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Research Paper



Perceived Usefulness and Ease of Use of Plastic Money and the Resultant Perceived Risk by Small and Medium Enterprises

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ABSTRACT: This study sought to examine how SME owner managers perceived the usefulness and ease of use of Plastic Money and the perceived risks associated with cashless transactions. A drop and pick survey data collection method was used in which a self-completion questionnaire was administeredon 210 randomly selected SME owner managers. The study findings were analysed using simple descriptive statistics, namely arithmetic mean and standard deviation. The findings showed that respondents were not sure of the usefulness of Plastic Money when transacting. Besides, respondents also expressed lack of knowledge with regards to the ease of use of Plastic Money during business transactions. They also perceived that transacting without using hardthe currency was risky. It was concluded thatacceptance of technology by users is not easy as users might be sceptical about its usefulness, ease with which it can be used and general perceived risks of potential loss from adopting such. The study therefore recommended that a more comprehensive research be done in future with a broader scope to enhance generalizability of results and thatother designs like the longitudinal designs might be adopted for such studies to measure acceptance of technology over a longer period of time. **KEY TERMS:** Perceived Ease of Use, Perceived Usefulness, Perceived Risk, Plastic Money, TAM, SME.

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I. INTRODUCTION

Although the use of Plastic Money has been introduced in developed countries many decades ago, its adoption and subsequent use in developing nations like Zimbabwe is still in its infancy.Zimbabweans have traditionally been used to carrying large sums of money in an economy which was cash based. Developments in disruptive technologies and the shortage of the traditional hard currencies on the Zimbabwean financial market have seen a paradigm shift in the economy's financial services sector. One such disruptive technology is the use of credit cards, debit cards and other mobile financial platforms such as Eco Cash, One Wallet and Tele Cash. Plastic money is conventionally used to embrace all plastic cards (including credit, debit, prepaid cash cards and customer cards). The government of Zimbabwe through the Reserve Bank of Zimbabwe has been emphatically encouraging banks and all business sectors, including the consumers to adopt the use of plastic money in a bid to ease cash shortages as well as to move away from using traditional forms of payment. Transacting in cash is gradually fading away as the use of plastic money is getting familiarity amongst an array of business and consumer communities. Organisations large and small including consumers have come to realise that plastic money is more convenient and safe to for transacting. Besides security concerns, the use of credit cards, debit cards and other related forms of plastic money bring with them a host of benefits such as portability, access to account balances 24/7, convenience of the settlement of monthly utility bills and transfer of funds across multiple accounts. Consumers generally purchase high value products and services with little restraint using plastic money and organizations that promote the use of invisible money are better positioned in relation to their competitors. While the use and acceptance of plastic money have been a welcome development in many sections of the economy, a number of small and medium enterprises still have phobia and are unwilling to transact using abstract cash fearing that such transactions are surrounded by high risks and uncertainty. The study therefore seeks to find out the extent to which the SME owner managersperceive the usefulness and ease of use of plastic money and the perceived risk associated with transacting using plastic money as a medium of exchange. To date no studies have been done in Zimbabwe that focus on the use of the TAM model in the

Corresponding Author: Clay. Hutama Basera24 Page Department of Management Studies adoption of technology related products and or service, hence this study enlightens users of Plastic Money on its potential benefits as a medium of transaction. Since the Zimbabwean economy has been experiencing challenges associated with the shortages of hard currencies in circulation this study will result in a shift in the perceptions of the users in relation to the ease of use of plastic money, its perceived usefulness and perceived risk.

Plastic Money

II. LITERATURE REVIEW

The term plastic money has assumed a variety of names. Maphambela, (2016) refers to plastic money as the general term used to refer to, "the hard plastic bank cards that are issued to account holders for their everyday use, in place of hard cash (bank notes or coins) or cheques". According to the <u>Business</u> <u>Dictionary.com</u>, plastic money is a generic term which refers to all forms of bank cards such as credit cards, customer prepaid, debit cards and smart cards. In Zimbabwe plastic money has been traditionally defined in terms of "ATM" cards as a result of their frequent use in withdrawing funds from automated teller machines in urban centres. In general, plastic money represents all plastic cards that are used for transactions such as the credit card. Naim (1995) claims that a credit card is form of mutual agreement in which the financial institution is committed to release a certain amount of money to the cardholder in order to use the card to purchase goods and or access services from shops that are associated with the issuer of the card. Al- Zubaidi, (2002) &Wafuli, (2015) define a credit card as "a card that gives the holder the right to deal with many shops that are consistent with the issuer of the card to accept the granting of the credit for the cardholder to pay off his purchases, who will repay the value of purchases to the bank through 25 days from the date of the purchase."

The Technology Acceptance Model (TAM)

The Modelwas propounded by Davis, (1989) and it borrows heavily from Ajzen&Fishbein, (1980)'s Theory of Reasoned Action which looks at technology usage behaviour. It is premised on the analysis of personal beliefs and their bearing on individuals' attitudes and intentions, (Bagozzi, &Warshaw 1989). Thus, the TAM explores two criticalaspects that impact on the acceptance and use of plastic money, namely perceivedusefulness (PU) and perceived ease of use (PEOU). Crespo, et al (2009) refer to perceived usefulness as "theuser's subjective probability that using a specific system increases his or herperformance in a particular activity', while the perceived ease of use refers to the 'degree to which the user expects the target system to be free of effort' While other theories like the Theory of Reasoned Behaviour (TRB) assumes that use of plastic money is caused by behavioural intention, the TAM contends that intention to adopt and or use an innovation is dependent on personal attitude toward technologyand the extent to which it is perceived to be beneficial. Besides, perceptions about the usefulness of an innovation also influences attitude.

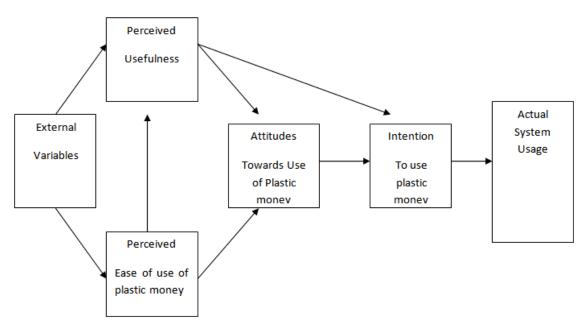


Figure 1: Technology Acceptance Model

Thus, Davis (1989) opines that a fundamental relationship exists between technology users' beliefs about its usefulness and their positive and or negative predisposition towards accepting it. Generally perceived usefulness has more defined relationship with usage in comparison to other variables. Saga &Zmud,(1994), claim that individuals are believed to embrace the use technology for convenience and only when it is advantageous in use and socially acceptable. In a nut shell the model seeks to illustrate the fact that if technology is mentally viewed to be easy to use then it will affect attitude toward its acceptance.

Perceived Usefulness

This seeks to measure the degree to which SME business owners believe that use of Plastic money is effective and important in situations where cash shortage in an economy is on the rise.

Perceived ease of use

This is the degree to which users of a particular technical product and or service believe that it is difficult and or ease to use. In this regard perceived ease of use of plastic money refers to the extent to which individuals perceive it to be easy or difficult to use during business transactions.

Perceived Risk

Perceived risk is broad term which refers to a user's perceptions of uncertainty, and the likely consequences of adopting and or using a particular product and or service. Forsythe & Shi (2003) define perceived risk "as the subjectively determined expectation of loss by Internet shoppers". Pavlou (2003) posits that perceived risk implies the users' subjective fears of loss as a result ofpursuinga desired outcome. Perceived risk is a mental feeling of uncertainty emanating engaging in online transaction.Kau et al., (2003); Forshyte& Shi., (2003); Kim et al., (2008) viewperceived risk as the predominant hindrance to successful online transactions. A study by Bhatnagar et al. (2000) found that perceived risk plays a pivotal role in reducing the propensity of people to use online transactions.

Small and Medium Enterprises (SMEs)

Past studies have shown that there is no universally acknowledged definition of small and mediumsized enterprises (Ahmed, et al 2004; Simpson & Docherty, 2004). Gustafsson, Klefsjo, Berggren & Ulrika (2001) indicate that the term small and medium enterprise is country specific and is determined by the country's political-legal and socio-economic interests (Simpson, 2004). Chivasa (2014) posits that the term SME varies from one region to the other and from one country to another and even among provinces within the same country. In general, a plethora of socio economic indicators have been adopted in defining SMEs such as employee establishment, amount of capital invested in the business, turnover and industry sector (Ministry of EconomicDevelopment, 2005). Ahmed et al. (2004) posit that definitions of SMEs may be derived from using more than one socio-economic variable. Such is the case with the European Union (EU) which describes SMEsas organisations that engage less than 250 employees and with an annual gross income of less than 40 million euros.In Zimbabwe SMEs have been defined in a number of ways. The Zimbabwe Association of SMEs defines a small enterprise as a registered firm with an annual gross income of less than USD 240.000 and an asset base not exceeding USD 100.000. On the other hand a medium sized firm has an annual turnover of above USD 240.000 but not exceeding USD 1.000.000. However the Ministry of SMEs and Cooperative Development classifies all enterprises which are not regarded as large companies as small regardless of their registration status. Such is the case with all informal back yardoperations, including companies with asset values ofless than or equal to USD 2.000.000. The Zimbabwe Revenue Authority (ZIMRA) has defined SMEs on the bases of tax delimitation criteria. Thus, ZIMRA defines SMEs on the basis of three socio- economic facets, namely employee establishment, annual earnings and the asset value of the organization as reflected in the table below.

| Table 1:Definitional Scheme for SMEs by ZIMRA | | | | | |
|---|-----------|----|------------------------|-------------------|---------------------|
| Enterprise | Number | of | Annual Turnover (US\$) | Asset Value(US\$) | Registration |
| Category | Employees | | | | Status |
| Small | 10 - 40 | | 50000 - 500000 | 5000-10000000 | Formally registered |
| Medium | 45 - 75 | | 1000000 - 2000000 | 100000-200000 | Formally registered |

| Table 1:Definitional | Scheme for | SMEs by | ZIMRA |
|----------------------|------------|-------------|-------|
| Tuble Liberminuonai | Deneme 101 | DIVILLO D J | |

Source: ZIMRA (Finance Act ss2b: chapter 23:04)

Despite the fact that socio- economic indicators are used to define SMEs, it appears the use of annual turnover is limited since this sector does not divulge such information, (Julian, 2003). It appears the use of employee establishment is more popular amongst a number of academics such as Carson & Grant (2001);Brouthers&Nakos (2005);Lin (2007);Gelderman&Weele (2005).The Organization for Economic Cooperation and Development, (OECD)countries also define SMEs on the basis of the number of employees.

III. RESEARCH METHODOLOGY

The study adopted quantitative research as the major research design. A cross sectional descriptive survey research was employed to establish the extent to which SME owner managers accepted the use of plastic money in their transactions. The descriptive design is suitable when statistical data are needed on a fact (Kolb (2008).Data were collected using the drop and pick survey method in which a self- administered questionnaire was distributed in person to selected SME owner managers by fieldworkers. A structured response format was adopted in the instrument to limit study subjects to specific response options. Such questionnaire designs guide the respondent in completing the questions without difficulties. Generally structured self-administered surveys allow for respondents to have control over the completion process, are cost-effectiveand are devoid of interviewer bias and data gathered can be analysed quantitatively (Hair, Bush &Ortinau, 2010). Structured designs also enable the researchers to easily analyse quantitative data. Hertzog (2008);Nieswiadomy(2002);Lackey & Wingate, (1998) recommend the use of 10% of the targeted sample size for pilot testing and this study adopted this with the consideration of research cost, time constraints and the degree of homogeneity and population size, among other issues. The instrument was pilot-tested with 21 participants who were not chosen in the final data collection process to establish whether it measured what it purported to measure and to ascertain reliability anticipated in the data to be collected. The simple random sampling technique was adopted because of its convenience in assembling sample elements. Besides, the technique offers all elements in a given population a known non- zero chance of being picked to represent the population on important attributes of interest to the researcher. This also enabled the researcher to infer the sample results on the entire population due to the representativeness of the sample. Data wereanalysed using the Statistical Package for the Social Sciences (SPSS). Data analysis was meant to capture the views of SME owner managers in relationto the usefulness, ease of use of plastic money and theperceived risk. For easy interpretation of study findings, simple descriptive statistical computations, which included the arithmetic mean and standard deviation, were used.

IV. RESULTS

A total, 210 questionnaires were dropped for self-administration, of which 194, (92.38%) passed the validation process and were considered for data analysis. The distribution of the study participants did not depict a normal curve as there were more males (69%) compared to a paltry 31% females running Small and Medium Enterprise businesses. The findings of the study were analysed using simple descriptive statistics such as the arithmetic mean and standard deviation for easy interpretation. A five point likert scale was used in which the study participants were asked to indicate the extent to which they agreed or disagreed to the statement raised by the researcher in the questionnaire. In this regard the attributes of the scale were given as: **Strongly Agree-1; Agree-2; Not Sure-3; Diagree-4; Strongly Disagree-5.** Below are tables indicating the summaries of responses as given by the respondents in relation to the three variables of interest to the study namely, perceived usefulness, ease of use and perceived risk.

| Table 2: Ferceiveu Oserumess: | | | | |
|---|------------------------|--------------------|--|--|
| | Mean Response category | Standard Deviation | | |
| Enable you to accomplish tasks more quickly | 3.10 | 1.26 | | |
| Increase your number of daily transactions | 3.30 | 1.13 | | |
| Enhance the effectiveness of all transactions | 2.97 | 1.04 | | |
| Make it easier to handle transaction that involve a lot of money | 2.24 | 0.96 | | |
| Enable you to safely transact | 3.92 | 1.16 | | |
| Enable you to save time | 3.16 | 1.08 | | |
| Overall perceived usefulness of Plastic Money | 3.12 | 1.11 | | |

Table 2: Perceived Usefulness:

The mean values for the six attributes of the perceived usefulness construct ranged between **2.24** and **3.92** and the degree of variability as reflected by the standard deviations oscillated between **0.96** and **1.26**. Most responses fell within the "Not Sure" category as reflected by the overall mean response of **3.12** and a respective overall variation of **1.11** from the average. The value of standard deviation shows that there is a smaller overall variation in responses on perceived usefulness of Plastic Moneyamong respondents. The general response indicates that SME business operators are not sure of the usefulness of using plastic money as they still perceive

that cash transactions are more reliable. To an extent this group of respondents disagrees, (as shown by **Mean=3.92** and **Standard Deviation=1.16**) that there is safety in transacting using plastic money. This could be so because the use of plastic money is still a new development to the nation and innovations may be perceived as risky and less useful.

| Table 5: Ferceived Lase of Use of Flastic Money | | | | |
|--|------------------------|--------------------|--|--|
| | Mean Response category | Standard Deviation | | |
| Plastic money such as credit cards are ease for you to use | 2.26 | 1.24 | | |
| You would find it easy to manipulate the cards to do what you want during transactions | 3.04 | 1.06 | | |
| Plastic transactions enable interactions with customers to be easy | 3.12 | 1.13 | | |
| You find the use of plastic money modes as flexible | 3.06 | 1.17 | | |
| It is very easy for you to become skilful | 2.84 | 1.21 | | |
| It is easy to follow transactional procedures | 3.08 | 0.76 | | |
| Overall perceived ease of use of plastic money | 2.90 | 1.10 | | |

Six variables on the attributes of plastic money were provided to find out the extent to which respondents agreed or disagreed regarding their perceptions on the ease of use of plastic money as reflected in the table above. The arithmetic means for the ease of use of plastic money varied between 2.26 and 3.08 and the standard deviations stretched between 0.76 and 1.24. The overall mean response on the perceived ease of use construct was 2.90, an indication that most respondents were not sure whether plastic money is easy to use in their business transactions. The overall degree of dispersion as measured by the standard deviation of 1.10 indicated that respondents were giving almost similar responses during the data collection phase of the study. The response to the first statement in the table reflect that SME business people generally agreed that plastic money in the form of credit, debit cards and other forms of cashless transactions are ease to use as shown by a mean value 2.26 in the results table above. Limited knowledge amongst response category as the use of plastic money is slowly permeating the economic membrane of the economy.

| Table 4. I effetived Kisk on the Use of I lastic Money | | | | |
|--|------------------------|--------------------|--|--|
| Perceived Risk Attribute | Mean Response Category | Standard Deviation | | |
| You have fears of financial loss due to | 1.05 | 0.42 | | |
| use of plastic money | | | | |
| You're afraid that plastic money | 2.21 | 1.04 | | |
| transactions do not result in complete | | | | |
| transactions | | | | |
| You would not be comfortable in higher | 1.02 | 0.25 | | |
| value transactions without using cash | | | | |
| You're afraid that in the event of fraud you | 2.08 | 1.01 | | |
| will get blame from society or family | | | | |
| You're afraid that if the electronic transfer | 2.28 | 1.12 | | |
| fails to materialize there will be loss of | | | | |
| goods or service rendered | | | | |
| Overall Perceived Risk on Use of Plastic | 1.73 | 0.79 | | |
| Money | | | | |

Table 4: Perceived Risk on the Use of Plastic Money

The table above gives a summary of responses on the variable "Perceived Risk on Use of Plastic Money". The average response fell between the "Strongly Agree and Agree" categories as shown by the mean values ranging from 1.02 and 2.28 and a range of variability of between 0.25 and 1.12 about the mean. The smaller value of the standard deviation, the lesser the variation in responses given by the respondents. In this regard the respondents indicated that they strongly agreed that they are afraid of financial loss through transacting using plastic money, (as reflected by a mean response value of 1.05). There were very few variations in responses as evidenced by a standard deviation of 0.42 which reflect that there were no differences in responses for that particular attribute of perceived risk. Respondents also strongly agreed that they perceived higher financial risk by engaging in higher value transactions using plastic money, as reflected by a 1.02 mean

response. The standard deviation value of 0.25 shows that most of the respondents perceived that there was a higher risk for transactions involving higher values using plastic money. Social risk was also envisaged as respondents also agreed that they would not want to be blamed by society or family as a result of losses emanating from fraud due to transacting using plastic money. The mean value for this response category was **2.08** with a respective standard deviation of **1.01**. Respondents also agreed (Mean = **2.28**) that they perceived product and service loss in the event that plastic money transactions are unsuccessful. The SME business people perceived the use plastic money as risky and have shown little interest in using cashless transactions as reflected by slow uptake of the innovation.

V. CONCLUSION

This study was premised on establishing the extent to which SME owner managers perceived the use of Plastic Money as useful, ease to use to transact and the resultant risk they perceived to arise thereof. The study made use of the Technology Acceptance Model (TAM) in which Plastic Money was considered as a form of disruptive technology whose adoption in use would come with suspicion from the expected users. The researcher found out that the respondents were not very sure of the usefulness of Plastic Money. This was established by the mean and standard deviation results. On the issues of perceived ease of use of Plastic Money participants also showed that they lacked knowledge on how easy it was in using it for business transactions. This was also evidenced by an overall standard deviation value and an overall mean value which fell in the "not sure" category. Respondents were asked to indicate the extent to which they agreed or disagreed with the fact that using Plastic Money for business transactions was risky. The study participants' overall answers pointed to the fact that they perceived transacting in virtual cash as risky. The responses on issues relating to financial, psychological, and social and product/service as implied in the statements on perceived risk provedthat respondents generally agreed that using different forms of Plastic Money is risky. The adoption and subsequent use of plastic Money amongst SME businesses is slow as this sector is sceptical about the usefulness and ease of use of this mode of transaction. Thus this sector perceives the use of Plastic Money transactions in a cashless economy as risky.

VI. RECOMMENDATIONS FOR FURTHER RESEARCH

Limitations present some impediments to ingenuity of study results. The sample size that was used in this study was not large enough for the results to be generalised upon the entire sector of the SMEs in the economy. Besides the study's coverage was limited to a confined geographic area which restricted the breadth of the study. In light of this it is therefore recommended that future researchers look at this study area with a more profound orientation in which larger samples would be used on a broader scope so as to enable inference of the results on the national scale. Other related studies based on the TAM model are recommended as technology related breakthroughs are fast cropping up in the economy and yet acceptance of such technological disruptions is perceived to be risky. So further studies in this direction would go a long way in demystifying perceived risk in accepting technology related product and or services in an economy. Lastly, it is recommended that future researchers may adopt longitudinal descriptive research designs so as to monitor attitudinal changes of chosen groups of respondents on a particular variable of interest, such as the acceptance of technology like Plastic Money, which requires monitoring over a prolonged period of time.

REFERENCES

- Ahmed, S., Hassan, M. H. & Taha, Z. (2004). State of implementation of TPM in SMIs: A survey study in Malaysia. Journal of Quality in Maintenance Engineering, 10, 93.
- Brouthers, L. E. &Nakos, G. (2005). The Role of Systematic International Market Selection on Small Firms' Export Performance. Journal of Small Business Management, 43, 363-381.
- [3]. Chivasa, S. (2014). Entrepreneurship Culture among SMEs in Zimbabwe: A Case of Bulawayo SMEs. International Journal of Economics, Commerce and Management Vol. II, Issue 9.
- [4]. Gelderman, C. J. &Weele, A. J. V. (2005). Purchasing Portfolio Models: A Critique and Update. Journal of Supply Chain Management, 41, 19-28.
- [5]. Gilmore, A., Carson, D. & Grant, K. (2001). SME marketing in practice. Marketing Intelligence & Planning, 19, 6.
- [6]. Gustafsson, R., Klefsjo, B., Berggren, E. & Ulrika, G.-W. (2001). Experiences from implementing ISO 9000 in small enterprises a study of Swedish organisations. The TQM Magazine, 13, 232-246.
- [7]. Hair, J.F. Jr., Bush, R.P. &Ortinau, D.J. (2010). Essentials of Marketing Research. 2nd Ed. New York: McGraw-Hill/Irwin.
- [8]. Hertzog, M. (2008). Considerations Determining Sample Size for Pilot Studies, Research in Health and Science. Volume 31, Issue 2.
- [9]. Julian, C. C. (2003). Export marketing performance: A study of Thailand firms. Journal of Small Business Management, 41, 213-221.
- [10]. Kolb, B. (2008). Marketing Research: A Practical Approach, 1st Edition SAGE Publications India Pvt Ltd.
- [11]. Lackey, N.R., & Wingate, A.L. (1998). The pilot study: One key to research success. In P.J. Brink & M.J. Wood (Eds.). Advanced Design in nursing research (2nd Ed.). Thousand Oaks, CA: Sage.
- [12]. Lin, C. Y, (2007). An Examination of Implementing Customer Relationship Management by Chinese-Owned SMEs. A Master's Thesis.

- [13]. Nieswiadomy, R.M. (2002). Foundations of nursing research (4th Ed.). Upper Saddle River, NJ: Pearson Education.
- [14]. OECD.(2004). Background report for the 2nd OECD Conference of Ministers Responsible for Small and Medium Enterprises (SMEs).
- [15]. Simpson, M. & Docherty, A. J. (2004) E-commerce adoption support and advice for UK SMEs. Journal of Small Business and Enterprise Development, 11, 315.
- [16]. Ajzen, I., &Fishbein, M. (1980). Understanding attitudes and predicting social behaviour. Englewood Cliffs, NJ: Prentice-Hall.
- [17]. Crespo, A. H., Del Bosque, I. R. &García de los SalmonesSánchez, M.M. (2009). The influence of perceived risk on Internet shopping behaviour: a multidimensional perspective, Journal of Risk Research, 12:2, 259-277.
- [18]. Davis, F.D.Bagozzi, P. R. &Warshaw P. (1989). User acceptance of computer technology: A comparison of twotheoretical models. Management Science.
- [19]. Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly (13:3), pp. 319-339.
- [20]. Forsythe, S. M. & Shi, B. (2003). Consumer Patronage and Risk Perceptions in Internet Shopping. Journal of Business Research, Vol. 56: 867-875.
- [21]. Kim, D.J., Ferrin, D.L. &Rao, H.R. (2008). A trust-based consumerdecision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. Decision Support Systems, 44, 544-564.
- [22]. Pavlou, P. A. (2003).Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. International Journal of Electronic Commerce (7:3), pp. 101-134.
- [23]. Kau, A. K., Tang, Y. E. & Ghose, S. (2003). Typology of online shoppers. Journal of Consumer Marketing, 20(2), 139-156.

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