### BEFORE CORONA AND AFTER CORONA AS NEW GLOBAL MILESTONES IN THE THEORY AND PRACTICE OF CONSUMER BEHAVIOUR: EVIDENCE FROM VENDING INDUSTRY

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### SUMMARY OF THE PAPER

- Research background: In the light and shadow of contemporary global situation, Corona pandemic crisis can be established as new milestone in economic and managerial theory and practice. It has flew over national markets as black swan and it has totally destroyed so far formulated models and patterns. No one industry has stayed untouched.
- Purpose of the article: The aim of this paper is to identify changes in consumer behaviour caused by Corona
  pandemic crisis in relevant industry of national economy.
- Methods: The aim of this paper will be fulfilled by applying comparative analysis on the case study of vending industry provided on chronological basis. The reason for choosing this industry lies in the specifics of this industry i.e. elimination of personal contact and nonstop functioning not only in closed but also in open air places. Thus, it can be expected that the impact of Corona pandemic crisis characterized by lockdown, social distancing and strict hygienic steps would be minimal in this case.
- Findings & Value added: It has been already stated that Corona pandemic crisis has a potential to modify so far formulated theoretical approaches to consumer behaviour. By providing own research, this fact has been proven. Based on these findings, it is possible to identify future trends in purchasing behaviour not only in case of chosen industry but also generally. These are mainly connected with the shift in perception of consumption and savings, the preference of cash less payment and the change in philosophy of personal alimentation.

### **THEORETICAL BACKGROUND**

- The decreasing demand of Vending Machines in 2020 can be understood under three scenarios:
  - positive the global vending machines market is expected to decrease in the first, second and third quarter of 2020 under the COVID-19's strong impact, and demand may pick-up from the fourth quarter
  - pessimistic the market is expected to remain under doldrums until the end of the second quarter, affecting the sales of vending machines
  - probabilistic demand is not anticipated to gain traction until after the first quarter of 2021
- Amid the COVID-19 crisis, the global market for Vending Machines estimated at US\$134.4 Billion in the year 2020, is projected to reach a revised size of US\$146.6 Billion by 2027, growing at a compound annual growth rate of 1.3% over the analysis period 2020-2027

### THEORETICAL BACKGROUND

- According to Yue et al., households are more likely to change their risk behavior and become risk-averse. Further, COVID-19 increases the probability that a household will change its investment portfolio.
- Sreelakshmi and Prathap state that shifting to mobile-based banking transactions from physical banking transactions can be considered as a social distancing mechanism, which helps to prevent the spread of COVID-19 virus. As the spread of COVID-19 is expected to continue for long, the continued usage of mobile-based payment services as a strategy to maintain social distancing has to prevail.
- The study of Laguna et al. describes the impact of the COVID-19 health crisis on people's interests, opinions, and behaviour towards food. The answers to the online questionnaire showed reduction of shopping frequency but no changes in shopping location. Products purchased with higher frequency were pasta and vegetables, others were purchased to improve their mood. Reduced purchasing was attributed to products with a short shelf-life or because they were unhealthy and contributed to gained body weight or mood. Statements made by experts or scientists were considered by consumers to be the most reliable.

# METHODOLOGY

- The basic research problem has been insufficient knowledge about consumer behaviour on vending market in specific conditions of Slovak republic.
- The survey has been conducted in April and September 2020 via electronic tools of distribution as the contemporary pandemic situation didn't allow personal distribution of the questionnaire.
- Standardized method of the direct questioning via semi-structured written questionnaire has been used.
- A basic set of surveyed respondents has been composed by Slovak citizens older than 15 years (depending on the size of the basic set, the survey sample was 384 respondents).
- Hypotheses:
  - HI: COVID-19 pandemic has an impact on the perception of consumption and saving.
  - H2: COVID-19 pandemic has an impact on preference of cash less systems from consumer perspective.
  - H3: COVID-19 pandemic has not got an impact on the philosophy of personal alimentation.
- Hypotheses were tested using binomial test which uses the binomial distribution to decide if the outcome of an experiment in which we
  count the number of times one of two alternatives has occurred

## **RESULTS AND DISCUSSION – HYPOTHESIS HI**

- Hypothesis
  - H<sub>0</sub>: COVID-19 pandemic has not got an impact on the perception of consumption and saving.
  - H<sub>1</sub>: COVID-19 pandemic has an impact on the perception of consumption and saving.
- The value of testing characteristic was calculated (6,2384). The critical testing characteristic was calculated through the Microsoft Excel, using the function NORMINV (0,05; 0; 1). The resulting value was -1,142 ( $t_k$ ). To accept the null hypothesis ( $H_0$ ) which is the object of verification, the "t" value has to be minor than " $t_k$ " value. As the " $t_k$ " value is minor than "t" value (6,2384 > -1,142), the null hypothesis ( $H_0$ ) is rejected and we accept the alternative hypothesis ( $H_1$ ) at the significance level of 0,05.
- Thus, we can conclude that COVID-19 pandemic has an impact on the perception of consumption and saving.

## **RESULTS AND DISCUSSION - HYPOTHESIS H2**

- Hypothesis
  - H<sub>0</sub>: COVID-19 pandemic has not got an impact on preference of cash less systems from consumer perspective.
  - H<sub>1</sub>: COVID-19 pandemic has an impact on preference of cash less systems from consumer perspective.
- The value of testing characteristic was calculated (-1,091). The critical testing characteristic was calculated through the Microsoft Excel, using the function NORMINV (0,05; 0; 1). The resulting value was -1,623 ( $t_k$ ). To accept the null hypothesis ( $H_0$ ) which is the object of verification, the "t" value has to be minor than " $t_k$ " value. As the " $t_k$ " value is mayor than "t" value (-1,623 < -1,091), we can accept null hypothesis ( $H_0$ ) and rejected the alternative hypothesis ( $H_1$ ) at the significance level of 0,05.
- Thus, we can conclude that COVID-19 pandemic has not got an impact on preference of cash less systems from consumer perspective.

# **RESULTS AND DISCUSSION - HYPOTHESIS H3**

- Hypothesis
  - H<sub>0</sub>: COVID-19 pandemic has not got an impact on the philosophy of personal alimentation.
  - H<sub>1</sub>: COVID-19 pandemic has an impact on the philosophy of personal alimentation.
- The value of testing characteristic was calculated (3,814). The critical testing characteristic was calculated through the Microsoft Excel, using the function NORMINV (0,05; 0; 1). The resulting value was -1,002 ( $t_k$ ). To accept the null hypothesis ( $H_0$ ) which is the object of verification, the "t" value has to be minor than " $t_k$ " value. As the " $t_k$ " value is minor than "t" value (3,814 > -1,002), the null hypothesis ( $H_0$ ) is rejected and we accept the alternative hypothesis ( $H_1$ ) at the significance level of 0,05.
- Thus, we can conclude that COVID-19 pandemic has an impact on the philosophy of personal alimentation.

## CONCLUSION

- Originally, it has been assumed, that COVID-19 pandemic would have significant impact on all analyzed perspectives of consumer behavior.
- This assumption has been verified only in case of the perception of consumption and saving and the philosophy of personal alimentation.
- However, in case of preference of cash less systems from consumer perspective it has not been proven the impact of the COVID-19
  pandemic when survey results are take into account generally.
- On the other hand, when applying selective approach and comparing results which were obtained in April and September 2020, the trend
  of positive attitude towards cash less payment could be observed.
- Thus, it can be concluded, that cash less payments are very slowly going to be preferred by consumers.
- When analysing the reason of such a phenomenon, it can be stated, that the most relevant is social distancing mechanism, which helps to prevent the spread of COVID-19 virus.
- This fact is in contrast with generally stated trend of tendency towards implementation of progressive payment systems.
- On the example of this discrepancy between global trend on vending market and Slovak reality from the prospective of consumers, it can be highlighted the need of constructive criticism of implemented progressive patterns.
- Similarly it is also in case of change in philosophy of personal alimentation. Respondents have indicated that their positive attitude towards healthy goods has been caused mainly by their effort to protect the health and stimulate immunity in the era of COVID-19 pandemic.