. However, typical financial measures cannot predict or describe what happens at the most basic (quantum) levels and how these quantum entities in the organization affect measured financial results. This inability to observe, correlate, and report minute-by-minute inputs, data, and events at the most basic levels of the organization prevents traditional accounting systems from ever driving proactive decisions by management. Consequently, this inability could hamper an organization's focus on its strategic imperatives. Enter the Quantitative (or "Q") Culture.

Firms with a "Q" culture have an in-depth understanding of their organizations' **quantum business mechanics**. These firms understand the value of data that is hidden inside operational systems. Data describes—to a certain degree—the characteristics of a company at its most basic and discrete levels, much like atoms describe the characteristics of a physical system. Data is necessary in quantitative models to determine what core processes and variables drive critical outcomes. Models are used to predict operational performance by providing **Key Performance Indicators (KPIs)**. The models represent the firm's operationalized strategy.

Quantum Mechanics teaches us many things, but one of the most potent observations is that the reality we know today is that which can be measured! Without measurement, there is only uncertainty. The heavy lifting can be performed with math and statistics to develop the model that properly describes the organization. The successful model provides probability and a certain level of predictability. Even Quantum Theory suggests an inherent amount of uncertainty that cannot be completely ascertained. However, quantum business mechanics predicts where the uncertainty lies and allows outcomes to be much more predictable.