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How the Digital Ecosystems are transforming the Banking Industry

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In the next 5 to 10 years the World will see the results of Digital Transformation, which will also disrupt the Global Banking Sector. Namely:

- Digital commerce spending is expected to reach $26.2 trillion annually by 2028, driven by e-Retail acceleration [1].
- Digital Banking Market size is estimated to exceed $13 trillion by 2032 [2].
- Global market for loyalty programs is anticipated to be $216 billion in 2022 [3].
- Assuming that companies are spending at least 2% on bonus points [4], the total retail market size with the loyalty programs is estimated at about $11 trillion.

The above figures indicate the size of the digital economy and the potential of creating digital ecosystems in various forms including eCommerce, Digital Banking and Loyalty Platforms.

The case of Kaspi Bank JSC (Kazakhstan) explains how digital ecosystems can transform the banking industry delivering value to both, banking customers and bank shareholders. Figure 1 presents the comparison of the Total assets and Market Capitalization for two leading banks in Kazakhstan: Kaspi Bank JSC and Halyk Bank JSC.

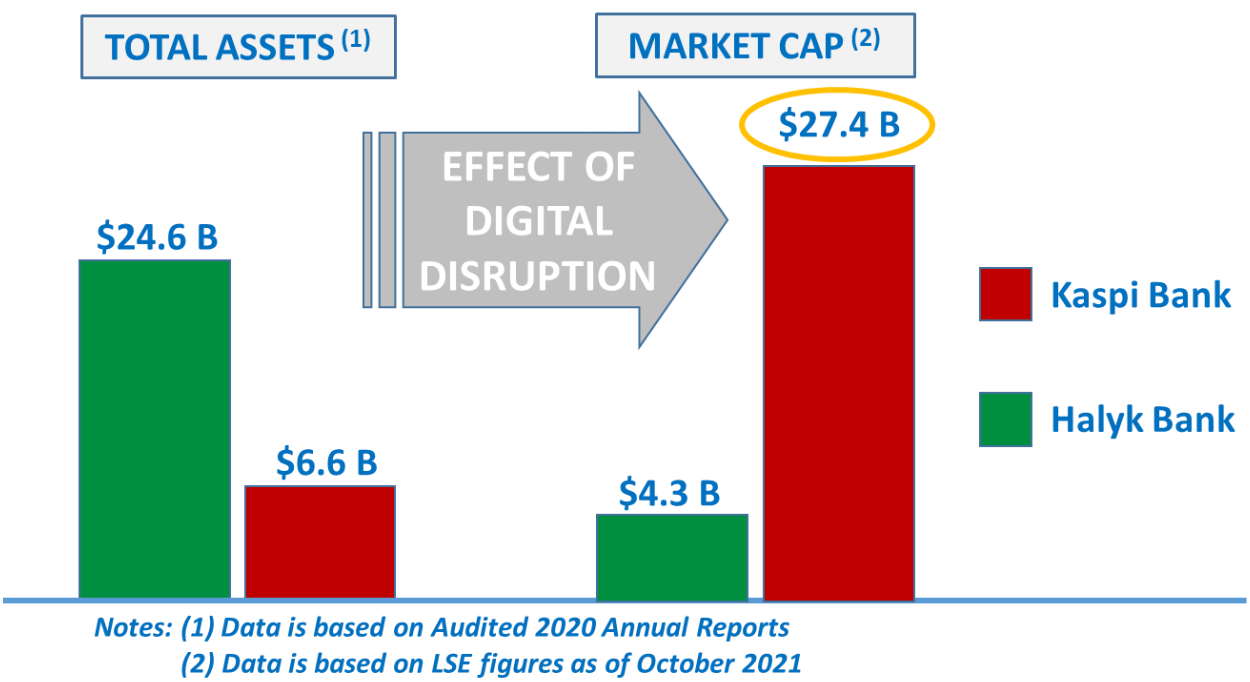

Fig. 1 Comparison of the Total Assets and Market Capitalization

The data on Figure 1 is based on the annual audited reports of year 2020 regarding Kaspi Bank JSC [5] and Halyk Bank JSC [6]. The market capitalization figures are based on the data of the London Stock Exchange (LSE) as of October 2021 for Kaspi Bank JSC [7] and Halyk Bank JSC [8].

As can be seen from Figure 1, the total assets of the Halyk Bank is about 3.7 times larger than that of Kaspi Bank, however the market capitalization figures show the rather opposite picture. Namely, the market cap of Kaspi Bank is about 6.4 times higher than that of Halyk Bank. This difference is a result of the digital disruption initiated by Kaspi Bank in the Kazakhstan's banking Sector.

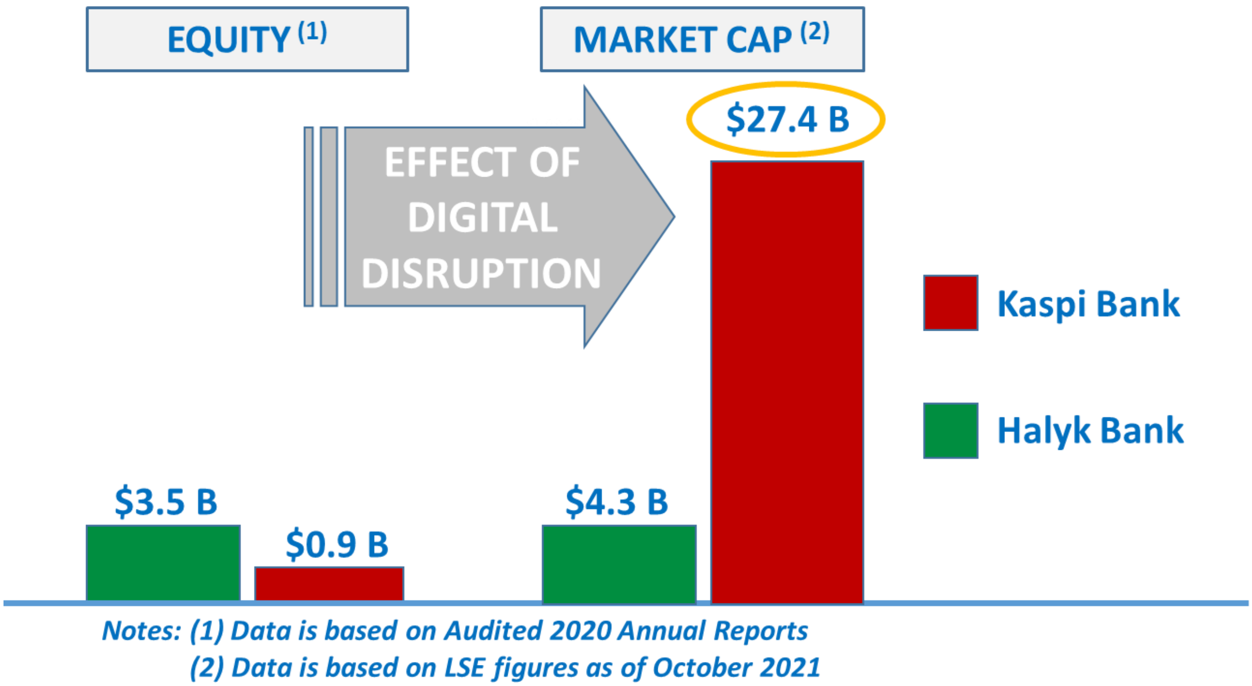

Fig. 2 Comparison of the Equity and Market Capitalization

The effect of digital disruption is even more evident when comparing the equity size with the market cap for these two banks. It can be seen from Figure 2 that the market cap of Halyk Bank is almost the same as its equity, while the market cap of Kaspi Bank is more than 30 times its equity – a truly remarkable result. This is the result of the market expectation of higher returns due to synergy effects of an innovative digital ecosystem set up by Kaspi Bank, which incorporates into the ecosystem the banking services with Fintech solutions, electronic marketplace and loyalty platform in association with a large number of merchants.

In order to evaluate the effect of digital ecosystem, it would be interesting to compare the present-day performance characteristics of these two banks with those some years ago, i.e. before the introduction of the digital ecosystem approach in banking. For comparison we have chosen the year 2014 and the results are presented in Figure 3. In 2014 the total assets of Halyk Bank was about 3 times higher than that of Kaspi Bank. The same can be said about the operating profits, i.e. the operating profit of Halyk Bank was about 3 times higher than that of Kaspi Bank. This indicates that $1 of assets had generated almost the same operating profit for both banks, thus displaying a similar operating performance of these banks in 2014.

However, the picture has changed drastically in 2020. Figure 3 indicates that during the period since 2014 until 2020 the size of the total assets of Halyk Bank increased at a higher rate than that of Kaspi Bank. More precisely, the total assets of Kaspi Bank in 2020 was only about 1/4th of that of Halyk Bank.

In contrast, the operating profit of Kaspi Bank had increased at a higher rate than that of Halyk bank and reached 82% of the operating profit generated by the latter. To summarize, 1/4th of assets (in case of Kaspi Bank) had generated about 82% of the operating profit of Halyk Bank. I.e. $1 of Kaspi Bank's assets generated 3.02 times more operating profit than $1 of Halyk Bank's assets (refer to Figure 3).

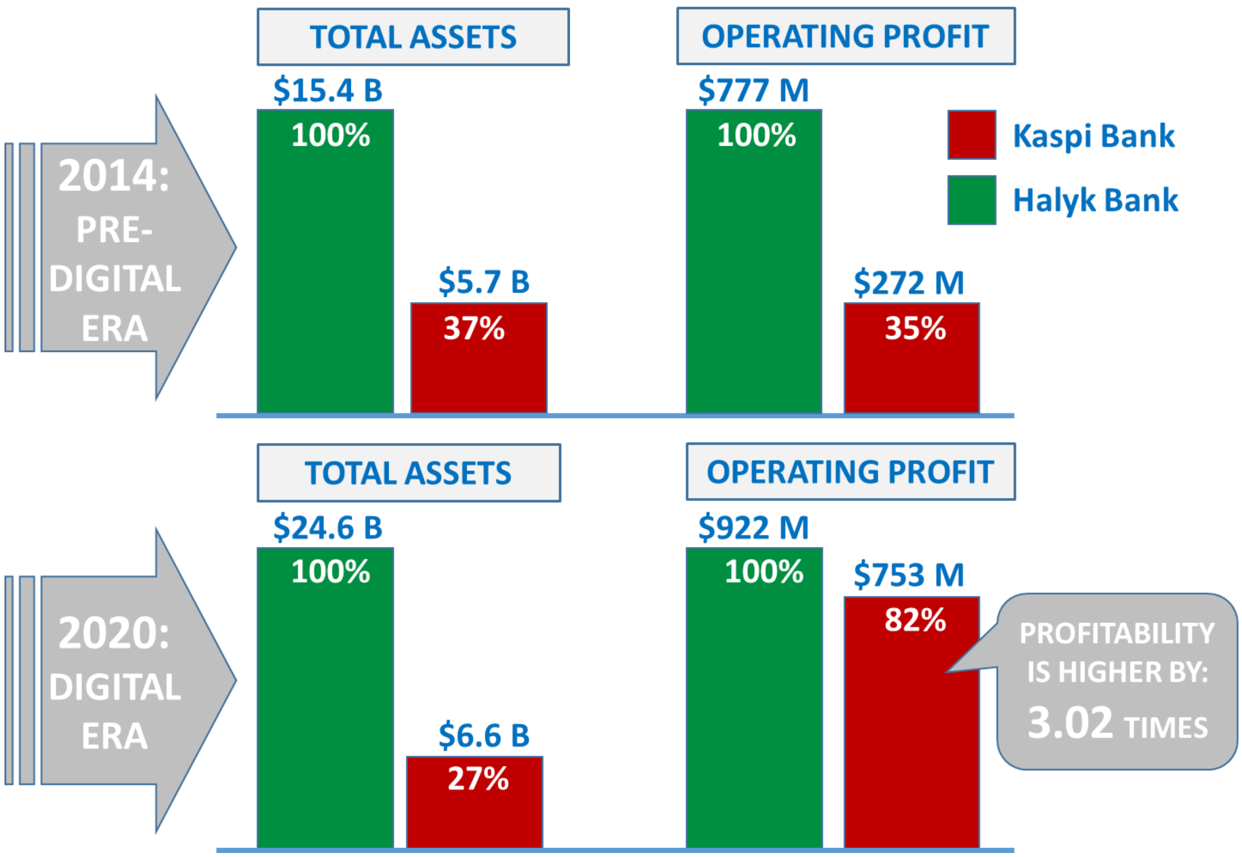

Fig. 3 Comparison of the Total Assets and Operating Profit in 2014 and 2020

It is interesting to find out the causes of such phenomenal performance. For this reason, we need to compare the operating profits and asset turnovers for these 2 banks. The results of the comparison are presented in Figure 4. Namely, 3.02 times more operating profit per $1 of assets generated by Kaspi Bank in comparison to Halyk Bank is attributed to two factors: (a) Higher operating profit and (b) Higher asset turnover. More specifically, the operating profit of Kaspi Bank is about 50% of its revenues, which is some 1.32 times higher than that of Halyk Bank. This is a typical result for digital banks, which operate mainly by using online channels that are much cheaper in comparison to their brick-and-mortar counterparts.

An even more staggering picture emerges when comparing the figures reflecting the asset turnovers. Namely, the asset turnover of Kaspi Bank is 2.28 times higher than that of Halyk Bank. The multiplication of these two parameters, i.e. 1.32 times higher operating profit and 2.28 times higher asset turnover gives 3.02 times more operating profit per $1 of assets as indicated in the above.

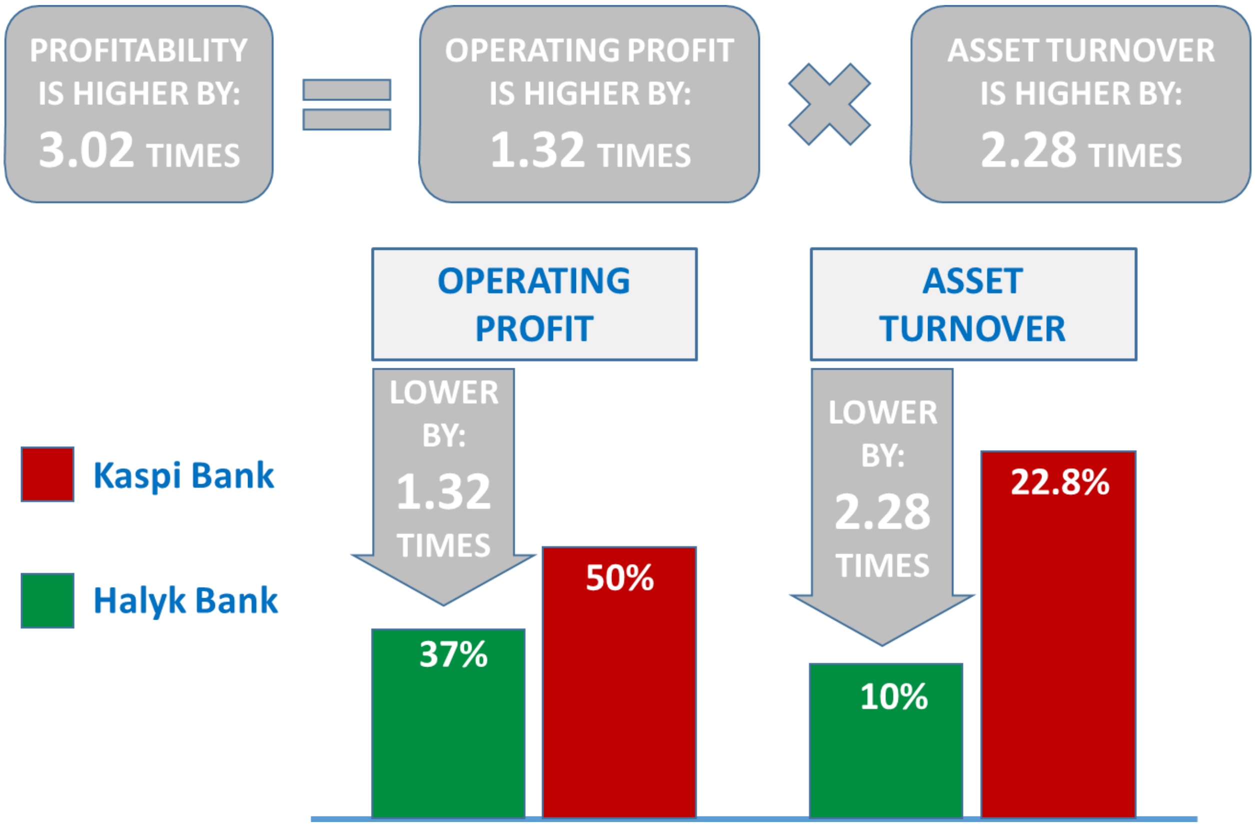

Fig. 4 Comparison of the Operating Profit and Asset Turnover

The next step in our analysis will be the identification of the reasons behind the 2.28 times higher asset turnover of Kaspi Bank in comparison to Halyk Bank. This analysis is presented in Figure 5, which gives the breakdown of the asset turnover in terms of interest revenues and fees & commissions.

The analysis of the financial results presented in Figure 5 shows that the interest revenue per asset of Kaspi Bank is 1.63 times higher than that of Halyk Bank. This can be logically attributed to the more retail-oriented portfolio of Kaspi Bank and to a lesser accent on mortgage loans that are traditionally characterized with lower APRs.

However, the more prominent picture emerges from comparing the revenues per asset generated by fees & commissions (including membership fees) paid by both, customers and partner merchants (for using the electronic marketplace incorporated into a unified digital ecosystem of Kaspi Bank). Namely, fees & commissions income per asset of Kaspi Bank is staggering 3.84 times higher than that of Halyk Bank. This is the result of cooperation between Kaspi Bank and a large network of merchants, which are incorporated into the Kaspi Bank's digital ecosystem. Such cooperation offers an additional and cost-effective channel to merchants to sell their products through Kaspi Bank's platform. At the end, an ultimate winner is a customer, who receives full eCommerce and banking services through Kaspi Bank's portal in a convenient and comfortable manner.

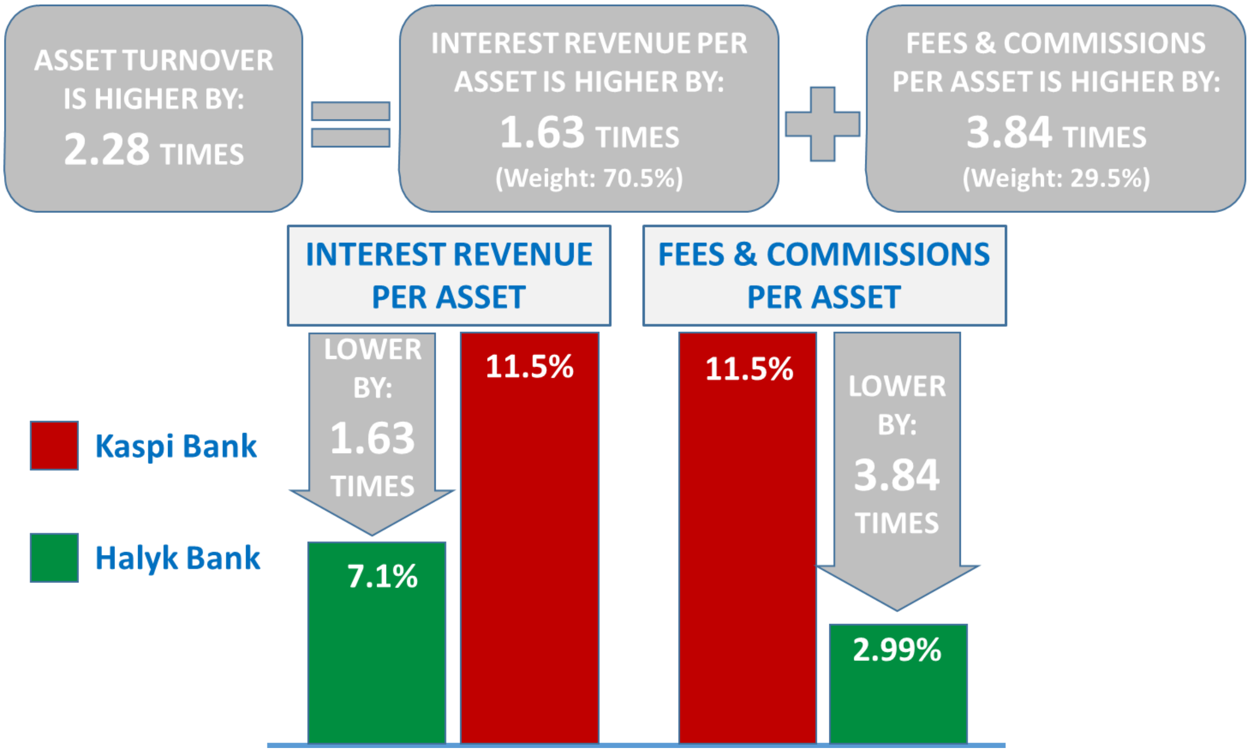

Fig. 5 Breakdown of the asset turnover into interest revenues and fees & commissions

Even more amazing is the fact that the revenue of Kaspi Bank generated from fees & commissions is almost exactly equal to its interest income (as shown in Figure 5), which is an extremely rare case in the banking industry. This fact indicates on the effectiveness of cross-sectoral cooperation and the synergy effects derived from such cooperation. The result is the high profitability of the ecosystem delivering full-scale digital services to large segments of customers in a convenient and comfortable manner.

	CAC/Initial Investment	Number of Customers	Transaction Origination	Operating Cost	CLV/ Profitability
Loyalty Aggregators	Low	High	Mid	Mid	Low
eCommerce Platforms	Mid	Mid	High	High	Mid
Embedded Finance	Mid	Low	Low	Low	High

Fig. 6 Benefits of a Digital Ecosystem Model

To analyze the reasons behind such a phenomenal performance of Kaspi Bank, let's refer to Figure 6, which presents the idea behind an ecosystem approach and the benefits it brings to its stakeholders. The business rationale of such an approach derives from the fact that none of the ecosystem components, i.e. Loyalty Aggregator, eCommerce Platform and Embedded Finance offering digital banking services, will not be sustainable in the long run, if operated independently. However, a unified digital ecosystem will incorporate all the elements of a sustainable business model. More specifically:

- Loyalty Aggregators will require low initial investment to acquire a large customer base, as the existing channels of participating merchants will be used to reach a vast number of customers. Hence, the number of customers will be high, and the Customer Acquisition Cost (CAC) will be low.
- eCommerce Platform will originate many transactions, as it is convenient for customers to shop and accumulate bonus points at one place. Moreover, a high operating costs of eCommerce business, associated with the logistics and delivery of goods, will be mitigated by introducing a platform approach, i.e. the ecosystem will only aggregate the information from the various eCommerce players without taking ownership of the title on the goods to be delivered.
- The ecosystem will incorporate embedded finances by offering digital banking services to its customers. By this, the Customer Lifetime Value (CLV) of the ecosystem will increase drastically, making it a sustainable business in the long run.

Summary

It can be concluded that an ecosystem approach offers a comfortable solution to modern day customers oriented at receiving digital services in their mobile phones. At the same time such approach results in a sustainable business model derived from a large customer base and low customer acquisition cost (due to participating merchants), large potential to originate eCommerce transactions, lower operating costs due to a platform approach and a high customer lifetime value due to digital banking services, which are offered to customers through an embedded finance. It only remains to see which companies will move swiftly to introduce the ecosystem approach, which has already been well-tested by an innovative Kaspi Bank JSC in Kazakhstan.

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