

Original scientific paper

THE IMPACT OF THE LONG TAIL ECONOMY ON THE BUSINESS RESULT OF THE DIGITAL PLATFORM: THE CASE OF SPOTIFY AND MATCH GROUP

Joško Lozić¹
Marin Milković
Katerina Fotova Čiković

Abstract

Purpose: The aim of this paper is to analyse the business performance of corporations from the platform economy model in the context of the long tail economy model. By comparing business results, analyse the significance of the impact of the long tail economy on business performance.

Methodology: The research is focused on analysing the business results of Spotify and Match Group corporations. The research compares the business results of selected corporations in the context of the impact of long tail on business management, financial result and the trend in the number of users of the platform. The methodological framework is unique and applicable to all other corporations from the platform economy model.

Results: The survey results showed significant differences in the impact of the long-tail economy on selected corporations. In addition, the survey results showed a significant impact of other factors on the business result that are not closely related to the long-tail economy.

Conclusion: The effects of the long-tail economy model need to be analysed on a case-by-case basis in the platform economy. Both corporations are increasing total revenue and customer numbers, but Spotify is operating at a loss, while Match Group is increasing profits year on year.

Keywords: Gross profit, long tail economy, long tail business models, Match Group, platform economy, Spotify

JEL Classification: O31; O33

INTRODUCTION

The development of the Internet and the digitalization of business have directly affected the dramatic changes in the business models of industrial production and distribution. The media industry was the first to find itself in a whirlwind of change. The changes affected all media industries equally quickly, and media corporations changed their business models in line with changes in the environment. Digitization and convergence of production and distribution systems, enabled new production models, but had a much greater impact on the distribution model. The sale of media content in classic "brick-and-mortar" stores has been replaced by the distribution of digital content on platforms. The

¹ **Joško Lozić**, Ph.D., Associate Professor; **Marin Milković**, Ph.D., Chancellor of the University North; **Katerina Fotova Čiković**, Ph.D., lecturer; University North, Croatia.

cost of storing the physical product and the distribution problem have been replaced by online distribution.

The end of the classical music industry was marked by the advent of the Napster platform. Pirated downloading and sharing of music content has completely changed the business model of the music industry. The development of streaming technology has dramatically affected the distribution model, and even more so the model of monetization of music content. According to the number of available music content, geographical distribution and revenue, Spotify is the largest music streaming platform. The dating industry has fully adapted to the digital model and parallel platforms for user targeting have been developed. In the context of platform economics (Parker et al., 2016; Moazed & Johnson, 2016), the dating industry is a classic example of the development of a network effect on both sides of the platform (Evans & Schmalensee, 2007). Match Group is the largest global dating platform. It owns the globally renowned Tinder which makes up the bulk of Match Group's revenue.

The distribution of content on the platform equalized the cost of access to main and niche content. The model of separating content into part of the content from the head and part from the tail is known as the long tail economy. The theory was perfected and published by Anderson (Anderson, 2006), but the theory was already known from before. Rosen published the "superstar effect" theory in 1981 (Rosen, 1981), and in 1995 Frank and Cook published the "blockbuster strategy" model or, as he later became known, the "winner takes all society" model (Frank & Cook, 1995). By equalizing the cost of access to all content as well as significantly reducing the cost of content distribution, the standard cost paradigm of physical products has changed. The research will include the cost of revenue or gross profit as well as operating profit and net profit in order to analyse the impact of the long tail economy on the operations of selected corporations in the platform economy model. The results of the financial research will be compared with the results of the trend analysis of the number of users with the aim of analysing the impact of the long tail economy on the trend of the number of users.

1. LONG TAIL ECONOMY

The roots of the long-tail theory originated as a continuation of Pareto's law, also called the 80:20 rule. Pareto claimed that 80% of agricultural products are produced by 20% of the population or that 80% of total wealth is controlled by 20% of the population. The long tail economy is based on the premise that 80% of the sales value is goods from the head of the curve, while 20% of the sales value is goods from the long tail. The theory was created by researching trends in the sale of physical products. With the development of the Internet and the digitalization of the production and distribution of media content, the long-tail paradigm has taken on a whole new dimension. Anderson was the first to systematically investigate and analyse the new distribution of value distribution in long tail theory and published his research in *Wired Magazine* (Anderson, 2004). The main paradigm shifts in the economy of the long tail, relative to sales of physical products, Anderson (2006) based on three key points: a) the tail of available variety is far longer than we realize; b) it's now within reach economically; c) all those niches, when aggregated, can make up a significant market". The core incumbents usually only pay attention to the head customers with high average market value and high-powered purchasing behaviour (Dai & Taube, 2019). In comparison, long tail customers feature

only low average market value and demonstrate only restricted purchasing patterns (Anderson, 2004).

Anderson (2006) directed the analysis of the business paradigm of the long-tail economy, in the context of digital content production, in three basic directions: a) production cost; b) distribution cost; c) searching cost. Kung et al. (2008) warns of the high cost of producing the first copy in the media, and especially in the publishing industry. Digital production and the Internet significantly reduce the production costs of the first copy. The change in the cost of the digital content paradigm is related to zero marginal cost theory (Rifkin, 2015; Lozić, 2019). Digital technology has also enabled the distribution of user-generated content and revenue generated by platform owners (Briggs, 2007). The total distribution costs of newspaper publishers in the USA accounted for 50% of the total costs (Sparks, 2000). Distribution on the Internet implies a significant reduction in distribution costs, and is also associated with the effect of zero marginal cost. The costs of distributing the physical product significantly limited the demand and sales of niche products. Digital distribution has equalized distribution costs from all parts of the offer. Digital distribution and low costs have made products available in all geographical areas within the same time frame (Chyi & Sylvie, 2010). Long tail theory is based on the idea that media content in niches can be acquired at different rates, on different scales, through different infrastructure and based on different criteria from the highest-grossing commercial texts (Jenkins et al., 2013). Search costs, monetary and nonmonetary, make up a significant portion of total costs. Digital search significantly simplifies searches (Kung et al., 2008.). Information technologies enable these search methods and have lowered the costs of finding niche content, further evidently expanding the reach of news into the long tail consumer segment (Huang & Wang, 2014).

2. LITERATURE REVIEW

The law of the long tail attempts to explain some of the asymmetries of the system of production, sale, and income generation of the physical goods and services that accompany it. It can still be found in the economic literature under the name "Power-Law Distribution". The economy of the long tail determines the situation of statistical correlation between two variables, i.e. the change in the value of one variable causes a proportional change in the other variable. The frequency of earthquakes is inversely related to their intensity, and the share of income distribution in society is inversely related to the amount of income (Jones & Kim, 2012). Retail space on store shelves is expensive and only a small portion of the product can get on the shelves. Digital media and e-commerce have transformed our notion of shelf space. The managerial model and communication in the digital business model differ significantly from the business model with physical products (Zott & Amit, 2012). Economists have found a significant asymmetry in the sales process, i.e. the influence of the long tail law in e-commerce, where significant profits can be achieved by a small volume of sales of a large number of less popular items (Fenner et al., 2010). Elberse (2008) indicates an asymmetry between the increase in assortment and the size of demand in online sales. As we move away from the area of "hits", i.e. the area of the "distribution head", the "long tail" becomes longer and longer, and the seller's ability to commercialize stocks decreases (Jenkins et al., 2013). Sela et al. (2009) investigate how increasing the range affects the change in

consumer choice habits in traditional sales channels. Clemons et al. (2006) demonstrate an association between high dispersion of ratings and an increase in total sales. The effect especially increases with the sharp increase in the range available in online sales.

Elberse and Oberholzer-Gee (2006) warn of a significant drop in sales in classic sales channels after an increase in supply in the online sales model. The research does not include an analysis of the distribution of sales to long-tailed products. Empirical research proves that the growth of the range in the online offer leads to an increase in customer demand. The larger range makes it easier for customers to find the products they are looking for. However, after increasing the range beyond the saturation limit, the growth of demand does not follow the growth of supply (Hinz et al., 2011). Modern search engines can reduce the demand for blockbuster products (Brynjolfsson, 2011) and increase the importance of demand and supply (Mooney & Roy, 2000). In the context of journalism, Cook and Sirkkunen (2013) stress that niche relates to narrow-interest content serving specific-interest audiences. Research shows that consumers are willing to pay premium prices for niche products and subsequently make recommendations to others based on these latent purchases (Dellarocas et al., 2010). Dai and Taube (2019) investigate the impact of the long tail market on consumers with lower purchasing power, i.e. those that sellers can hardly reach with their offer. The length of the tail also depends on the share of new customers. Compared to new customers, they more often search and buy long-tailed products (Hinz et al., 2011). The importance of niche users from the base of the pyramid mostly depends on technological innovations (Kolk et al., 2014). The concept of long-tail market overlaps significantly with the base of pyramid markets, yet reflects more considerable business insights and coverage. Base of pyramid mainly refers to the most deprived socioeconomic group who lives on less than US \$ 2.5 per day (Dai & Taube, 2019).

In the internet economy, niche products that are usually not significantly visible on markets can grow to take a large collective share of total sales. This phenomenon fits the classical “long-tail” pattern. This finding shifts the centre of focus from “best-selling products to niche products when comparing total product sales (Brynjolfsson et al., 2011). Proper (niche) products and services may create a market where the total market value may be almost the same as in the head market, even though individual market values are much lower (Dai & Taube, 2019). The same conclusion, exploring online markets, was defined by Anderson (2004). While search technologies, such as “favourites list”, favour bestsellers and should therefore reduce the share of purchased products, other search technologies, such as search filters, can increase the long tail and increase the share of purchased products (Hinz et al., 2011). Playlists have become a central form of music consumption on streaming platforms. By signing in to Spotify, you will immediately be confronted with a playlist wall, tailored to your listening history, time of day, and other specific characters (Arditi, 2017; Dholakia et al., 2015). Music streaming services such as Spotify and Apple Music, have gone from a niche to the dominant mode of music distribution (Maheshwari, 2019).

Computer-based matchmaking technologies first emerged in the 1960s, and one of the first online dating sites kiss.com, was founded in 1994 (MacLeod & McArthur, 2014). Match Group, Inc., through its portfolio companies, is a leading provider of dating products available globally. Our portfolio of brands includes Tinder, Match, Meetic, OkCupid, Hinge, Pairs, PletyOffish, and OurTime, as well as a number of other brands, each designed to increase our users’ likelihood of finding a meaningful connection

(Match Group, 2021). At the end of 2020, Tinder had 60 million active users, 10 million daily active users, and 30 billion matches with approximately 30 million per day (Smith, 2021). With 6.7 subscribers, Tinder has become the world's largest dating online platform (Match Group, 2021). Tinder is a location-based real time app that came to market in 2012 with the goal of facilitating people to connect via their personal profiles and location-based tracking (Leurs & Hardy, 2019).

3. METHODOLOGY AND RESEARCH QUESTIONS

The study of the impact of the long tail economy on the business performance of the platform economy, in the context of Spotify and Match Group corporations, will be based on analysis of data from the Annual Report (Match Group; Spotify Annual Report), for the financial part of the research. deal with such analyses (Statista.com, 2021a, 2021b). The model of production and distribution of content in the platform model significantly reduces costs and enables the use of the zero marginal cost effect for each additional produced copy, which significantly affects the cost of revenue or gross profit. Research on the trend and level of gross profit will analyse the impact and relationship of the long tail economy on the business performance of corporations. In addition, the analysis of the trend in the number of users will analyse whether there is a significant relationship between the trend of financial parameters and the number of users. The research is structured according to the search for answers to two basic research questions:

- RQ1 - What is the impact of the long tail economy on the financial performance of the platform?
- RQ2 - How important is the long tail economy to the trend in the number of platform users?

The metrics and financial analytics of the platform economy differ significantly from the classical metrics in the brick-and-mortar model. The impact of the long-tail economy and the reduction in product distribution costs have drawn attention to new financial parameters. Zero sum game strategy, the platforms changed to Winner take all markets or all long tail (Lamberson, 2016). Platform economics abandons the model of vertical integration, thus undermining the foundations of the classical long-tail theory (Napoli, 2016). Before the advent of the Internet, economies of scale created competitive advantages. The Internet and the sharp decline in the cost of content distribution have lowered barriers to entry in the industry and created the conditions for the growth of new industries (Olmedilla Fernandez et al., 2016). The redefined long tail economy has become a dominant part of the sharing economy (Geissinger et al., 2016).

User interaction on the platform blurs the classic boundaries between key product users and niche product users. Technological innovations have been a significant factor in connecting users from the pyramid base with producers (Kolk et al., 2014; Gebauer et al., 2017), export strategies have been linked to the pyramid base (Landrum, 2014), and the platform economy has erased the boundaries of financial opportunities that connected users to the pyramid base. The number of users and the number of interactions affect the network effect and stabilize the platform no matter in which part of the user base interactions are most common. Spotify is a platform that has achieved an extremely strong networking effect, despite a negative financial result over the last five years (Lozić et al., 2020).

4. DATA ANALYSIS

Data research and analysis is divided into two basic parts. The first analyses financial indicators in the context of the impact of the long tail economy on gross profit, operating profit and net profit. The second part of the research analysis the impact of the long tail economy on the trend in the number of users. The results of the research and analysis are presented in the chapter Discussion and conclusion.

4.1. Financial analysis

Total revenue growth was digressive. In the first analysed period, the increase was 38.6%, and in the last analysed period, the increase was 16.5%. Gross profit rose from \$ 401 million to \$ 2.01 billion, an increase of 402.5%. The increase in gross profit in the first analysed period was 111.7%, and in the last analysed period 17%. The effect of digressive growth is greater than that of total income. The results of the analysis of the linear regression trend, interpreted by the regression equation $y = 1253x + 2883$, showed that the total income grew at an average rate of $s = 23.25\%$ per year, with the coefficient of determination $R^2 = 0.9975$. Cost of revenue grew on average annually at a rate of $s = 20.45\%$, with a coefficient of determination of $R^2 = 0.9902$, interpreted by the linear regression equation $y = 842.9x + 2435.2$.

Table 1. Spotify financial analysis (in millions; \$)

	2016	2017	2018	2019	2020
Revenue	2,952	4,090	5,259	6,764	7,880
Cost of revenue	2,551	3,241	3,906	5,042	5,865
Gross profit	401	849	1,353	1,722	2,015
%	13.58%	20.76%	25.73%	25.46%	25.57%
Operative loss	-349	-378	-43	-73	-293
Net loss	-535	-1233	-173	-131	-709

Source: Own illustration (Spotify Annual report)

Table 2. Match Group financial analysis (in thousands; \$)

	2017	2018	2019	2020
Total revenue	1,330,661	1,729,850	2,051,258	2,391,269
Cost of revenue	279,499	410,000	527,184	635,833
Gross profit	1,051,162	1,319,850	1,524,074	1,755,436
%	79.0%	76.3%	74.3%	73.4%
Operating income	360,517	549,469	645,454	745,715
Net Profit	350,148	626,961	431,131	128,561

Source: Lozić, 2021 (Match Group Annual report)

The growth of total revenues above the growth rate of cost of revenue resulted in the growth of gross profit higher than the growth of cost of revenue. The average annual growth of gross profit was $s = 32.34\%$, with the coefficient of determination $R^2 = 0.9901$, interpreted by the equation of the linear regression trend $y = 410.1x + 447.8$. Total revenues and gross profit are continuously growing, but they are still not enough to cover operating costs, so operating profit and net profit are continuously in the red. In the context of the research objectives, ie the first research question, we can conclude that there is no significant impact of the effects of the long tail economy on the financial results of the Spotify platform. Gross profit accounts for only a quarter of total revenue and has stabilized at that level. The sharp increase in gross profit in the second period analysed was the result of a business decision to transfer part of the ownership of the corporation, and was not directly related to the increase in the role of the long tail in the financial result. The results of the research are shown in Table 1.

The analysis of the financial performance of Match Group covers a period of four years, from 2017 to 2020 (the period after the corporate restructuring). In the analysed period, revenues increased from \$ 1.330 billion to \$ 2.391 billion, an increase of 79.71%. Revenue growth was declining and fell from 30% in the first accounting period to 16.6% in the last period. Gross profit rose from \$ 1,051 billion to \$ 1,755 billion, an increase of 67%. The increase was followed by digressive growth as in total revenue. Total revenues grew at a rate of $s = 18.67\%$ on average per year, with a coefficient of determination of $R^2 = 0.9978$, interpreted by the linear trend equation $y = 350323x + 1E + 06$. Cost of revenue grew at an average annual rate of $s = 25.6\%$, with a coefficient of determination $R^2 = 0.9983$, interpreted by the linear regression trend equation $y = 118619x + 285201$. Gross profit grew on average annually at a rate of $s = 16.4\%$, with a coefficient of determination $R^2 = 0.9971$, interpreted by the linear regression trend equation $y = 231705x + 1E + 06$. Gross profit grows at an average annual rate less than revenue growth indicating an increase in cost of revenue.

The share of gross profit decreased and fell from 79% in the first analysed period to 73.4% in the last analysed period. Compared to Spotify, gross profit is inversely proportional in share to revenue. Continuous revenue growth, and a share of gross profit of almost a quarter of revenue provides the platform with sufficient financial resources for positive business. In the context of the first research question, we can conclude that the long tail effect has a significant effect on the financial result of the Match Group. However, if we put the result of the research in relation to the results of Spotify we can conclude that the economy of the long tail does not have equal significance to all business models in the economy of the platform. The results of the research are shown in Table 2 (Lozić, 2021).

4.2. Users trend analysis

The analysis of the trend in the number of users of both corporations shows a continuous growth in the number of users. In the analysed period from 2015 to 2020, the number of monthly Spotify users grew at an average rate of $s = 25.2\%$ with a coefficient of determination of $R^2 = 0.9732$.

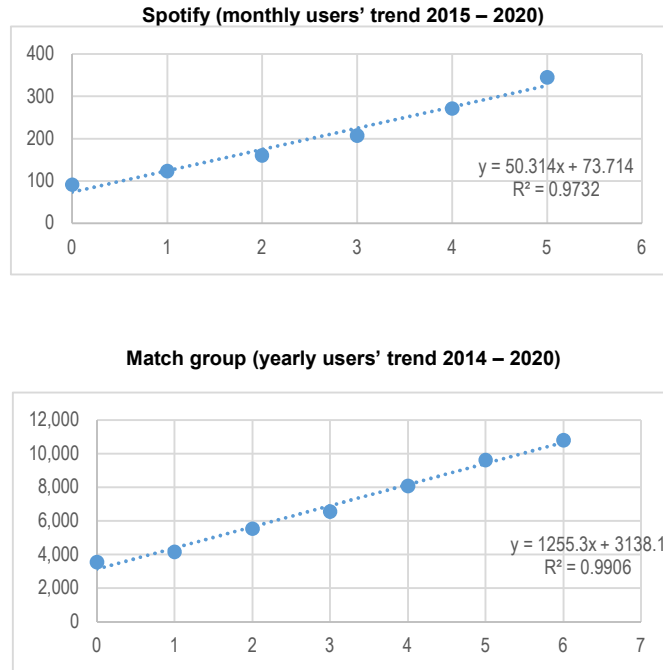


Figure 1. User trend regression analysis
Source: Own illustration

The increase in the number of Spotify users did not follow the trend of revenue growth, ie it was not digressive. The increase in total revenues was proportional to the increase in the number of subscribers. In the context of another research question, we can conclude that Spotify's revenue primarily depends on the number of subscribers, no matter what part of the long tail curve they come from. The number of subscribers, i.e. revenues from subscription to the platform, are more significant than the expansion of demand into the niche area of the long-tail economy.

The average annual growth in the number of Match Group users, with the period from 2014 to 2020, was $s = 18.18\%$ with a coefficient of determination of $R^2 = 0.9732$. Average revenue growth was accompanied by average growth in the number of users. Unlike Spotify which generates most of its revenue from subscriptions to the platform, unlike Match Group which generates revenue from other forms of monetization of the service. Unlike Spotify, Match Group is directly dependent on the effects of the long tail economy because only by increasing the number of users from the niche part of the tail can it achieve greater monetization on the platform. The results of the research are shown in Table 3.

5. DISCUSSION AND CONCLUSION

The analysis of the business model of the selected platforms showed similarities in the trend in the number of users, but also large differences between the financial results of operations. In the context of the long-tail economy effect, different factors that are similar but also different for the selected platforms were investigated and analysed. The basic results of the research that needs to be analysed, before concluding on the impact of the long tail economy on the business model of the platform economy, are listed in five points:

- The declining revenue growth of Spotify indicates revenue saturation within the music streaming platform industry.
- Spotify's gross profit share is too small to cover total production costs. The offer of long-tail music content did not significantly reduce the cost of revenue. It follows that the impact of the long tail is less significant compared to other factors that affect the overall business result.
- Spotify user growth ensures continuous revenue growth, but still insufficient for the financial stability of the platform.
- The share of gross profit Match Group is three times higher than Spotify. It is almost inversely proportional. It follows that the impact of the long-tail economy is very significant in addition to the influence of other factors.
- Continuous growth in the number of users, from all parts of the long-tail economy curve, ensures a stable Match Group network effect.

Research and analysis of business results of selected corporations from the platform economy model, in the context of research on the impact of long tail economy on overall business performance, showed very different research results. Spotify and Match Group have completely different models of monetizing the service. Spotify generates the largest share of subscription revenue, and a smaller portion of other forms of monetization of the service. Match Group provides free access to the platform, and generates revenue from the sale of advertising space, Premium services and the like. In the context of the first research question, the impact of the long-tail economy is not significant on the financial performance of Spotify because most of the revenue comes from subscriptions. For a corporation, it doesn't matter which part of the tail the revenue comes from, and with the geographical expansion into new markets, it is difficult to determine when a significant part of the revenue comes from the niche part of the curve. Match Group generates revenues from the monetization of services and the impact of the long-tail economy is very significant. By increasing the number of premium users from the niche part of the curve, revenue grows, and at the same time the number of surveys in the premium category grows.

In the context of the answer to the second research question, the research results are similar to the first research question. Spotify charges a subscription to the platform and earns a smaller part from monetization in the premium model. The impact of the long tail on the growth of the number of users is minimal because all users who pay a subscription have equal access and equal costs. By increasing the number of users, the platform achieves the full capacity of the strategy "winner takes all markets" or "winner takes all long tail". Users who have not paid the subscription cannot be considered part of the long

tail because they do not participate in the work of the platform. The trend analysis of Match Group users, in the context of another research question, shows quite different results. The platform strongly depends on the number of users from the long tail who will be actively involved in the operation of the platform and stabilize the network effect. A special segment are users from the base of the pyramid who can access the platform regardless of their financial status, and unlike Spotify which has a similar subscription price in all geographical regions.

The research analysis showed different research results, in the context of research questions, for the selected platforms although both belong to the platform economy model. The subscription model severely limits the effects of long tail economy, while the freemium model is very sensitive to the effects of long tail economy. Future research needs to focus on the effects of the network effect and the monetization of the service in the context of the long-tail economy in the platform economy.

REFERENCES

- Anderson, Chris. 2004. *The Long Tail*. Wired Magazine. <https://www.wired.com/2004/10/tail>
- Anderson, Chris. 2006. *The Long Tail: Why the Future of Business Is Selling Less of More*. Hachette Books.
- Arditi, David. 2017. Digital Subscriptions: The Unending Consumption of Music in the Digital Era. *Popular Music and Society*, 41(3), 302-318. <https://doi.org/10.1080/03007766.2016.1264101>
- Briggs, Mark. 2007. Journalism 2.0: How to survive and thrive. USF Tampa Bay *Open Access Textbooks Collection*. Book 2. https://digitalcommons.usf.edu/oa_textbooks/2/
- Brynjolfsson, Erik, Hu, Yu Jeffrey and Semester, Duncan. 2011. Goodbye Pareto principle, hello long tail: The effect of search costs on the concentration of product sales. *Management Science*, 57(8), 1373-1386.
- Chyi, Hsiang Iris and Sylvie, George. 2010. Are long-distance users an inconvenient truth? Profiling U.S. newspapers' online readership in the dual-geographic market. *International Journal on Media Management*, 12(2), 93-112.
- Clemons, Erik K., Gao, Guodong Gordon and Hitt, Lorin M. 2006. When online reviews meet hyper differentiation: A study of the craft beer industry. *Journal of Management Information Systems*, 32(2), 149171.
- Cook, Clare and Sirkkunen, Esa. 2013. What's in a Niche? Exploring the Business Model of Online Journalism. *Journal of Media Business Studies*, 10(4), 63-82. <https://doi.org/10.1080/16522354.2013.11073576>
- Dai, Shuanping and Taube, Markus. 2019. The long tail thesis: Conceptualizing China's entrepreneurial practices in Fintech and electric vehicles. *Chinese Management Studies*, 14(2), 433-454. <https://doi.org/10.1108/CMS-03-2019-0109>
- Dellarocas, Chrysanthos, Gao, Guodong and Narayan, Ritu. 2010. Are consumers more likely to contribute online reviews for hit or niche products? *Journal of Management Information Systems*, 27(2), 127-158.
- Dholakia, Nikhilesh, Reyes, Ian and Bonoff, Jennifer. 2015. Mobile media: from legato to staccato, isochronal consumptions capes. *Consumption Markets and Culture*, 18(1), 10-24. <https://doi.org/10.1080/10253866.2014.899216>

- Elberse, Anita and Oberholzer-Gee, Felix. 2006. Superstars and underdogs: An examination of the long tail phenomenon in video sales. *Harvard Business School Working Paper No. 07-15*. Boston, MA: Harvard Business School.
- Elberse, Anita. 2008. Should you invest in the long tail? *Harvard Business Review*, 86(7-8), 88-96.
- Evans, S. David and Schmalensee, Richard 2007. Industrial Organization of Markets with Two-Sided Platforms. *Competition Policy International*, 3(1), 151-179.
- Fenner, Trevor, Levene, Mark and Loizou, George. 2010. Predicting the long tail of book sales: Unearthing the power-law exponent. *Physica A: Statistical Mechanics and its Applications*, 389(12), 2416-2421.
- Frank, Robert H. and Cook, Philip J. 1995. *The Winner-Take-All Society*. The Free Press.
- Gebauer, Heiko, Haldimann, Mirella and Saul, Caroline Jennings. 2017. Business model innovations for overcoming barriers in the base-of-the-pyramid market. *Industry and Innovation*, 24(5), 543-568.
- Geissinger, Andrea, Laurell, Christofer, Sandström, Christian, 2020. Digital Disruption beyond Uber and Airbnb—Tracking the long tail of the sharing economy, *Technological Forecasting and Social Change*, 155, <https://doi.org/10.1016/j.techfore.2018.06.012>.
- Hinz, Oliver, Eckert, Jochen and Skiera, Bernd. 2011. Drivers of the Long Tail Phenomenon: An Empirical Analysis. *Journal of Management Information Systems*, 27(4), 43-70. <https://doi.org/10.2753/MIS0742-1222270402>
- Huang, J. Sonia and Wang, Wei Ching. 2014. Application of the Long Tail Economy to the Online News Market: Examining Predictors of Market Performance. *Journal of Media Economics*, 27(3), 158-176. <https://doi.org/10.1080/08997764.2014.931860>
- Jenkins, Henry, Ford, Sam and Green, Joshua. 2013. *Spreadable Media: Creating Value and Meaning in a Networked Culture*. New York University Press.
- Jones, Charles I. and Kim, Jihee 2012. Exploring the dynamics of top income inequality. <http://economics.mit.edu/files/8465>
- Kolk, Ans, Rivera-Santos, Miguel and Rufin, Carlos. 2014. Reviewing a decade of research on the ‘base/bottom of the pyramid’ (BOP) concept. *Business and Society*, 53(3), 338-377.
- Kung, Lucy, Picard, Robert G. and Towse, Ruth. 2008. Theoretical perspective of the impact of the Internet on the mass media industries. In Kung, Lucy et al. (Eds.), *The Internet and the Mass Media*, 17-44. Sage.
- Lamberson, P. J. 2016. Winner-take-all or long tail? A behavioral model of markets with increasing returns. *System Dynamics Review*, 32(3-4), 233-260. <https://doi.org/10.1002/sdr.1563>
- Landrum, Nancy E. 2014. Defining a base of the pyramid strategy. *International Journal of Business Emerging Markets*, 6(4), 286-297. <https://doi.org/10.1504/IJBEM.2014.065582>
- Leurs, Elleke and Hardy, Anne. 2019. Tinder tourism: tourist experiences beyond the tourism industry realm. *Annals of Leisure Research*, 22(3), 323-341. <https://doi.org/10.1080/11745398.2018.1553678>
- Li, Chenggang. 2020. Research on Electronic Commerce Development of Small and Medium-sized Enterprises Based on Long Tail, *6th International Conference on*

- Information Management (ICIM)*, 2020, 83-87, doi: 10.1109/ICIM49319.2020.244675.
- Lozić, Joško. 2019. Zero marginal cost in magazine industry: Changing of cost paradigm in “new” magazine industry. In Nadrljanski, M. et al. (Eds). *Proceedings of the 44th International Scientific Conference on Economic and Social Development*, 125-136. Split: Varazdin Development and Entrepreneurship Agency.
- Lozić, Joško. 2021. Dating platform Tinder at the time of the Covid 19 pandemic. In Djukec, D. et al. (Eds.). *Proceedings of the 7th ITEM Conference – “Innovation, Technology, Education and Management” and 67th International Scientific Conference on Economic and Social Development*, 127-136. Sv. Martin na Muri: Varazdin Development and Entrepreneurship Agency and University North.
- Lozić, Joško, Vojković, Goran and Milković, Marin. 2020. “Financial” Aspects of Spotify Streaming Model. In Skala, K. (Ed.), *Proceedings of the 2020 43rd International Convention on Information, Communication and Electronic Technology (MIPRO)*, 1720-1724. Opatija: IEEE.
- MacLeod, Caitlin and McArthur, Victoria. 2019. The construction of gender in dating apps: an interface analysis of Tinder and Bumble. *Feminist Media Studies*, 19(6), 822-840. <https://doi.org/10.1080/14680777.2018.1494618>
- Maheshwari, Anup. 2019. *Digital Transformation: Building Intelligent Enterprises*. Wiley & Sons.
- Match Group. 2021. <https://mtch.com/>
- Moazed, Alex and Johnson, Nicholas L. 2016. *Modern Monopolies – What it Takes to Dominate the 21st Century Economy*. St. Martin’s Press.
- Mooney, Raymond J. and Roy, Loriene. 2000. Content-based book recommending using learning for text categorization. *Proceedings of the fifth ACM Conference on Digital Libraries*, 195-204. New York: ACM Press.
- Napoli, M. Philip. 2016. Requiem for the long tail: Towards a political economy of content aggregation and fragmentation. *International Journal of Media & Cultural Politics*, 12(3), 341-356. https://doi.org/10.1386/macp.12.3.341_1
- Olmedilla Fernandez, Maria, Martínez-Torres, M. Rocio and Toral, S. L. 2016. Examining the power-law distribution among Ewom communities: a characterisation approach of the Long Tail. *Technology Analysis & Strategic Management*, 28(5), 601-613. <http://dx.doi.org/10.1080/09537325.2015.1122187>
- Parker, G. Geoffrey, Van Alstyne Marshall W. and Choudary, Sangeet Paul. 2016. *Platform Revolution: How Networked Markets are Transforming the Economy and How to Make Them Work for You*, W.W. Norton & Company.
- Rifkin, Jeremy. 2015. *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*. St. Martin's Press.
- Rosen, Sherwin. 1981. The Economics of Superstars. *The American Economic Review*, 71(5), 845-858.
- Sela, Aner, Berger, Jonah and Liu, Wendy. 2009. Variety, vice, and virtue: How assortment size influences option choice. *Journal of Consumer Research*, 35(6), 941-951.
- Smith, Craig. 2021. *Tinder statistics and facts till 2021*. <https://expandedramblings.com/index.php/tinder-statistics/>

- Sparks, Colin. 2000. From dead trees to live wires: The Internet's challenge to the traditional newspaper. In Curran, James & Gurevitch, Michael (Eds.), *Mass Media & Society (3rd ed)*, 268-294. Hodder Arnold.
- Spotify. 2021. *Spotify Annual Report*.
<https://investors.spotify.com/financials/default.aspx>
- Statista.com. 2021a. *Number of Spotify premium subscribers worldwide from 1st quarter 2015 to 2nd quarter 2021*.
<https://www.statista.com/statistics/244995/number-of-paying-spotify-subscribers/>
- Statista.com. 2021b. *Number of paid subscribers registered to the Match Group from 1st quarter 2014 to 1st quarter 2021*.
<https://www.statista.com/statistics/449465/paid-dating-subscribers-match-group/>
- Zott, Christoph and Amit, Raphael. 2010. Business Model Design: An Activity System Perspective. *Long Range Planning*, 43(2), 216-226.