



**SLEZSKÁ
UNIVERZITA**

OBCHODNĚ PODNIKATELSKÁ
FAKULTA V KARVINĚ

Marketing

3. Empirical generalizations



Marketing

DIAGNOSIS

STRATEGY

TACTICS





"Very often I get the question: 'What will change in the next 10 years?' But I almost never get the question, 'What's not going to change in the next 10 years?' And I would argue that the latter question is actually more important because you can build a business strategy on things that are stable over time."

Jeff Bezos



Content

- What are empirical generalisations?
- Negative binomial distributions and how brands grow
- Double jeopardy
- Duplication of purchase
- Natural monopoly





Blood letting

- Blood letting is the removal of a small amount of blood from a superficial vein on the body.
- This practice was common in medicine from ancient times until the mid-19th century.
- Blood letting is based on the ancient medical idea that a patient's health is related to the balance of bodily fluids.
- According to this theory, blood is one of the body's four basic juices, and if there is too much blood in the body, it can cause illness.
- Therefore, blood letting removes excess blood and restores the balance of the body juices.



Blood letting

- In the 19th century, several studies were conducted to investigate the effectiveness of blood letting.
- These studies found no evidence that this technique was an effective treatment for any disease.
- Today, we use vein blood letting only rarely (for example, for excessive iron in the blood) because it is not only in medicine that the **scientific method** has become widespread.



Scientific method

- Evidence-based
- Observation - I observe my environment and the phenomena that interest me.
- Hypothesis - I infer what might be causing the phenomena.
- Data - I collect data to prove a cause.
- Result - I decide whether my hypothesis is valid.
- So in addition to theories, there is also empirics
- Theory is based on logical reasoning often without evidence, whereas empirics is based on observation and measurement.



Blood letting example

- I observe the practice of blood letting.
- I hypothesize that it is a method that does not benefit the patient.
- I am collecting data on cases where blood letting has and has not been used, which I will compare. The data show that in the group where blood letting was used, deaths were significantly more frequent.
- The result is evidence of the ineffectiveness of this method.



Chocolate bar example:

- We observe a chocolate brand that has a significantly higher market share than its competitors.
- We hypothesize that the brand succeeds in attracting customers to repeat purchases.
- The data show that the brand differs significantly from others in the number of customers, not in the amount of repeat purchases.
- As a result, the success of the brand is driven by customers who have purchased only once not by those who repeat purchase.



Why do marketing textbooks remain theories instead of evidence?

- The Hungarian physician Ignaz Semmelweis found that the death rate from puerperal fever is significantly higher in maternity hospitals staffed by doctors than in those staffed by midwives.
- After excluding other variables, he concluded that doctors, who often move directly from autopsies to deliveries, carry infectious material on their hands.
- Semmelweis instituted a hand-washing protocol using a chlorinated lime solution, which significantly reduced the incidence of puerperal fever.



Why do marketing textbooks remain theories instead of evidence?

- Despite the impressive results, Semmelweis's conclusions were met with skepticism and resistance from the medical community.
- His ideas contradicted established medical views and were largely rejected.
- Empirical generalizations in marketing go against established theories, which is why most authors ignore them.



"It is not difficult for people to accept new ideas but forget old ones."

J.M.Keynes



Empirical generalisations in general

Empirické – evidence based

Generalizace – applies generally in most situations



Empirical generalisations in general

- Generalization of gravity:
- Gravity is more or less the same on planet earth.
- On the moon, however, it is significantly different, due to specific conditions.
- So we can generalize the validity of gravity to most conditions on earth.



Empirical generalisations in general

- An empirical generalization is like a rule or formula that applies in most situations. This rule helps us understand how different things or situations are related.
- But beware, these rules may not always and everywhere apply. There are situations where the rule does not apply, and that is good to know.
- For example, water usually boils at 100 degrees Celsius, but in the mountains, where the pressure is lower, this rule does not apply.
- So even if managers and marketers are creative, they need to know the rules of the market they are working in.
- It's like architects who design beautiful buildings. They can be creative, but they have to respect the laws of physics to make their buildings safe and stable. They can't ignore the law of gravity or their buildings will fall down.



NBD model of repeat purchases



Customer acquisition and retention

- To understand the importance of customer base modeling, we must first understand how a brand's sales grow.
- Essentially, there are two ways to do this: the first is a new customer and the second is a repeat purchase from an existing customer.



Customer acquisition and retention

- Acquisitions
 - Acquiring new customers
 - Indicator: market penetration
- Retention
 - Retention of existing customers
 - Indicator: repeat purchase/loyalty
- Under conditions of limited resources, the marketing manager must choose.



Market penetration

- Market penetration is the percentage of potential customers who have already purchased a company's product or service.
- Market penetration is measured as the proportion of customers who have purchased a product or service out of all potential customers.
- High market penetration means that a company serves a large part of the market.
- If the potential market is 100 people and 50 of them have already purchased the company's product or service, then the market penetration is 50%. This means that the company serves 50% of the market.



Repeat purchase / Loyalty

- If a customer buys a product from a company once, it is a one-time purchase.
- If the customer buys the product again, it is a repeat purchase.
- If the customer buys the company's products regularly, it is a sign of loyalty.

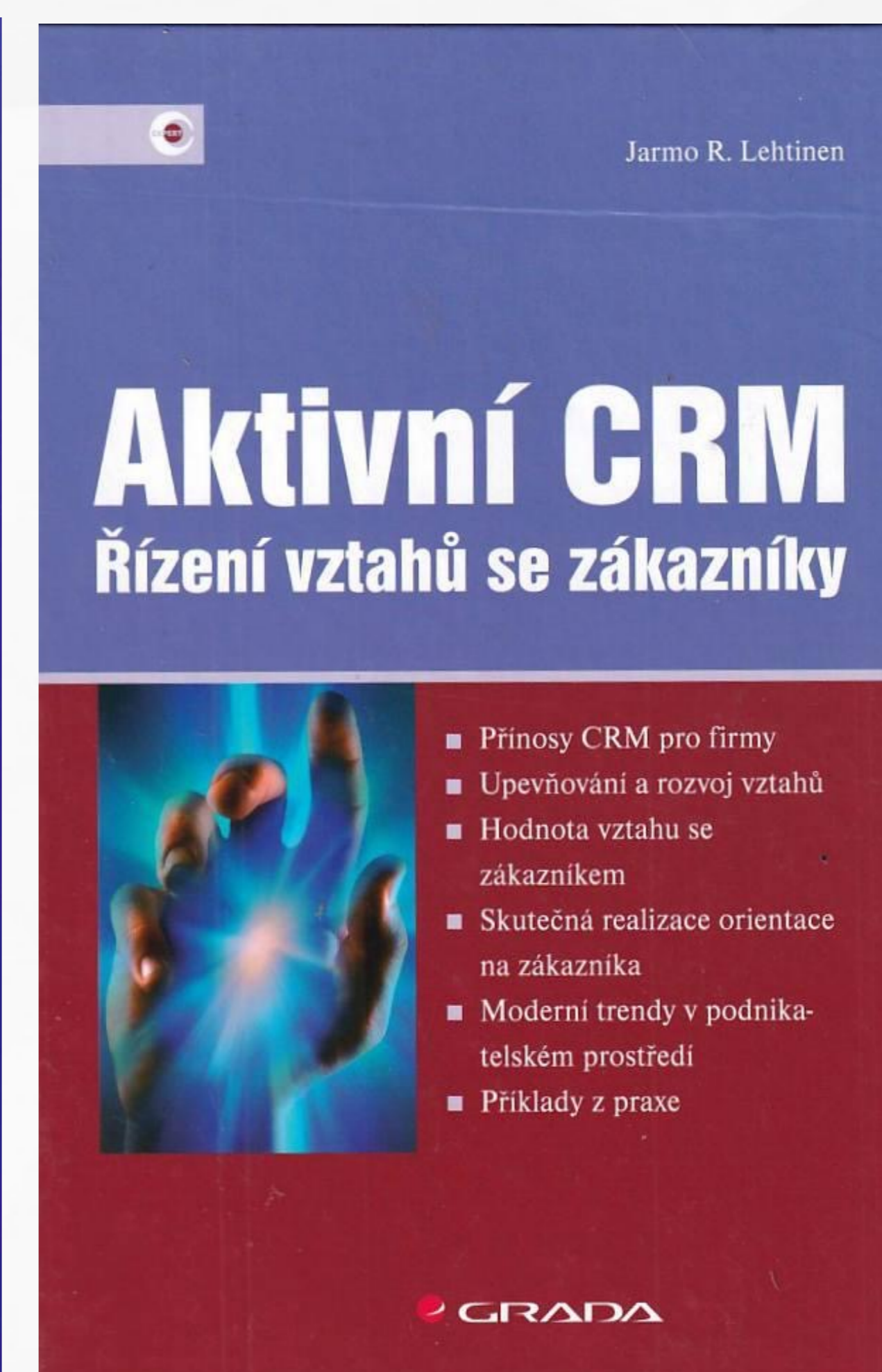
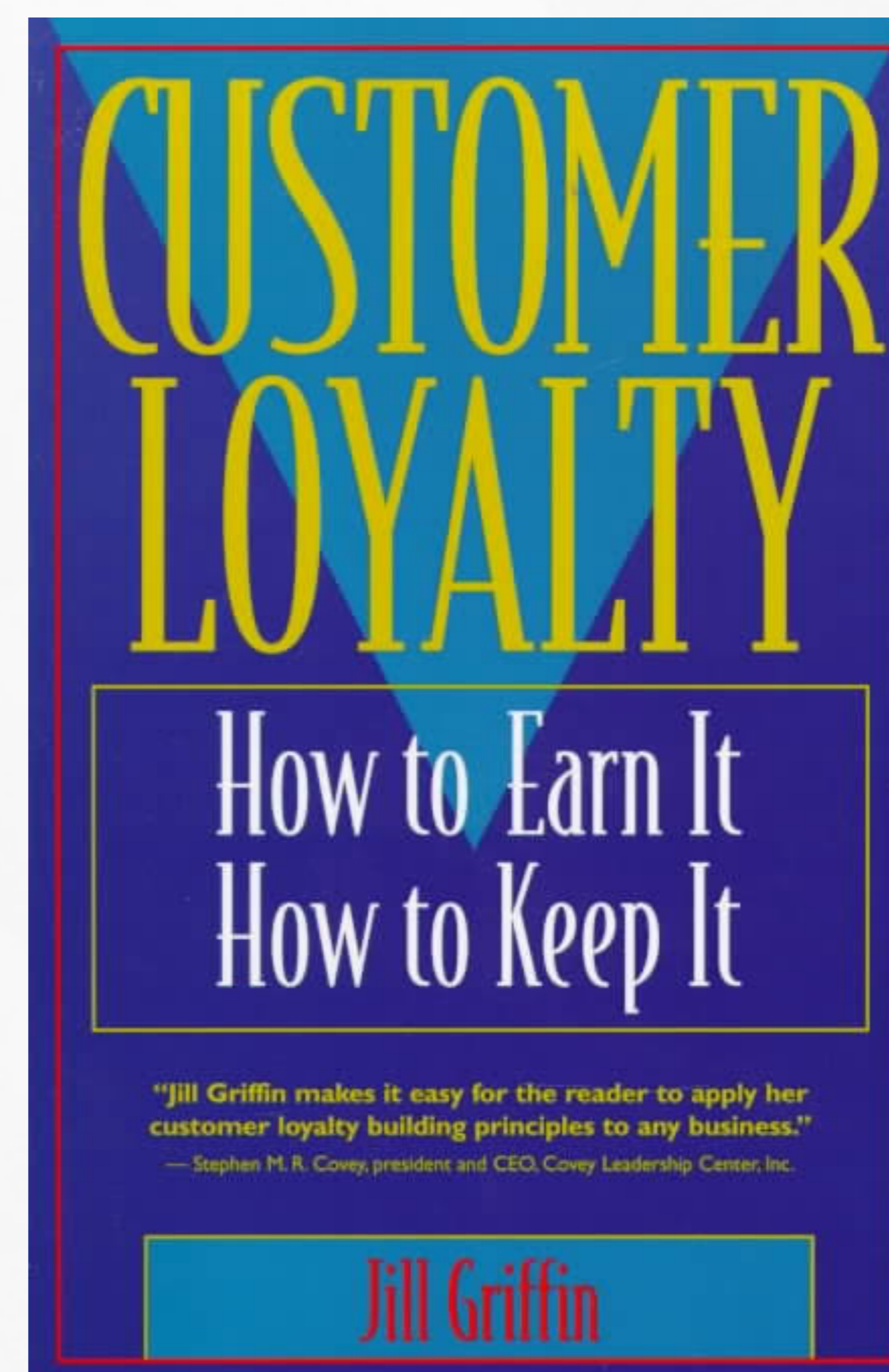
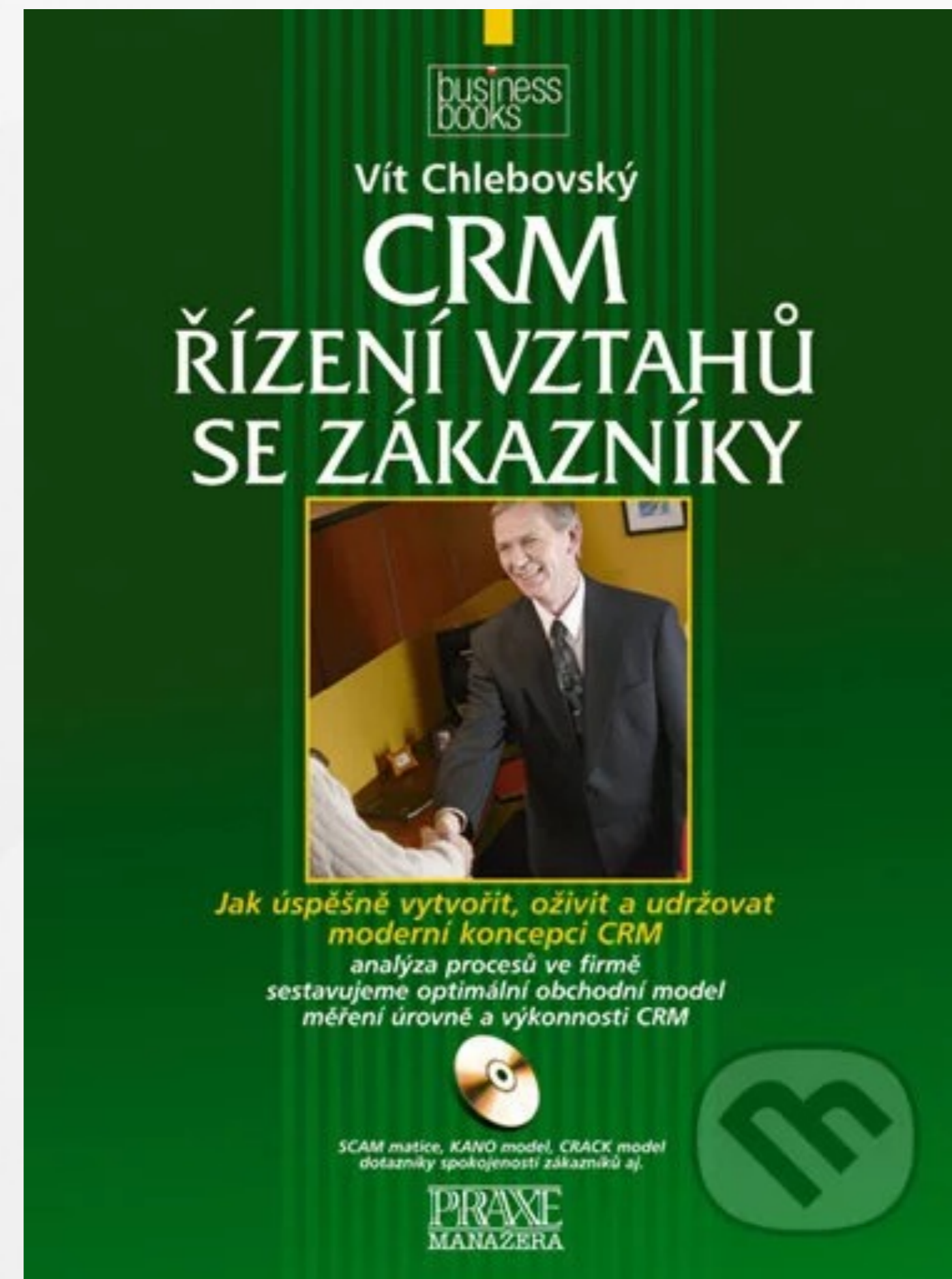
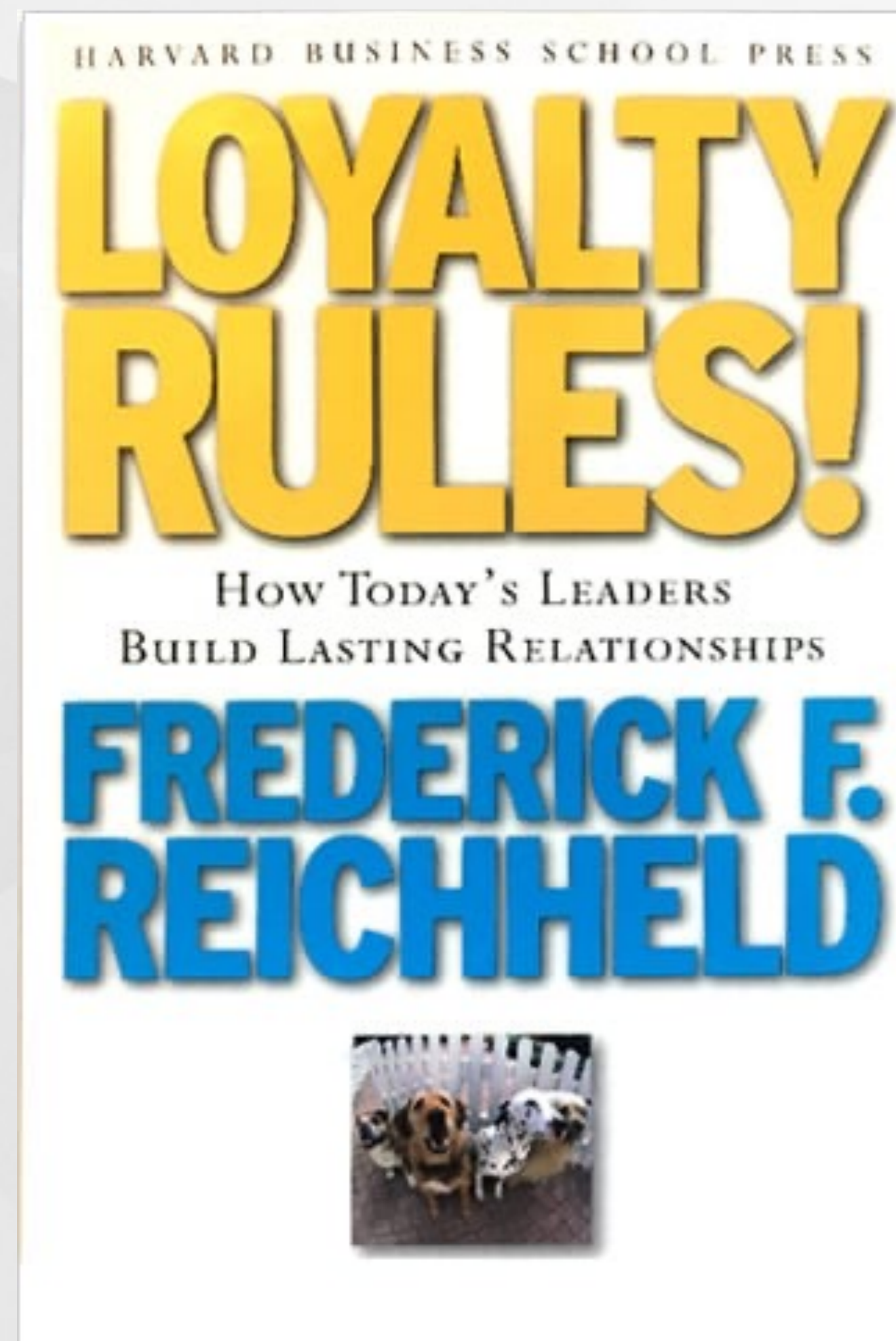


How do academics view loyalty?

- Customer loyalty has become a strategic objective to increase brand value and profitability (Baloglu et al. 2017).
- Increasing loyalty should be critical to becoming one of the growing brands (Baldinger and Rubinson, 1997).
- A critical issue for a company's continued success is its ability to retain existing customers and make them loyal (Dekimpe et al. 1997).
- If research shows a high level of loyal customers, it means that we do not need to find new ones to replace those leaving (Sethna and Blythe, 2016, p.16).



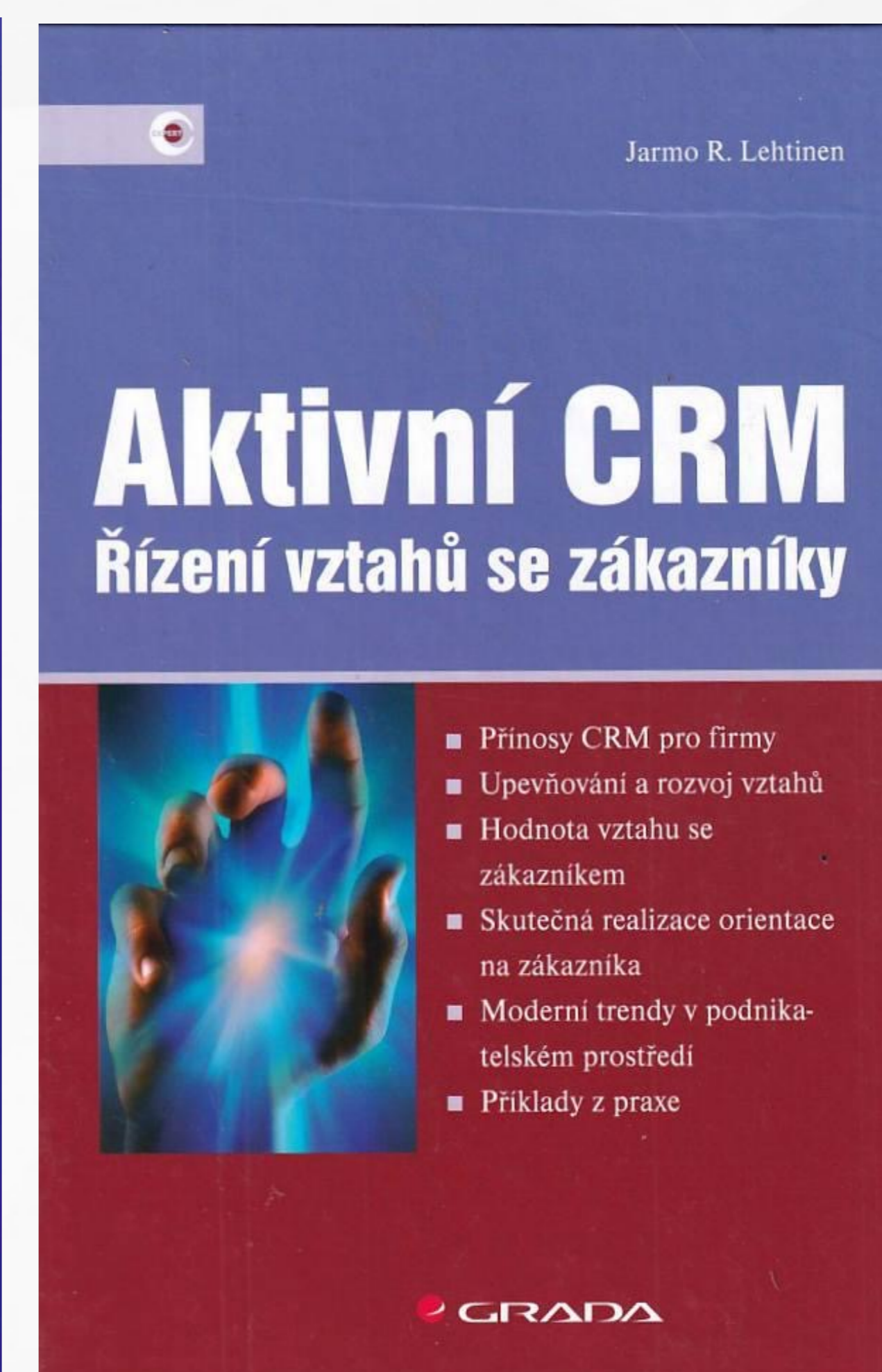
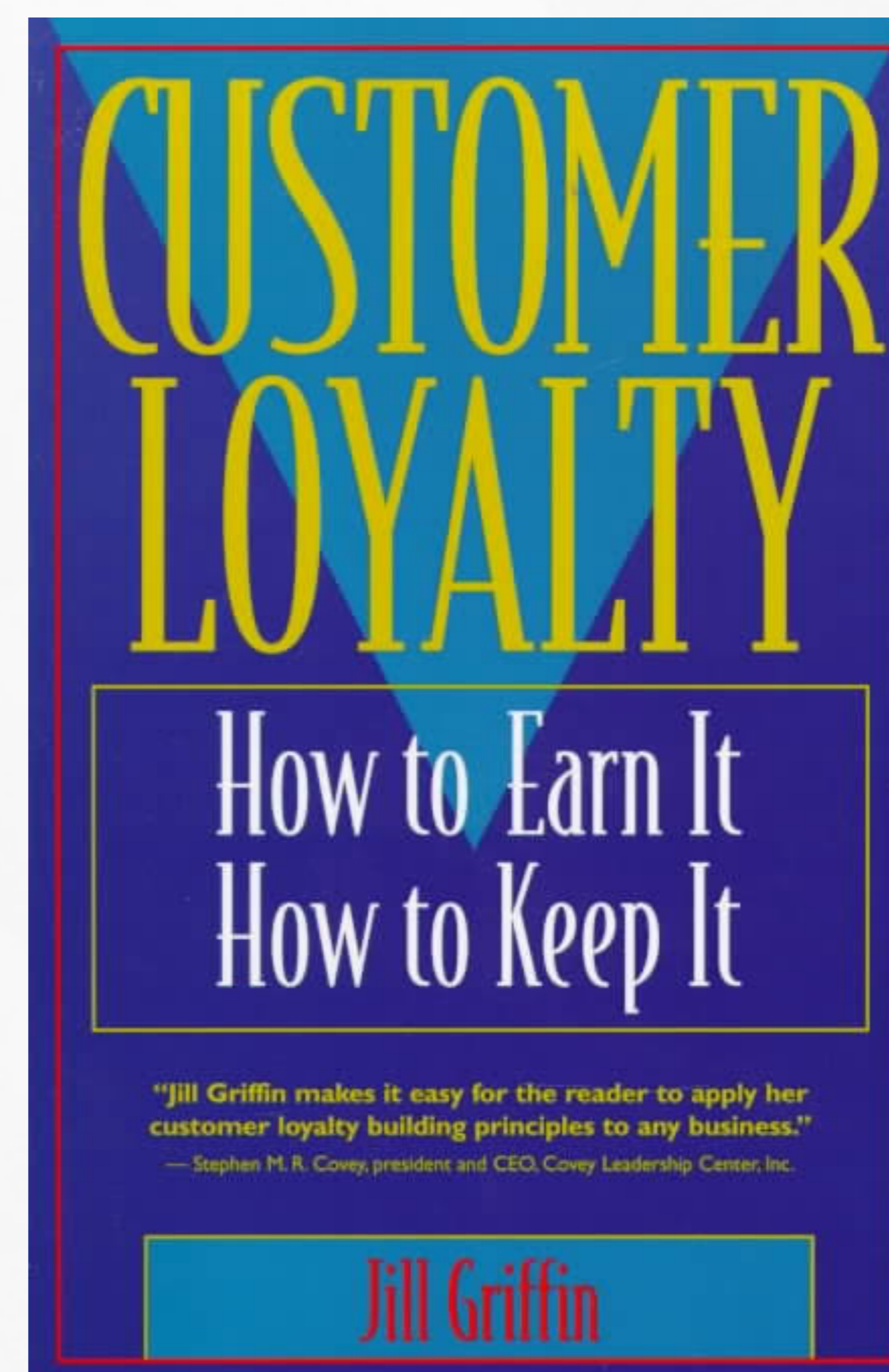
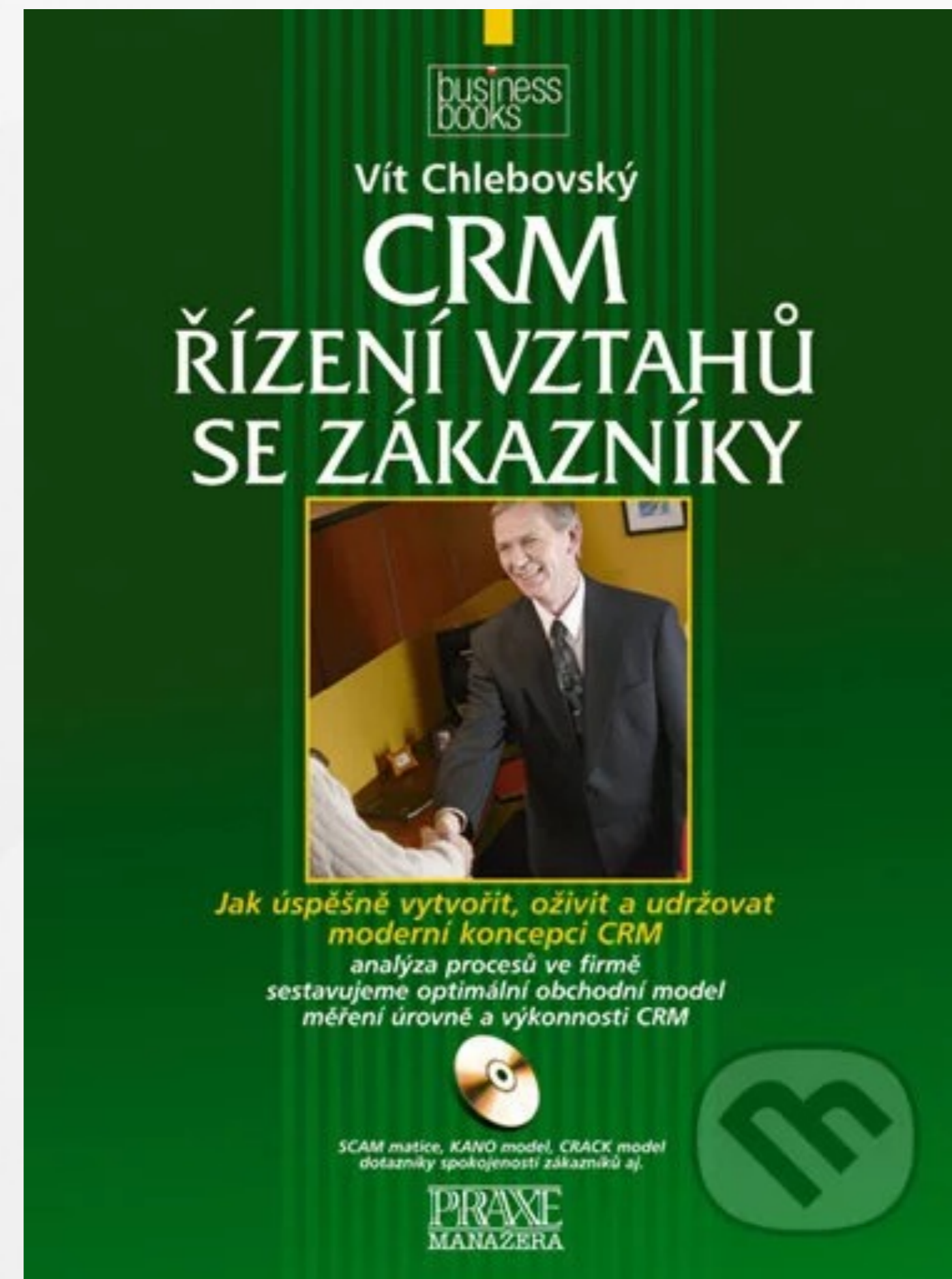
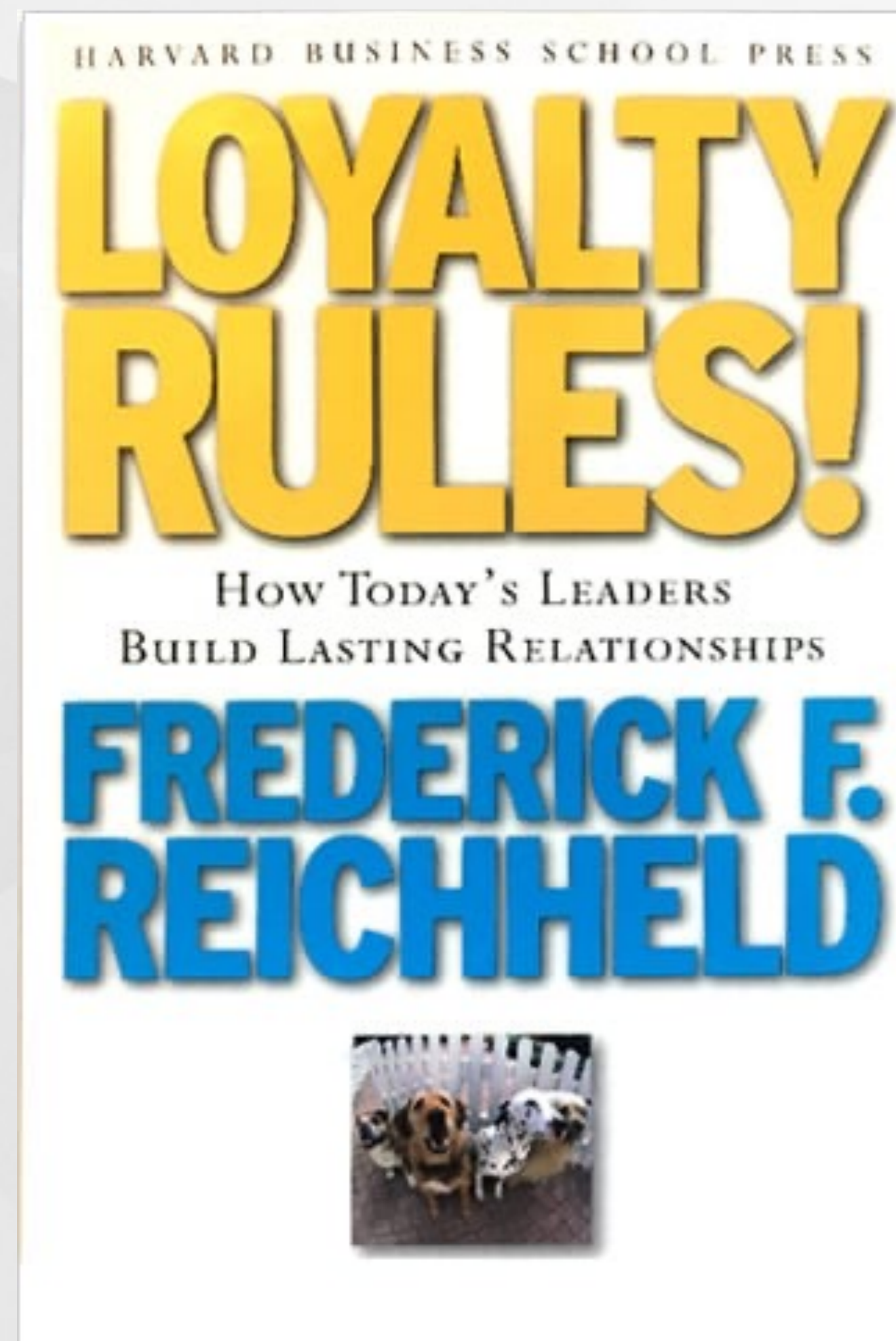
Build loylaty!



Sounds like generalization!



Build loylaty!



How about some evidence?



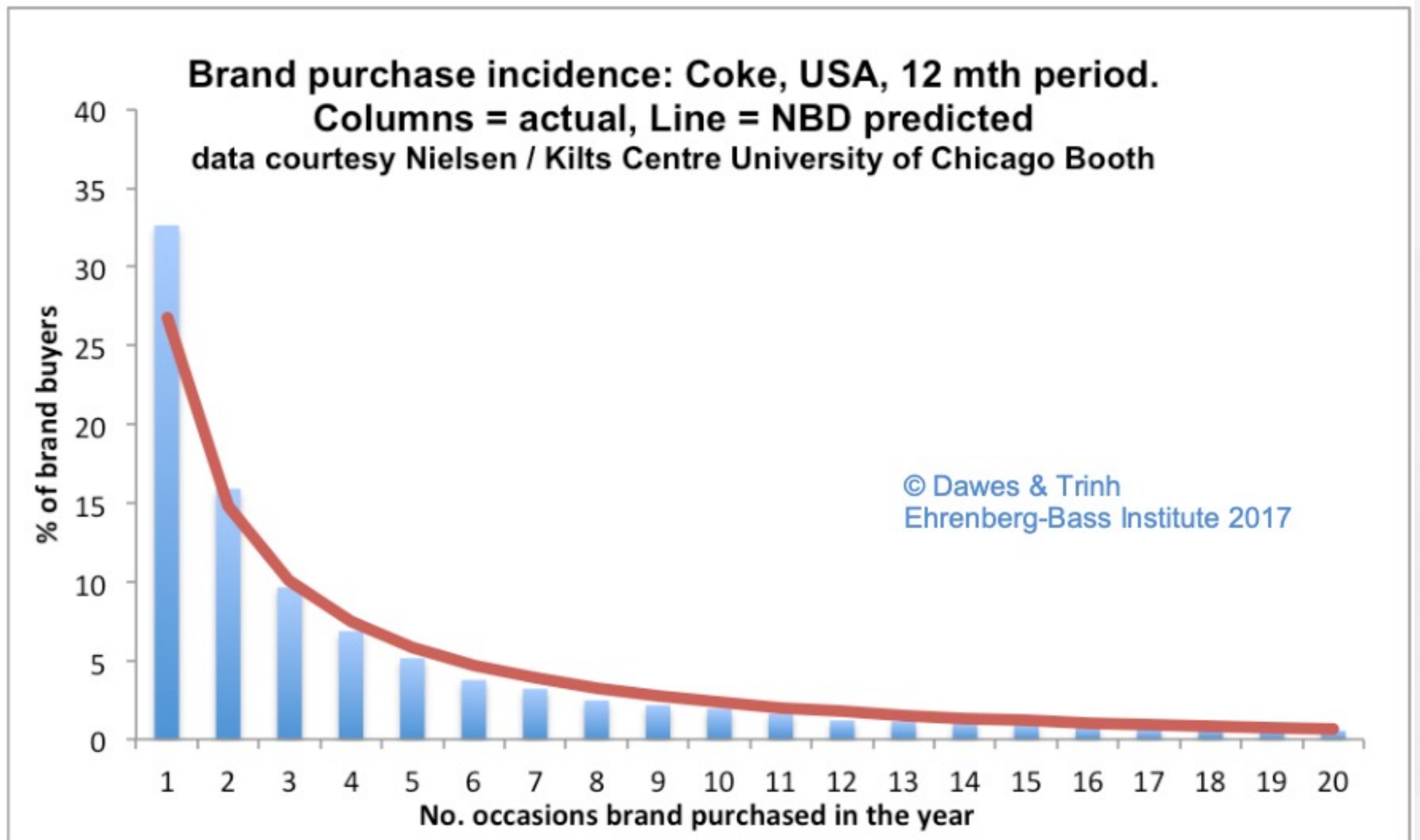
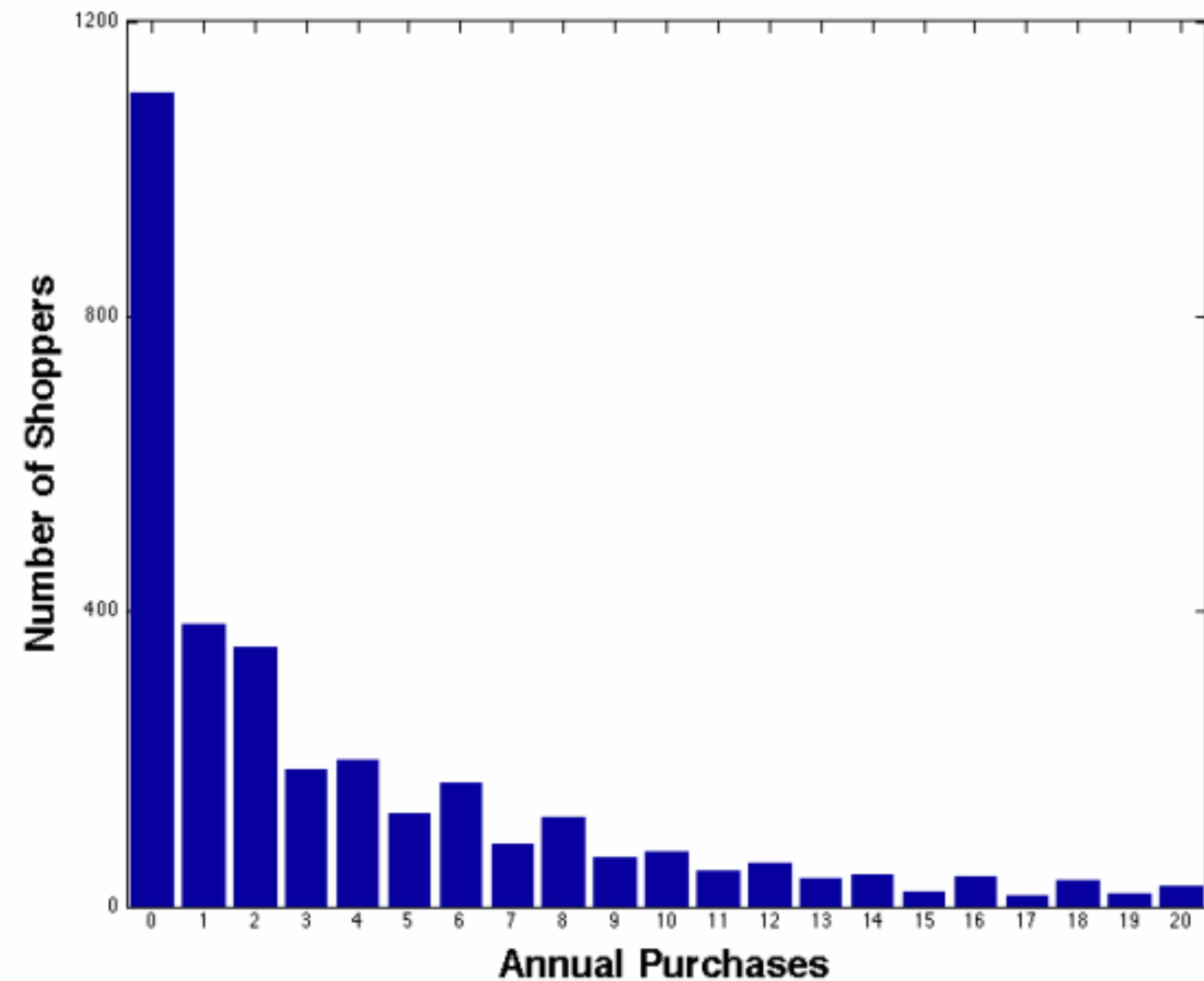
NBD Model

- Andrew Ehrenberg applied NBD to customer behaviour when he was working on market research and Cadbury's Drinking Chocolate brand seemed to have an unusually high level of overall sales.
- One idea was that the brand had a large number of intensive shoppers. That is, those who bought the brand repeatedly during the period under review.
- However, the empirical data revealed that there was no significant surplus of intensive shoppers for Cadbury's Drinking Chocolate and the majority were those who had only purchased the brand once.
- Gradually, other research has also shown this pattern across most customer bases of brands both large and small.
- Thus, the NBD model is that curve in the other slides in an inverted J shape that maps the structure of the customer base.



Repeat purchases in the customer base

Figure 4: Chocolate bars, 12 months observed

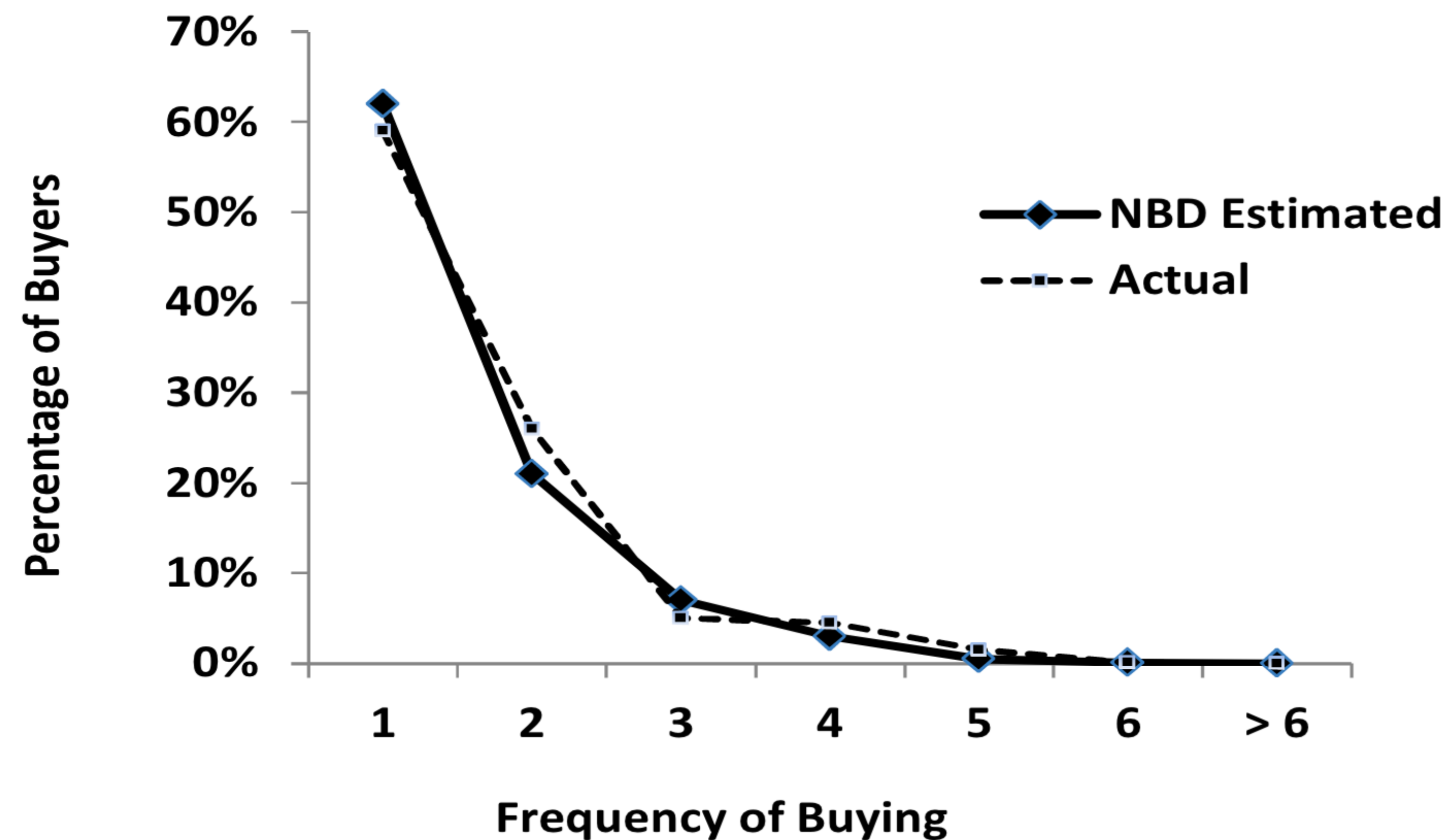


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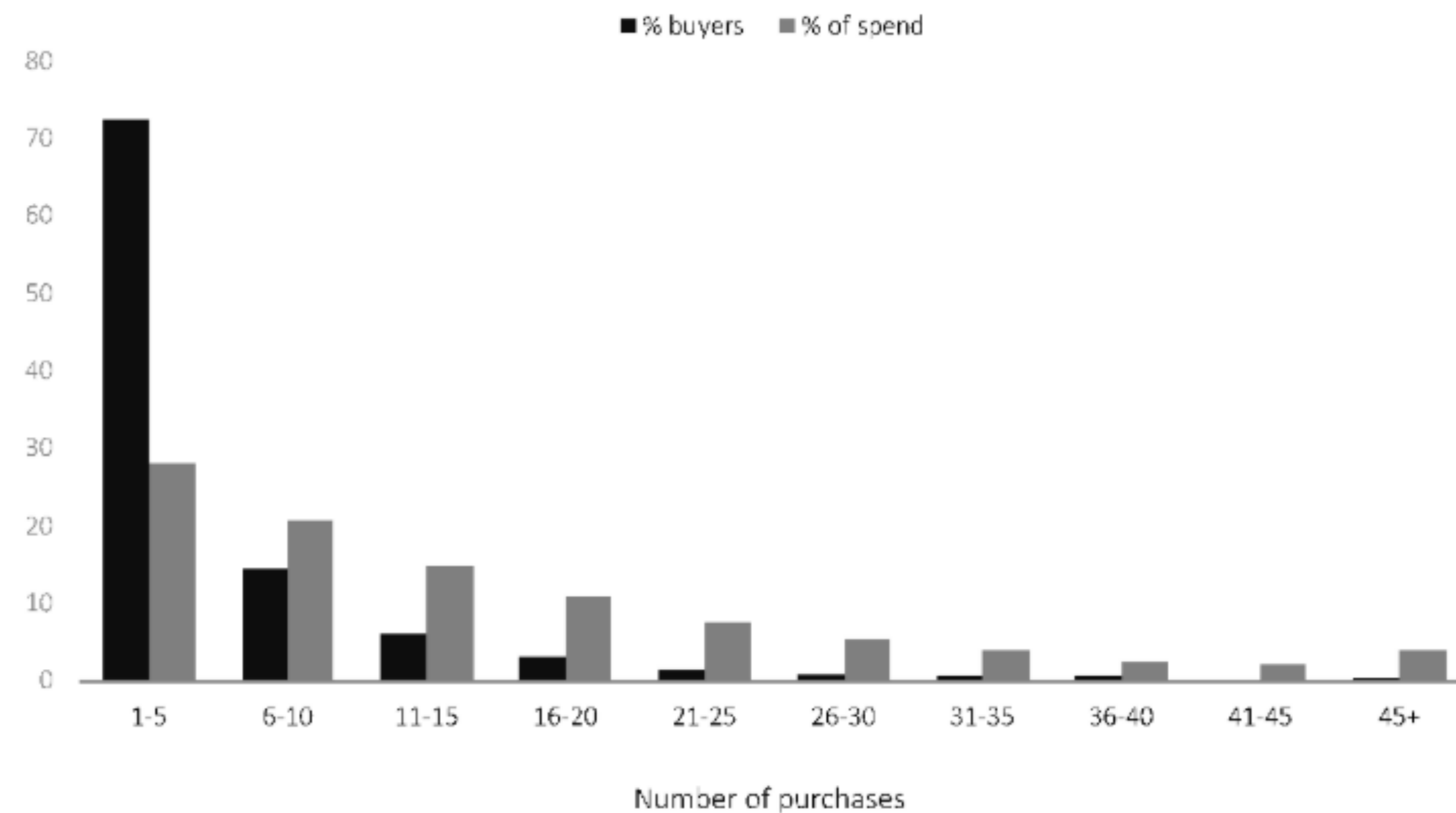
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Repeat purchases in the customer base



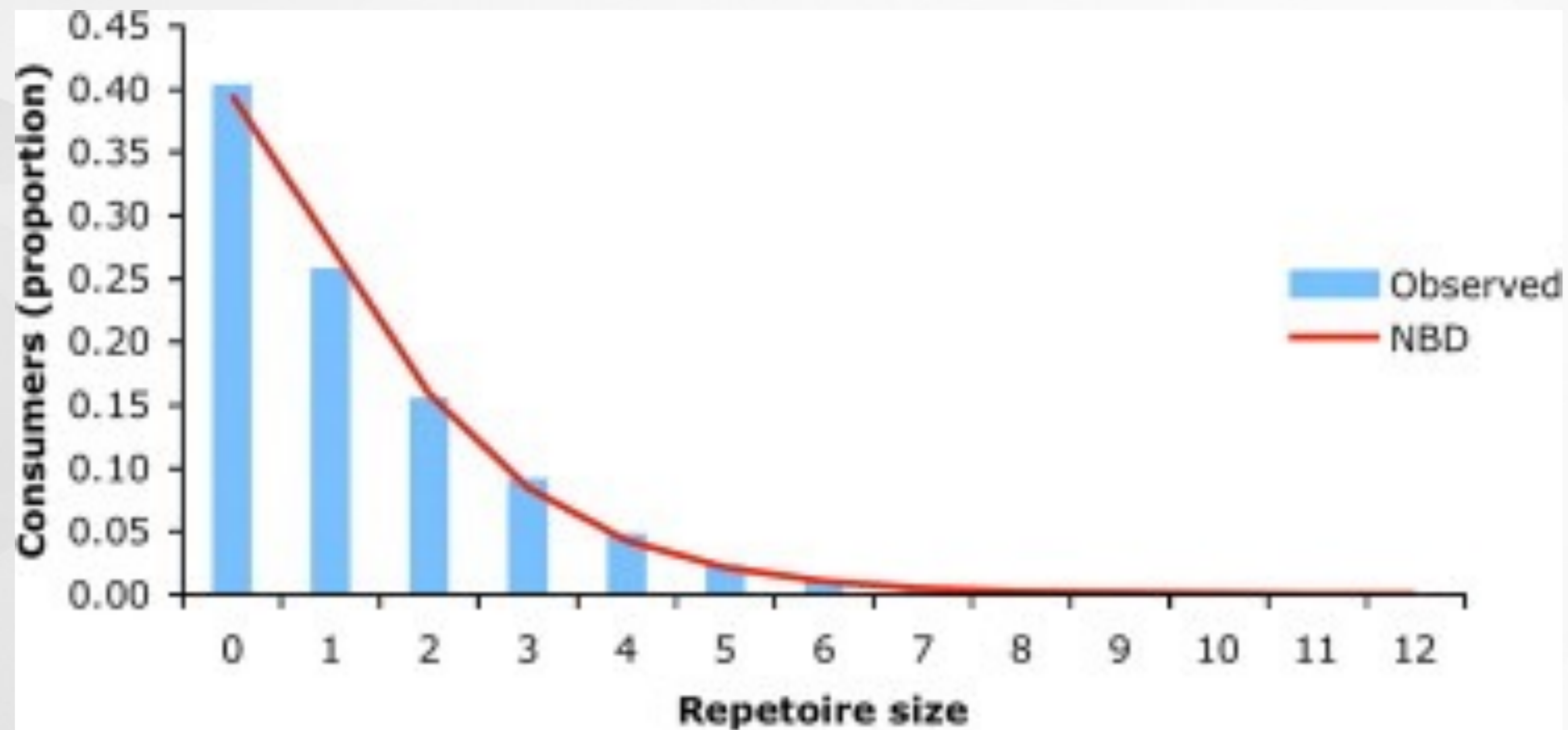
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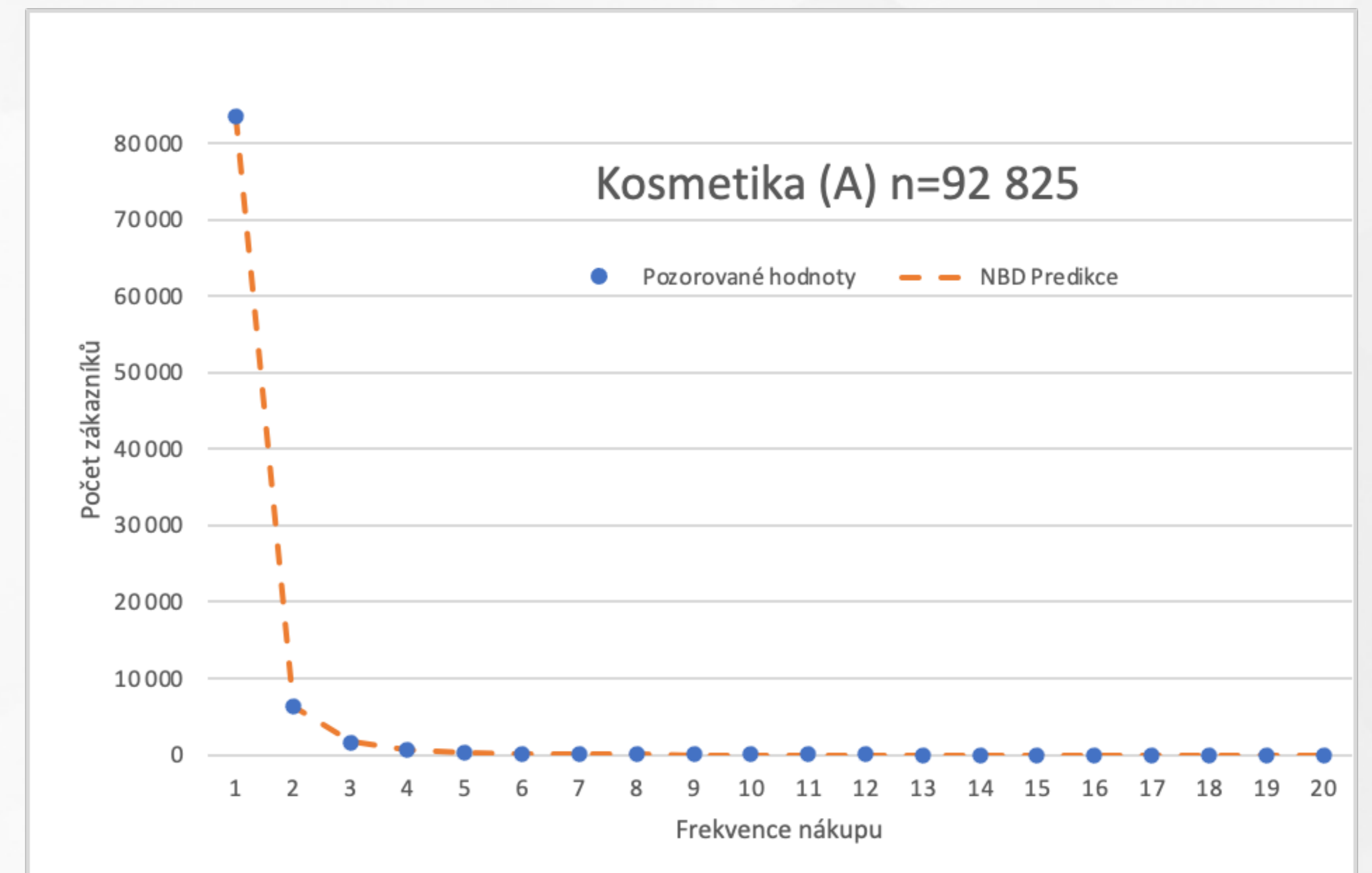
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Repeat purchases in the customer base



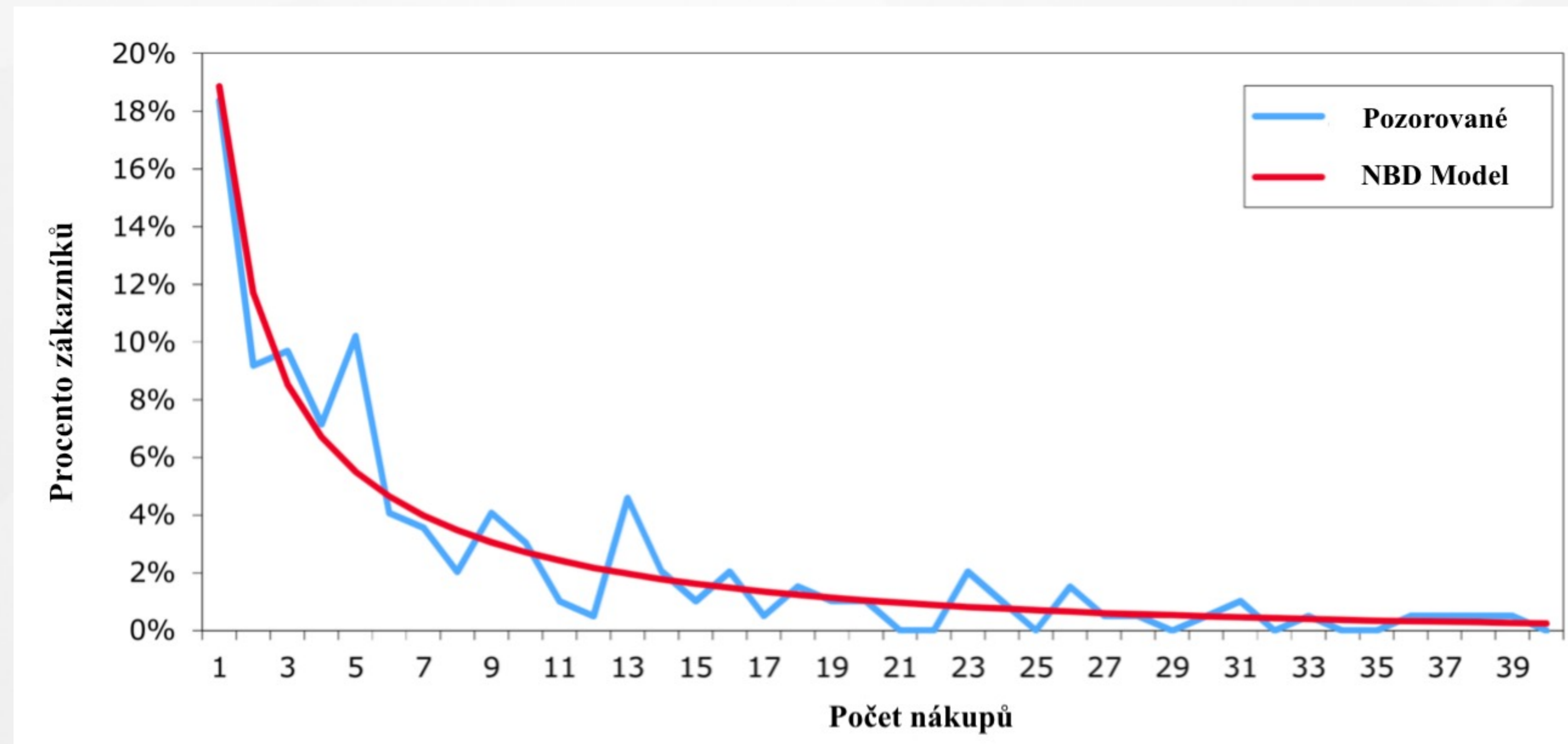
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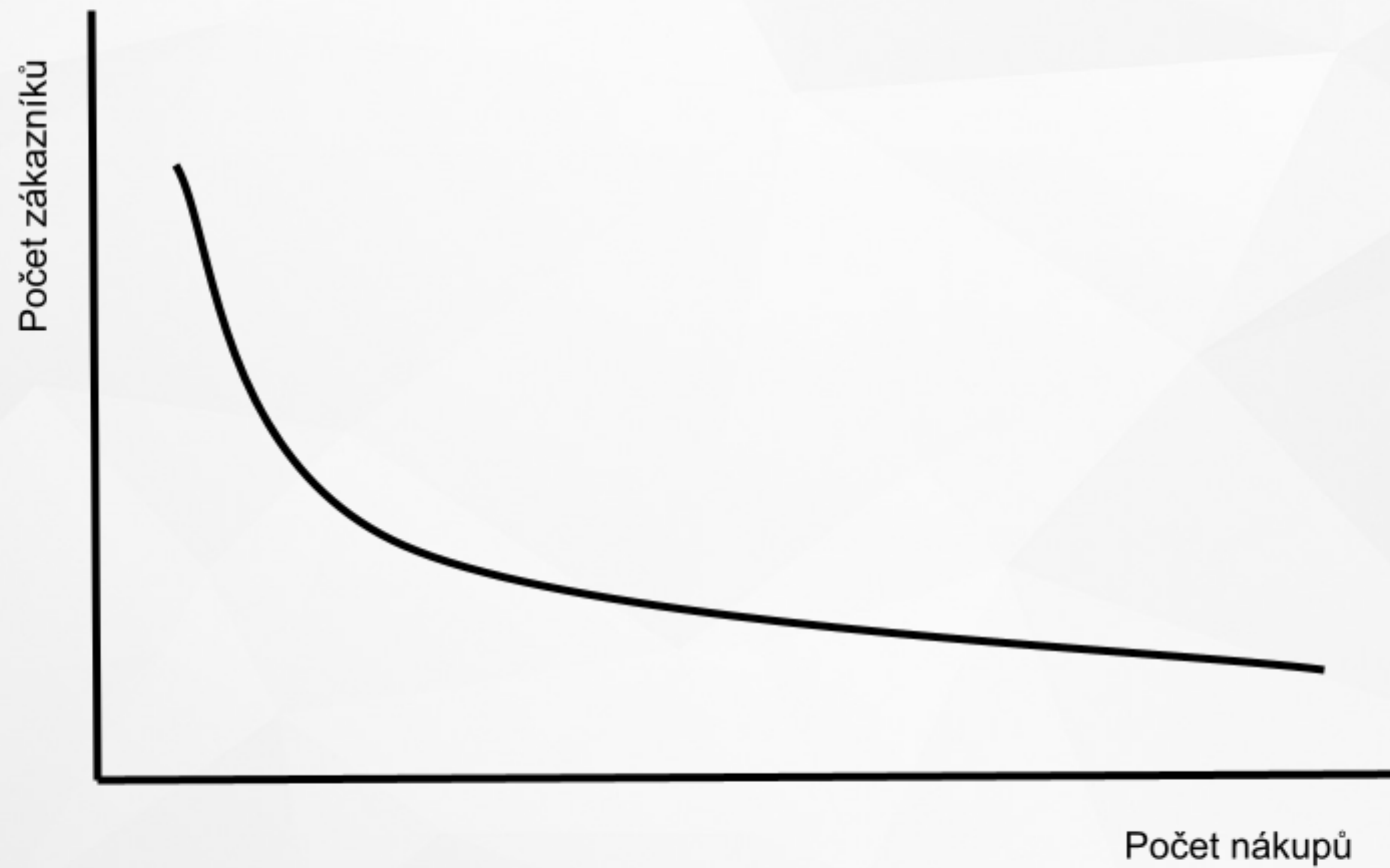
Repeat purchases in the customer base



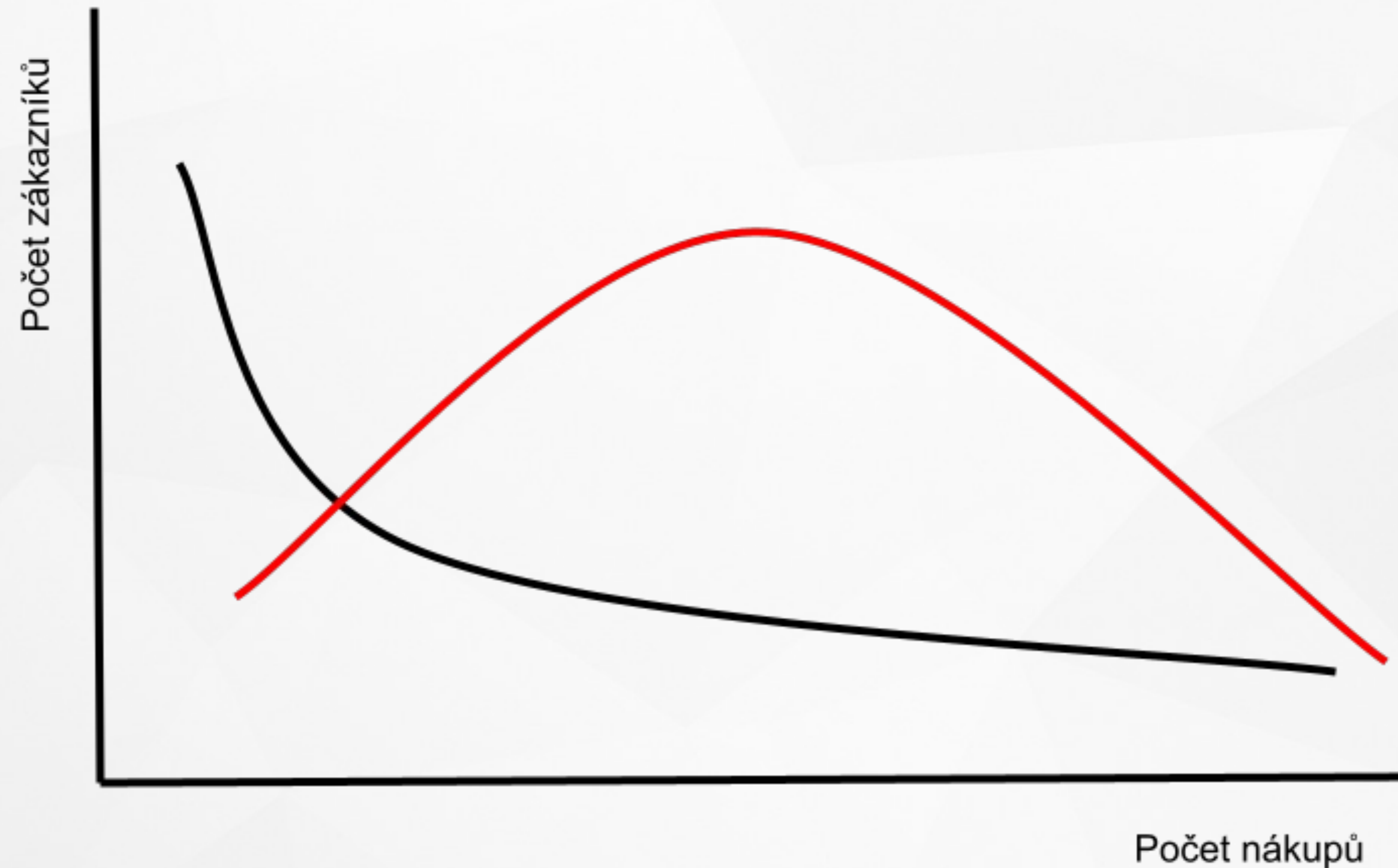
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How to grow?



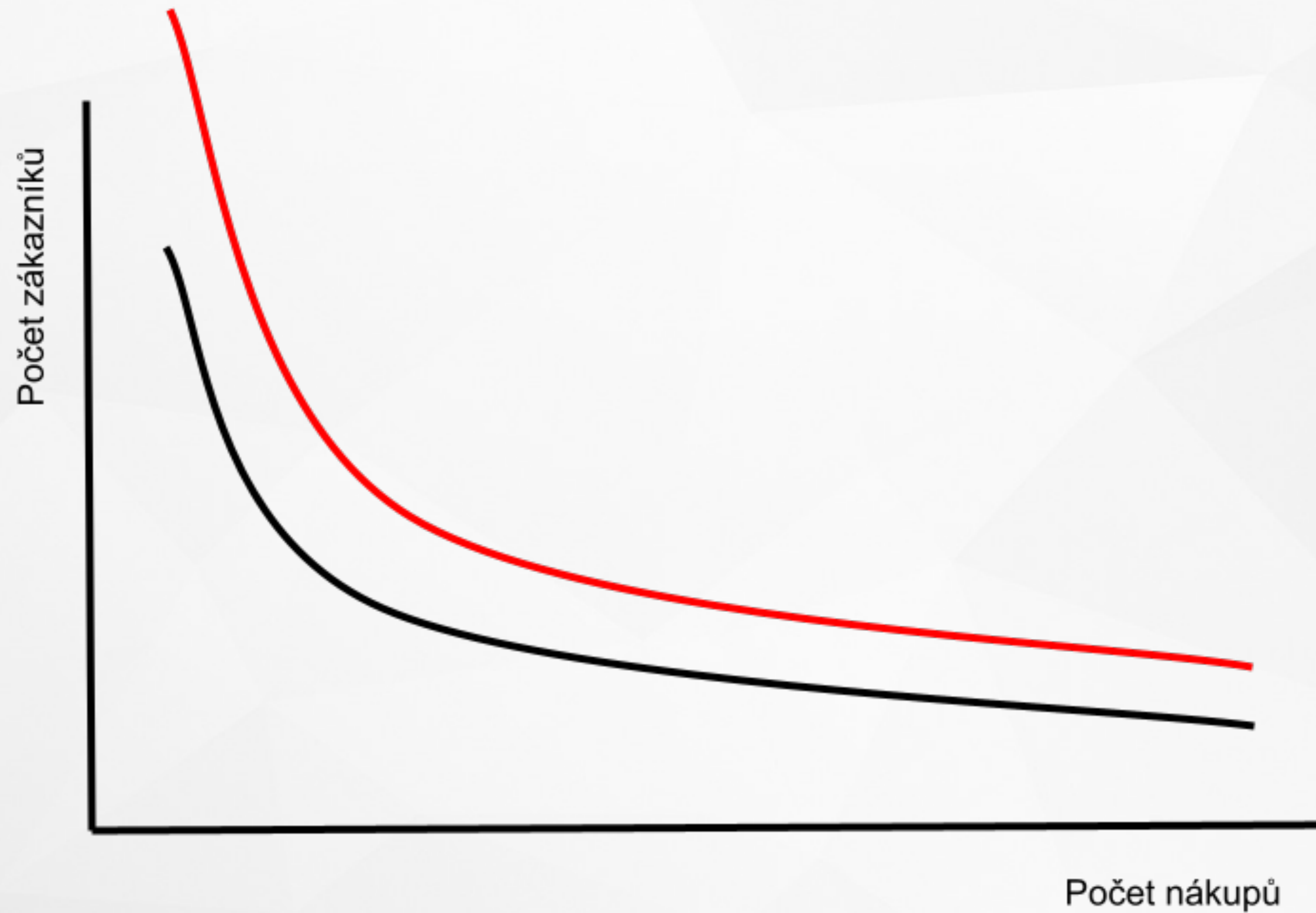
How to grow?



We don't see this curve shape in the research. So it is not possible for a brand to grow solely by increasing repeat purchases at the expense of new customer acquisition.

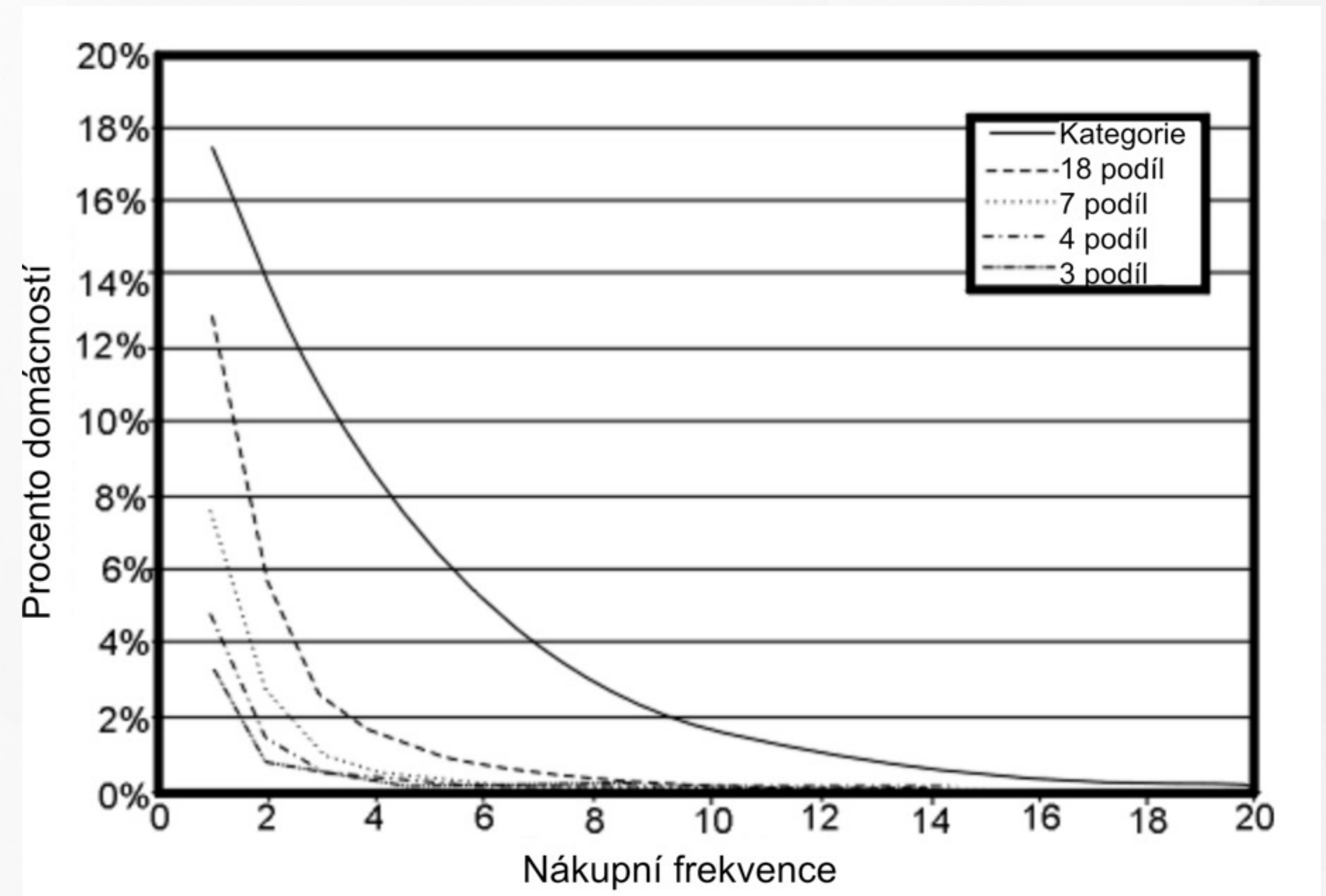


How to grow?



How to grow?

- When comparing larger and smaller brands, it is evident that larger brands have more customers who have only purchased once.
- But they also have slightly more repeat customers (double jeopardy)

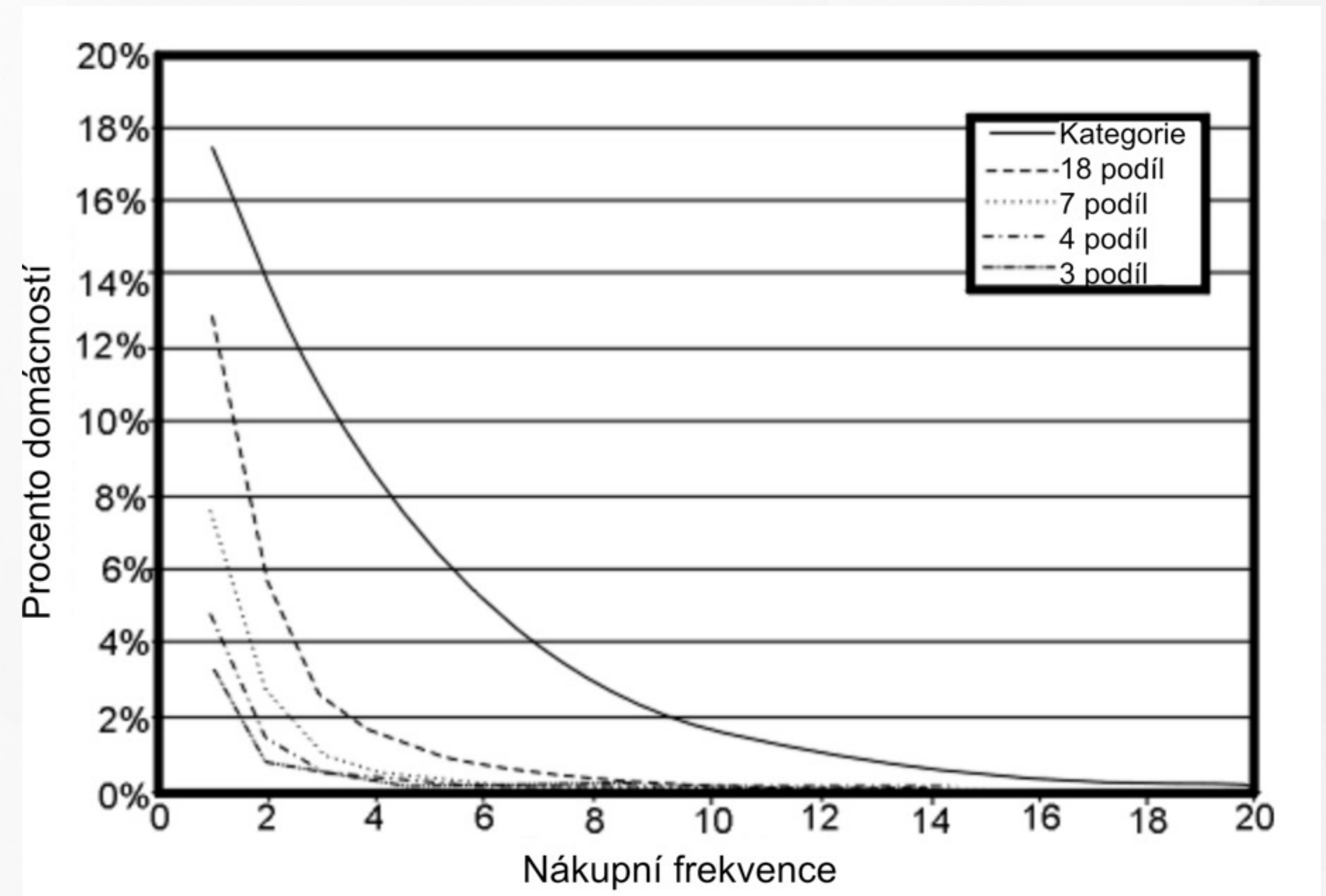


Source: Anschuetz (2002)



How to grow?

- We see that the first brand in the market with 18% share is more successful especially in the amount of light shoppers.
- In essence, this can be thought of as pulling the curve upwards beyond the extreme point at the beginning of the curve.



Zdroj: Anschuetz (2002)



Double Jeopardy

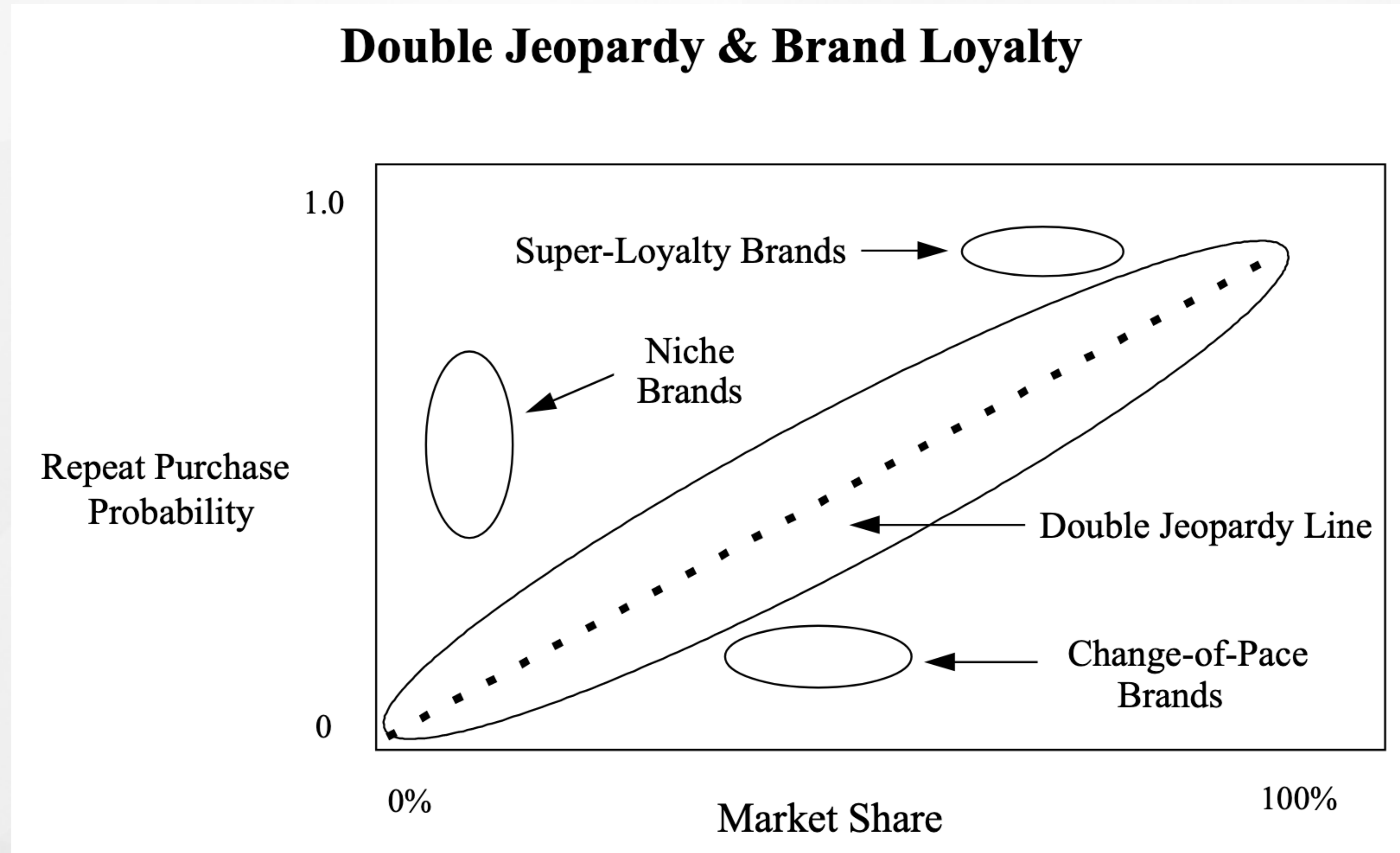


Double Jeopardy

- Small brands are hit twice, hence the phenomenon is called Double Jeopardy.
- Not only do they have fewer customers (the first threat), but they also attract less loyalty among their buyers (the second threat) than big brands.
- The average purchase frequency of a brand decreases only slightly with decreasing market share. In other words, the number of customers has a greater impact on market share.



Double Jeopardy



Source: Dowling and Uncles (1997)



Double Jeopardy

- **Super-loyalty brands:** are brands with high market share and above-average loyalty (repeat purchase frequency).
- **Niche brands:** are smaller brands with a small number of very loyal customers.
- **Change-of-pace brands:** are brands with a larger than expected number of customers, but they show less loyalty.



Double Jeopardy

- Most of the brands are on the DJ line, and the cases cited of superloyal brands, niche brands or speed-changing brands are rather the exception that proves the rule.
- It is true that small brands with low turnover can be significantly profitable (turnover \neq profit) as they choose profit instead of growth (investment in communication or distribution). But then they cannot expect to grow market share.



Duplication of purchase

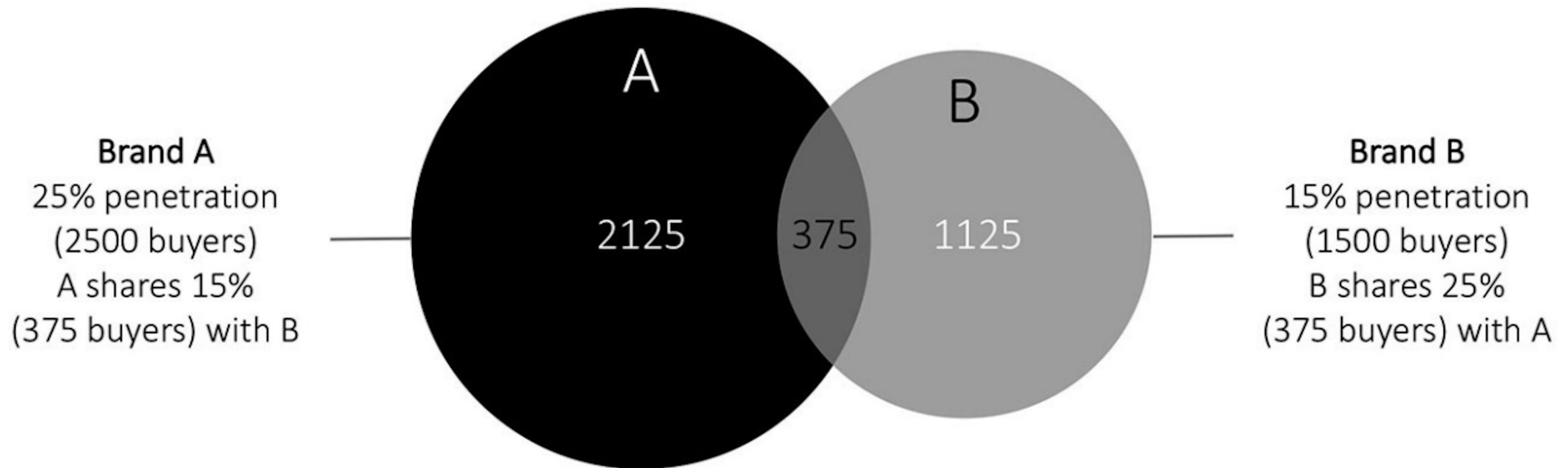


Duplication of purchase

- People buy from a repertoire of brands.
- Purchase duplication describes the overlap of a brand's customer base with competing brands in line with its penetration.
- Over the time period under consideration, a brand will share more of its customer base with large brands and less with small brands.
- Large brands will inherently be at an advantage.



Duplication of purchase



Source: Snijders (2020, p. 22)

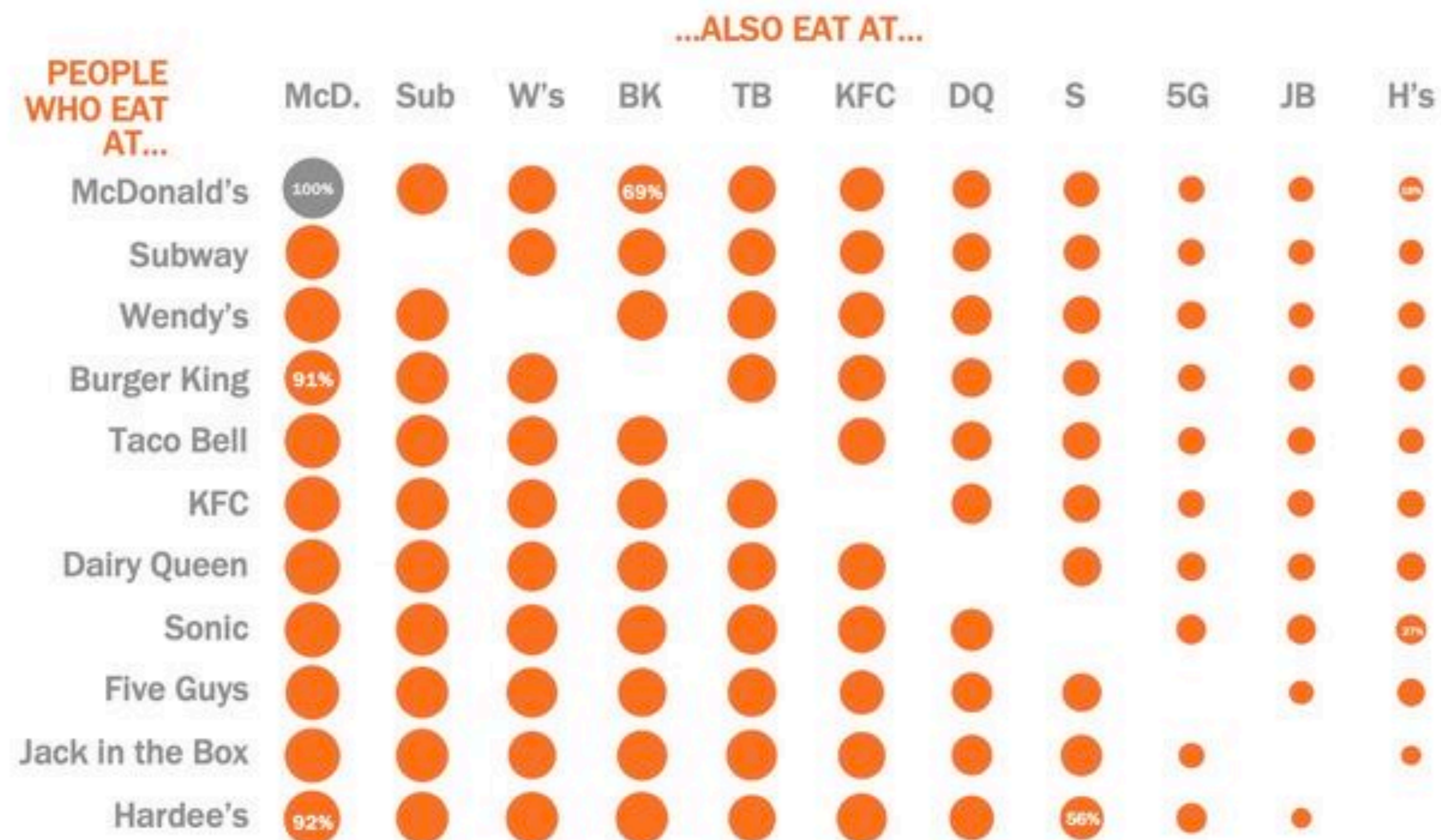


Duplication of purchase

Brand	% buying once or more in 12 months	% who also bought ...			
		Colgate	Aquafresh	Macleans	Sensodyne
Colgate	49	-	30	23	12
Aquafresh	26	57	-	27	10
Macleans	20	58	37	-	12
Sensodyne	12	47	22	19	-
<i>Average</i>		54	30	23	11



You don't "own" customers. You share them.



We like to think we "own" our customers. That "our" buyers are totes not like "their" buyers. Coke vs Pepsi, Coach vs Chanel, etc. But it mostly ain't so.

This is a 'duplication of purchase table (DPT)'. It shows that brands *share* customers — and do so predictably

based on how big they are: ~90% of buyers of all brands *also* eat at McD's. But only ~20% also eat at Hardee's.

Use a DoP table (DPT) to measure sharing in your category — and look for weird extra sharing (competitors) or undersharing ('partitions').

Data: Lynn, 2013
Sign up for The Irregular newsletter at AppliedBrandScience.com



Natural Monopoly

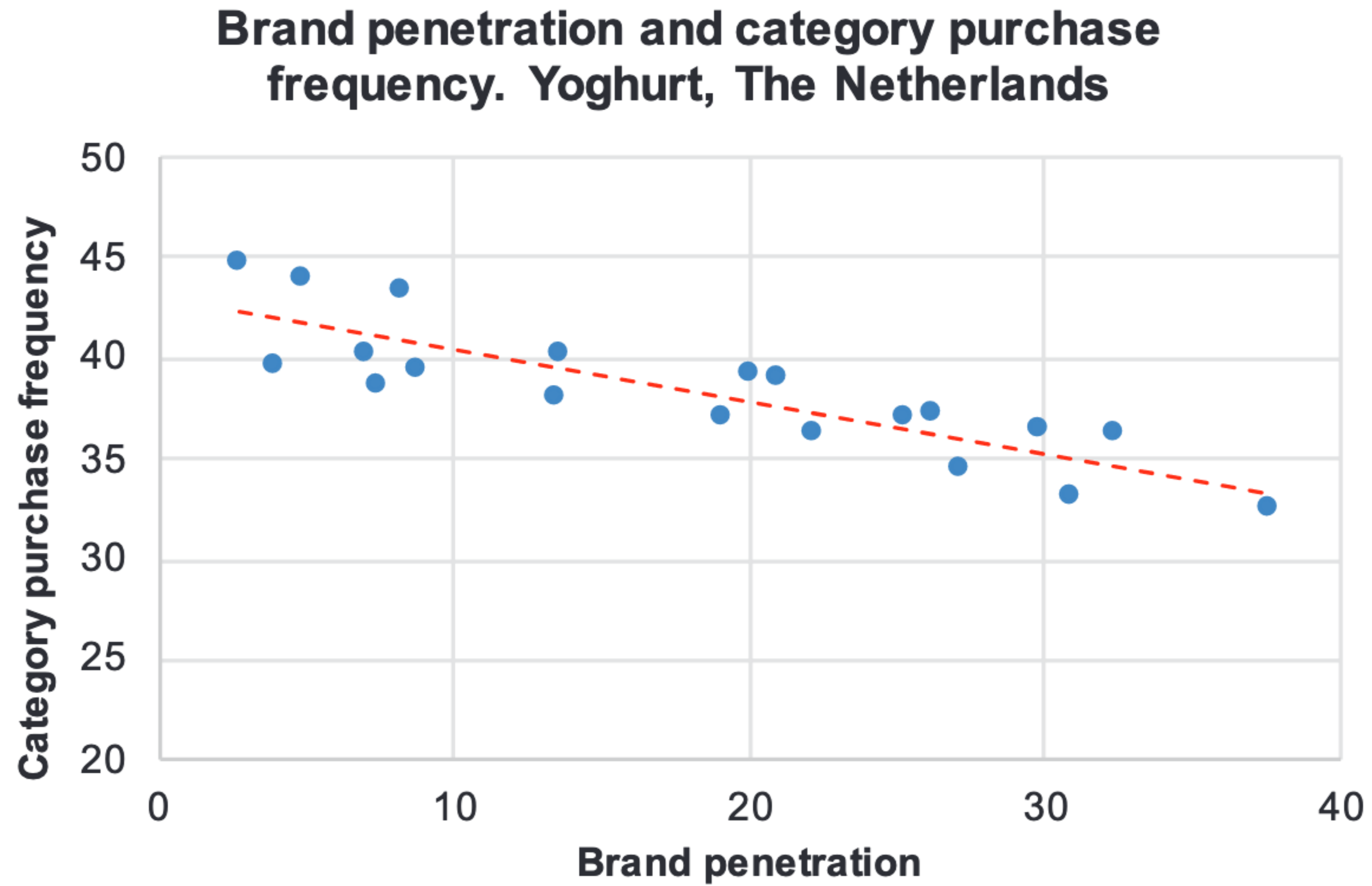


Natural Monopoly

- Not to be confused with economics!
- The effect of Natural Monopoly is that popular products or brands tend to attract lighter or less knowledgeable buyers of the product category compared to less popular products and brands.
- Impacts: advertising for the whole product category?
 - Small brands should avoid marketing communications that aim to promote an entire product category, as they are very likely to attract customers to other, stronger brands.



Natural Monopoly

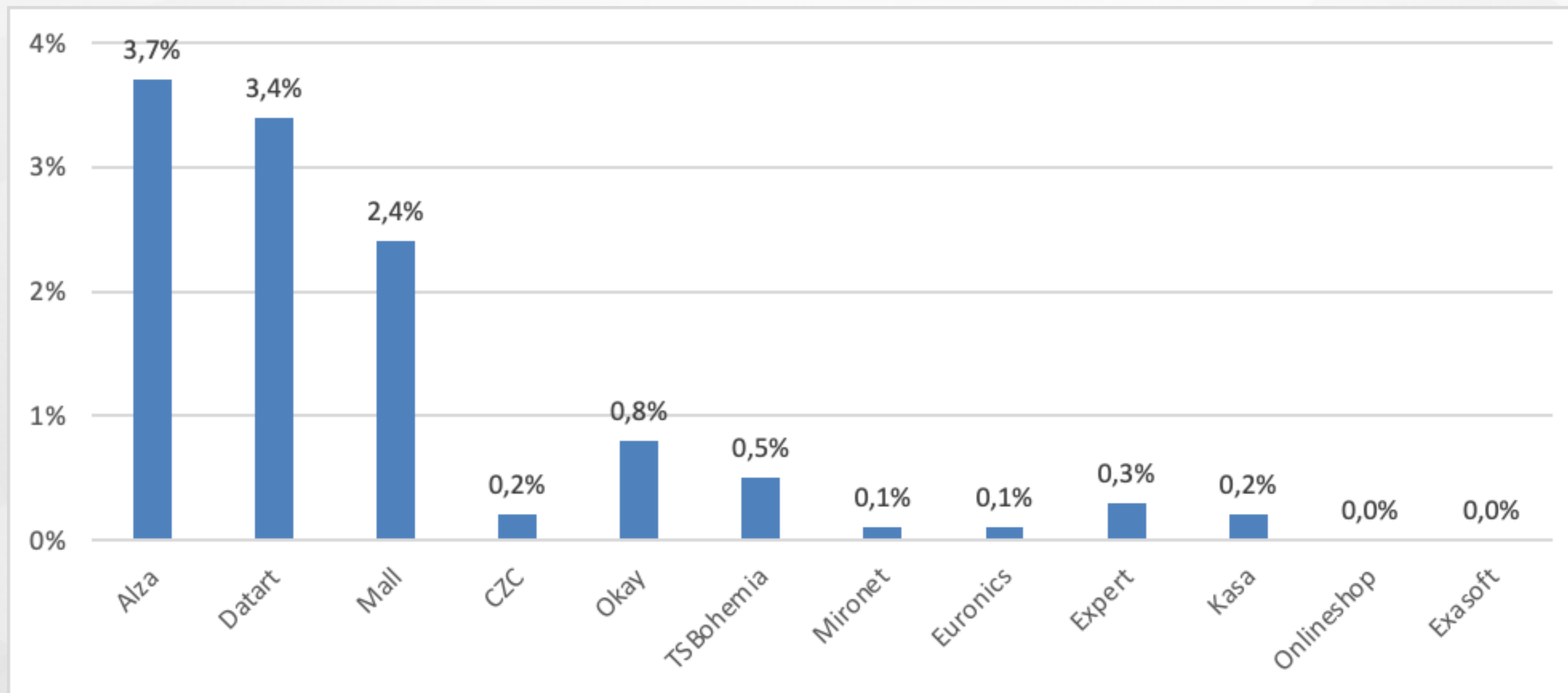


Zdroj: Dawes (2020)



Natural Monopoly

The amount of less experienced customers in the customer base. The firms are ranked by market share and it is therefore apparent that, with exceptions, the natural monopoly rule applies.



Source: <https://www.slu.cz/file/cul/eed27791-ea38-466f-8522-8433cc8490bb>



QUESTION
EVERYTHING
WHY?

TEAR & P
E.W.

WAVO



Marketing

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Thank you for your attention



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