**AI and Business Model Innovation: Leveraging the AI feedback loop**

This article made by Evangelos Katsamakas from Fordham University, NY, and Oleg Pavlov, Worcester Polytechnic institute, Worcester, MA is called AI and Business Model Innovation: Leveraging the AI feedback loop. The article was published on November 19, 2019, and aims to explain how AI enables strategic feedback loops to improve business models.

Business model innovation has become a key element in a viability of a business, previous articles have shown how AI is expected to completely transform and impact the economy and society. But companies still have difficulties making use of AI in the business model and create a coherent AI strategy.

Key concepts

Casual loop diagrams (CLD):

The concept of casual loop diagrams was first proposed in a 2010 article and is the closest concept to the approach made by the two scholars. CLD is a phenomenon when between two variables if one increases the other will too. It is a useful way to represent business model.

Feedback loops

This concept focuses on platform business model. A platform business model is a business model that focuses on helping to facilitate interactions across many participants. This model is based on the premise that the more contents, apps, services there is in a platform, the more it will attract users than in turn will attract more contents, apps, services. Consequently, creating a feedback loop. The more the platform has users, the more it can collect data from users which will improve the quality of search algorithm, increase the quality of search results, thus attracting even more users.

This loop also includes advertisers, they are attracted by the user rate. more ads raise revenues and profits, it will consequently create better efficiency and processes thanks to the investment on talent with the added revenue from de the added ads, thus creating a positive loop.

**The core structure of the ad-based platform business model is driven by these reinforcing feedback loops, which contribute significantly to its performance, growth, and long-term sustainability. AI also has the potential to enhance, accelerate or reinforce current feedback loops.**

Concentrating on feedback loops enables managers to delineate the fundamental framework of their business model, influencing both behavior and business performance.

We can categorize these mechanisms into two overarching AI-related procedures that can be applicable to every business model: the accumulation of data and the exploitation of data.

Data accumulation

The accumulation of data involves the aggregation of information obtained from customer interactions and various business processes. Additionally, this process may be supported by incorporating data from external sources (data acquisition) when deemed essential.

Data application

Data exploitation is the utilization of accumulating data through Artificial Intelligence. This process has the potential to enhance platform services, optimize business processes, and elevate the overall quality of the business model.

A crucial observation from the scholars causal model is the interdependence of data accumulation and data exploitation. The more a platform accumulates more, the more it gains increased capacity for exploitation, leading to a continuous cycle of accumulating even more data.