

GDP INDIVIDUAL REPORT

How Technology Companies Make Money

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Abstract

Gene regulatory [1] is used to perform hybrid modelling of GRN.

The 'Idea'

A technology company starts with an idea, but the idea alone is just part of the puzzle and carries less weight in revenues, profit margins or even valuation than some other concepts like market, protection, growth etc. During a guest lecture Alexander Hill from Senseye put this crucial point across, as did David Parker. Lets discuss some practical examples to support this claim.

Selling videos has long been a successful business. In fact Blockbuster and HMV were largely successful in doing exactly that. But these companies are now dead or skeletons of their former selves. On the other hand, Netflix and Apple took the same idea with a different delivery medium - streaming content. Youtube is also incredibly successful with the same idea of streaming video, and yet I do not consider Youtube and Netflix to be competitors, since they serve very different purposes - Netflix as a paid service for produced videos, whereas Youtube is an open platform of community content. Given the market dominance of Netflix among its targeted users, one would not expect Amazon, an online retailer, to be a worthy opponent. Yet Amazon Instant video, a business spinned from the acquisition of LoveFilm, is gearing up for intense fight this year and they are already a competitor to Netflix. But Amazon's success is obviously not in the idea, but in the delivery of its content - through its Prime subscription framework - the Flywheel shown by Ian Gavin, i.e. their retail business, which gets more traffic from the Instant Video customers, drives revenue. The two companies are operating with the same 'idea', but they are both successful because of their business model. On the other hand, Apple, an extremely profitable company and an earlier adopter to the streaming idea than Amazon, is failing to make a measurable dent in the video streaming market, although their iTunes music store is a market leader. It is because of failing to secure content deals in time and a very narrow delivery route - the iTunes ecosystem, which many associate

with Apple devices and do not consider to be a standalone service. Similarly, Vine - a company with an exciting idea and bought by Twitter, is now in ashes. They could not make money from their 'short vlog' idea in the long run, although it was quite popular among the users. Both Apple and Vine had the right 'idea' but their execution has fallen short.

The point to make here is that the 'idea' and acting early on it is surely important - but only if the other parts of the business model is executed well as done by Netflix. It is quite possible to enter a busy market with a largely similar idea and successfully compete with a majority market holder as done by Amazon Instant Video. But the idea alone will not make the business successful as demonstrated by Vine and Apple's iTunes video store.

Implementation

Figure 1 elucidates the layered architecture, upon which our implementation is based. We use existing coed of SMBioNet and HyTech for parameter estimation and hybrid modeling of GRN respectively.

Conclusion

Biological regulatory networks of any biological problem are very important to study and analyse. GenNet facilitates the user to completely simulate and analyse both qualitative and quantitative behaviours of GRNs.

References

1. D. Winterman and J. Kelly, "Online shopping: The pensioner who pioneered a home shopping revolution." <http://www.bbc.co.uk/news/magazine-24091393>, Sep 2013. [Online: accessed 14-December-2016].