

报告 3

互联网为金融市场带来了什么变革？

What Does the Internet Bring to Financial Market?

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报告摘要 Abstract

正如以往科技改变了金融行业的现状一样，由互联网支撑的新一代的人工智能技术的应用将会深刻的改变金融市场。上世纪五十年代中期，金融理论使用了复杂的数学公式去描述市场行为，这在一定程度上解放了人脑的计算。过去的三十年，金融市场见证了上述基于数学公式的理论所带来的繁荣与发展。如今，互联网为金融市场的改变注入了新的活力。这种改变很有可能颠覆以往基于数学公式的金融理论。特别的，新涌现的数据集及大数据无疑将加速这种变革。由大数据与人工智能技术为驱动的跨学科研究使得人们不断追求科学的前沿。基础科学问题也正在不断的被提出与研究，例如：互联网的搜索与信息传播、资产定价与社会网络特征都是有意义的研究话题。互联网正在呈现给我们一个前所未有的世界，金融决策的基本理论和方法已经或将要发生深刻的改变，基于此金融市场将被重新定义。

The new generation of artificial intelligence applications, backed by the Internet, will innovate the security market. This is not the first time when science and technology changed the status quo of the industry. After the mid -1950s, finance theories brought about the sophisticated math models to the market, partially in replacement of the human brain. For the past 3 decades, the markets have been dominated by and full of the products and services that are developed based on the theory. Now, the Internet, or in general IT, is bringing us to another new tipping point of change. This time, it is probably from math models to Internet-backed AI. The emerging new information sets and big data are seemingly accelerating the process. Inter-disciplinary studies, powered by big data and Internet-based AI, are making efforts to look for ALPHA. Fundamental research questions are raised from the practices of investment strategy by industry, and are studied by the scholars from different fields. For example, the search on Internet and information diffusion, asset pricing and social network properties, are all interesting topics. When Internet brings us the “big data” and powers the related AI, we can see what we could not see before. Finance, if we still view it as a science, could be possibly “rewritten” in this regard, since the foundations and methods of financial decisions by market participants have been or are being, changed significantly.