Poster Abstract

The Present Situation and Future Prospects in the Field Theory of Profitable Growth for Corporations in the Chemical Industry

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Field theory of profitable growth has passed through several stages and is of interest for corporations in the chemical industry and beyond.

In this paper we frame the problem of Profitable Growth using *Schrödinger* equation $\mathcal{H}\,\Psi = i\hbar\,\partial\Psi/\partial t$, where $\mathcal{H}$ is the Hamiltonian for the industry and its competitive environment, and Ψ is a vector in the *Hilbert* space, representing the profit generating state of the corporation, and Ψ_0 the desired solution of the *Schrödinger* equation representing the problem of profitable growth.
We demonstrate that the projection operators $\mathbb{P}_j$ applied to the eigenfunctions of $\mathcal{H}$ lead to $\mathbb{P}_j\Psi_i = \Psi_i\delta_{ij}$. Applying this to the problem represented by Ψ_0 results in $\mathbb{P}_0\Psi_0 = \Psi_0$, thus *the problem remains*.

For the solution we introduce a new projection operator $\circledcirc = \sum_{j=1}^{\infty}\mathbb{P}_j$ and show that the application of $\circledcirc$ to the problem represented by Ψ_0 lead to $\circledcirc\,\Psi_0 = (1 - \mathbb{P}_0)\Psi_0 = 0$, thus *causing the problem to disappear*.

It is evident that this projection operator technique can be applied to the solution of any problem in the profitable growth field theory across industries.

It follows that the problems of innovation, cash flow, operational cost, etc. may all be solved in terms of appropriately defined projection operators such as $\circledcirc^{CIX}$, $\circledcirc^{CCE}$, $\circledcirc^{COX}$, etc.

Further Reading.

E. Schrödinger, Quantisierung als Eigenwertproblem, Ann. Phys. 79, 361-76 (1926) and following papers
M. E. Porter, What is a strategy?, Harvard Business Review (November-December), 61-78 (1996)