Impact of Disruptive Technologies on Value Creation and Capture: Comparing OTT and LLMs providers

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The paper is devoted to technological impact on value chains, markets, and companies. We made a parallel between two disrupting technologies, Internet and Artificial Intelligence. Both have led to emerging new industries and markets and. In the internet era, telecom companies developed infrastructure to provide communications in different modes, mobile calls and later mobile internet. However, after several years other market players emerged and used internet for value creation and monetization, namely, over-the-top, OTT (Skype, WhatsApp, and later Netflix and Telegram) [1]. They demonstrated greater margins (15-20% vs 3-5% at Telcos) without heavy capital investments into infrastructure and equipment, and market revenues of telecom companies significantly fell [2].

Now we observe development and competition of LLM developing companies (OpenAI, Anthropic, Mistral, Google DeepMind, Meta, etc), associated with enormous investments into GPU clusters, energy, and R&D for foundational models. However, using LLM directly is very difficult to monetize, and many research show that the companies do not reach higher effects. This is the same story as with OTT/Telcos. Final beneficiaries of LLM usage are companies of higher layer: marketplaces offering consumer goods and services (Amazon, booking.com etc), SaaS companies (Salesforce, Hubspot), AI app startups (Cursor, Jasper), cloud hyperscalers (AWS, Azure). All of them create ecosystem and control final customer experience [3].

In the case of competition between OTT and telecom, the latter were established sector, while AI developers face extremely changing markets, volatile expectations and high risks [4]. It means that new collaborations, ecosystems and value chains will emerge, and their economics will be different in comparison with common digitally enabled business models.

References

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