

Financial engineering

Profession



Many innovations are taking place in the place of arena offinance. Such innovations are collectively called financial innovation. Financial innovation is a process to adapt existing financial instruments and processes and to develop new one so as to enable financial market participants to cope more effectively with the changing world. In recent years fast developments are taking place in corporate and banking sectors. This has given birth to a new discipline which has come to called financial engineering.

The term financial engineering was introduced by London banks. Financial engineering is the life blood of financial innovation. Financial Engineering Financial engineering is a multidisciplinary field involving financial theory, the methods of engineering, the tools of mathematics and the practice of programming. It has also been defined as the application of technical methods, especially from mathematical finance and computational finance, in the practice of finance. In the United States, financial engineering programs are accredited by the International Association of Financial Engineers.

Financial engineering draws on tools from applied mathematics, computerscience, statistics and economic theory. In broadest definition, anyone who uses technical tools in finance could be called a financial engineer, for example any computer programmer in a bank or any statistician in a government economic bureau. However, most practitioners restrict the term to someone educated in the full range of tools of modern finance and whose work is informed by financial theory. It is sometimes restricted even further, to cover only those originating new financial products and strategies.

Financial Engineering refers to the bundling and unbundling of securities. This is done in order to maximize profits using different combinations of equity, futures, options, fixed income, and swaps. They apply theoretical finance and computer modeling skills to make pricing, hedging, trading and portfolio management decisions. Newer and newer developments are taking place now in finance and related fields. Hence the existing instruments and processes must reengineer to suit the changing environment. This gives birth to financial reengineering.