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Full Length Research Paper

The influence of customer expectations, customer loyalty, customer satisfaction and customer brand loyalty on customer purchasing intentions: A case study of K-POP fans in Thailand

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From 1992 on the K-Pop culture has spread from South Korea all over the world and Thailand is no exception. The objective of this study was to analyze the variables that influence purchasing intentions of K-Pop fans in Thailand in terms of customer expectations, customer loyalty, customer satisfaction and customer brand loyalty. The four hundred thirty-one Thai respondents provided great insights into the purchasing intentions of Thai K-Pop fans in terms of theoretical and practical applications. Overall, the customers were very satisfied with the artists and exhibited a high brand loyalty to the products endorsed by the K-Pop groups. The Korean performers met the expectations of their followers which also let them to be loyal to their favorite boy or girl group. Understanding Thai Korean Pop music fans and their purchasing behavior helps the artist to capitalize on their influence through product endorsement and advertisement contracts which in turn are based on ratings of the artists in the before mentioned categories. It is hoped to replicate this study in the future in other ASEAN countries and other parts of the world.

Key words: brand loyalty, customer expectations, customer loyalty, customer satisfaction, K-POP artists, purchasing intentions.

INTRODUCTION

Since 1992 K-Pop (Korean: 케이팝; RR: keipap), culture has been taking over Asia and the world. It was then when the South Korean group Seo Taiji and Boys started to create a repertoire that integrated English lyrics, eclectic dance styles, and hip-hop elements with their South Korean roots with a mild western undertone. The modern K-pop "idol" culture that spread as the Korean Wave; over Southeast Asia, to India and Pakistan and from there to the Middle East and Africa, and throughout Europe the USA and the Western world, gaining a broad international audience. 2020 was a record-breaking year for K-Pop when it experienced almost a fifty percent growth and became the fastest-growing music market of the year, with BTS and BLACKPINK as the leading idol groups. K-Pop fans are going crazy over this new third generation of Korean superstars, which includes

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MAMAMOO, NCT and Monsta X. (Choi and Maliangkay, 2014). In 2021 more than ever, it has become clear that K-Pop has been on a steady track to globalization. The K-Pop industry uses digital marketing strategies through influencer marketing and very unusual content creation on social network platforms that attract a global audience. The group BTS for instance has over thirty million Instagram followers, who form a loyal fan base, that breaks records on YouTube and iTunes. K-Pop artists also learned how to capitalize on their fame by becoming company spokes persons and endorsing products and brands of all kinds of goods and services on a global basis. The K-Pop groups have created a loyal followership of fans that listen to them and follow their recommendations when it comes to purchasing decisions. Our research study looked at the customer purchasing intentions of K-Pop fans in Thailand and the influences K-Pop artists have in regards to: Customer Expectations, Customer Loyalty, Customer Satisfaction and Customer Brand Loyalty.

REVIEW OF LITERATURE

A literature review was conducted which explored the various aspect components of influence of customer expectations, customer loyalty, customer satisfaction and social influencers on customer purchasing intentions of K-POP fans in Thailand and explored the K-Pop culture as the underlying force the literature underpinned our research hypotheses in terms of customer expectations, customer loyalty customer satisfaction and brand loyalty the literature review is divided into those sections related to the research hypotheses to spell it out for the reviewers.

Customer expectations are defined to be the future-oriented beliefs about product or service before the consumption as defined by Mark (2015). Martin and Simmons (1999) discussed the phenomenon of pre-purchase and post purchase customer expectations. With changing customer expectations customer loyalty is changing as well. Rosen (2018) pointed out the professional judgment differs from that of the customer's expectations. Some companies exceed customer expectations by responding to changing customer expectations and by actively managing the customer expectations (Miller, 2000). But it is necessary to correctly understand and interpret customer expectations which also depend on the cultural aspects according to Overby and Assouad (2016). Kim et al. (2021) explored the success factors and sustainability of the K-Pop Industry with a structural equation model and fuzzy set analysis which helped the research hypotheses.

Customer loyalty as defined by Oliver (1999) is a commitment to re-purchase a certain product or service in the future despite other influences and marketing efforts to potentially cause a switching behavior. McMullen (2005), developed a scale for measuring customer loyalty development which guided the author research. Wong and Sohal (2003) researched service quality and various customer loyalty perspectives. Customer loyalty programs try to institutionalize customer loyalty (Uncle et al., 2003). Hanifah (2019) looked at customer advocacy as a result of the relationship between idol attachment and customer loyalty in the K-Pop industry which guided our customer loyalty hypothesis.

Customer satisfaction is the judgment a consumer makes in relation to his sense of fulfillment related to his purchase intentions and use of products and services according to Guido (2015). Maminiaina (2019) provided a thorough literature review of customer satisfaction definitions, factors affecting customer satisfaction and measurement of customer satisfaction. Yi et al. (2021) examined the relationship between customer participation, customer bonding, and customer satisfaction. Gustafsson et al. (2005) linked the effects of customer satisfaction and customer retention leading to brand loyalty. Kim et al. (2018) guided their research hypothesis in terms of customer satisfaction with their study of purchasing behavior of K-pop idol goods consumers in Korea.

Brand loyalty can be seen as a biased behavioral response which will be expressed over time. Loyalty implies a repurchase pattern of the brand which is a result of positive affection towards the brand (Mellens and Steenkamp, 1996).

According to Aaker (1991) brand loyalty is at the core of brand equity. Aggarwal (2004) explored the various effects of brand relationship norms on consumer attitudes and consumption behavior. Alnawas and Shadi, (2015) surveyed the role of brand identification generating higher levels of brand loyalty. Keller (1998) looked at strategic brand management to create brand loyalty. Lee and Kim (2020) explored brand loyalty and the Bangtan Sonyeondan (BTS) Korean dance this underpinned their research hypothesis in relation to brand loyalty.

Social media influencers are heavy social media users who have established themselves as a trustworthy source in a certain area such as the K-POP scene. Social media influencers have massive audiences and the ability to convince others by virtue of their authenticity such as the K-POP groups and their fans. Influencers can genuinely influence the behavior of their group of followers. Influencers regularly post about on the various social media channels and thereby generate large followings of passionate zealous people who pay close attention to their perspective. Saboo et al. (2016) measured the impact of social media activities on various brand sales.

K-Pop culture is an example of engineering the customer experience as defined by Carbone and Haeckel (1994). Capistrano (2019) conducted a study to understand Filipino Korean Pop Music Fans. Seo (2012a) focused on the lessons from K-Pop's global success. And

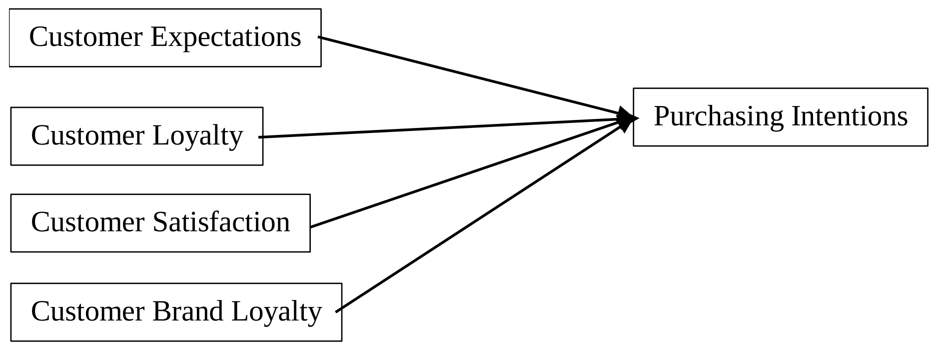

Figure 1. Conceptual research framework.

in Seo (2012b) he looked at what the corporate world can learn from K-Pop in terms of global strategy. Alanzalon (2011) shaped the word Kpopped in the study that researched Filipino teens' consumption of Korean popular videos, dance and music. Chen (2016) created a framework for marketing cultural exports and used it to analyze Hallyu (the Korean Wave). Igno and Cenidoza (2016) tried to understand Hallyu in the Philippines. Choi and Maliangkay (2015) studied fandom and the international rise of K-Pop. Choi (2011) questioned if K-Pop is losing its Korean-Ness due to the globalization of the genre. Decrop and Derbaix (2014) researched the artist-related determinants of concert prices including K-Pop. Doherty (1987) also explored the role of MTV and music videos in the promotion efforts. English et al. (1994) focuses on the cultural encoding of beauty types in print and video advertising. Huang (2017) explored social media and the New Korean Wave, and Yoon (2017) also looked at the Korean Wave from a retrospect and prospect perspective. Kim (2017) researched K-Pop's global popularity as a case of Girls' Generation's USA debut. Oh and Park (2012) moved from B2c to B2b selling of Korean pop music in the age of new social media. Oh and Lee (2013) looked at mass media technologies and the pop music genres while exploring K-Pop and YouTube. Pacis (2012) performed a study on the expanding world of K-Pop fandom as a subculture. Park (2013) saw the production, performance, and dissemination of K-Pop as an example of manufactured creativity. Parc and Moon (2013) explored the key factors for the international competitiveness of Korean TV soap operas and movies as part of the growing K-Pop culture. Figure 1 show the conceptual research framework.

Hypothesis

Hypothesis 1 **(**H1**):** Customer expectations positively influence customer purchasing intentions
Hypothesis 2 **(**H2**):** Customer loyalty positively influences customer purchasing intentions
Hypothesis 3 **(**H3**):** Customer satisfaction positively influences customer purchasing intentions.
Hypothesis 4 **(**H4**):** Influencing of influencer on brand loyalty positively influences customer purchasing intentions.

RESEARCH METHODOLOGY

The research study attempted to apprehend the purchase intentions of K-Pop fans on various magnitudes. The researcher developed a quantitative paper-based survey instrument. The instrument was pretested following ontologies, epistemologies, and methodologies outlined by Decrop (2004). The visitors of K-Pop events were interviewed by the researchers and the results were captured with paper-based instruments in the form of a questionnaire.

Population

The population of this study consisted of K-Pop fans in Thailand and in particular in Bangkok. As other K-Pop fans are alike and hope to be able to make generalizations**.** The K**-**Pop fans followed a variety of Korean boy and girl groups which performed in Thailand**.**

Sample

The study focused on K-Pop fans in Bangkok. All participants where Thai nationals, tourists and expats were not part of this study. Table 1 shows that the majority of the participants were female (76.3%) and are under the age of thirty years with a bachelor degree or high school education. The random convenience sample included four hundred thirty one respondents interviewed at K-Pop events and the sample demographics were representative of the demographics of the K-Pop fan population in Thailand.

Table 1 show that the majority (60.6%) of the participants in the study were employed and had a monthly income of less than 1,200 USD. Almost 14% earned between 1,201 and 1,800 dollars and 15.5% earned over 1,800 USD a month. The majority of the respondents came from Bangkok and the surrounding areas of the Metroplex. The sample solicited responses from new K-Pop fans with less than one year (34.1%) of fan experience but the majority of participants had between one to three years (42.7%) fan experience some respondents had four to six years (10%) and 13.2% even more than six years. In the study Gen Z (teens 13-17) accounted for roughly 10%, Millennials (adults 18-34) for about 75% – three quarters of the respondents and Generation X (adults

Table 1. Demographics.

Participants	Count (respondents)	Percentage
Gender		
Male	102	23.7
Female	329	76.3
TOTAL	431	100
Age		
< 20 years	54	12.5
21-30 years	321	74.5
31-40 years	53	12.3
> 41 years	3	0.7
TOTAL	431	100
Income (Monthly)		
< 600 USD	194	45.0
601-1,200 USD	91	25.6
1,201-1,800 USD	79	13.9
> 1,801 USD	67	15.5
TOTAL	431	100
Education Level		
Lower than undergraduate degree	282	65.4
Undergraduate degree	83	19.2
Graduate degree	35	8.1
Doctorate degree	31	7.1
TOTAL	431	100
Favorite Band Tracking Experience		
Less than 1 year	146	34.1
1-3 years	184	42.7
4-6 years	43	10
More than 6 years	58	13.2
TOTAL	431	100

Source*:* author.

35-49 years of age) for about 12%.

RESEARCH FINDINGS

The findings of the study can be categorized as follows by customer expectations, customer loyalty, customer satisfaction and customer brand loyalty following the research hypothesis and research instrument. The following tables summarize the data and the research findings were placed in the research context. The results included both mean and standard deviation (SD) as well as correlation coefficients and regression analysis for the relationship between purchase intentions of K-Pop fans and:

1) Customer expectations
2) Customer loyalty
3) Customer satisfaction
4) Customer brand loyalty

Customer expectations

Table 2 shows that K-Pop fans as customers strongly agreed that their customer expectations were met on average and on all seven dimensions such as positive attitude towards fans (Mean 4.53 and SD 0.52) was strongly agreed. Artists are constantly improving themselves (Mean 4.51 and SD 0.54) strongly agreed. Artists have a wide range of talents mostly dancing and singing (Mean 4.48 and SD 0.55). Artists are sincere with their fans (Mean 4.38 and SD 0.57) strongly agreed Artists have a close relationship with their fans (Mean

Table 2. Customer expectations.

Variable	Mean	S.D.	Results
Customer expectations			
1. Artists have a positive attitude towards fans	4.53	0.52	Strongly Agreed
2. Artists are constantly improving themselves	4.51	0.54	Strongly Agreed
3. Artists have a wide range of talents	4.48	0.55	Strongly Agreed
4. Artists are sincere with their fans	4.38	0.57	Strongly Agreed
5. Artists have a close relationship with their fans	4.29	0.66	Strongly Agreed
6. Artists have good looks and personality	4.28	0.64	Strongly Agreed
7. Artists have multiple communication channels	4.23	0.67	Strongly Agreed
Average	4.38	0.59	Strongly Agreed
Customer loyalty			
1. Purchase merchandise promoted by artists	4.06	0.91	Strongly Agreed
2. Recommending artists to others	4.03	1.00	Strongly Agreed
3. Twitter trending or vote for artists regularly	3.76	1.18	Agreed
4. Prioritize members over favorite band	3.52	1.38	Agreed
5. Attend concerts or Fan meetings regularly	3.45	1.29	Agreed
6. Willingness to travel to meet artists when they visit Thailand	3.39	1.30	Agreed
7. Donate money for projects promoted by the artists	3.26	1.24	Agreed
Average	3.63	1.18	Agreed
Customer satisfactions			
1. Artists public appearances at concerts and fan gatherings	4.09	0.63	Strongly Agreed
2. Appropriate communication channels with artists	4.02	0.67	Strongly Agreed
3. Social media apps	3.98	0.75	Agreed
4. Excellent public relations (PR)	3.95	0.78	Agreed
5. Promotion campaigns	3.95	0.67	Agreed
Average	3.99	0.70	Agreed
Artists influencing brand loyalty			
1. I feel proud when I use the product that artists are endorsing	4.02	0.80	Strongly Agreed
2. Willing to participate in activities that bring you closer to the artist	3.87	1.05	Strongly Agreed
3. Willing to purchase products that are endorsed by the artist	3.85	0.95	Agreed
4. Recommend others to buy products that the artist endorses	3.84	0.93	Agreed
5. Continue purchasing endorsed product even if the product is the same as the regular	3.83	0.96	Agreed
6. If the product is not available in Thailand, it will be purchased through other channels	3.59	1.16	Agreed
7. Continue purchase this brand even artists contract expired	3.43	1.05	Agreed
8. Will continue to purchase products even if the product quality is lower than the expectations.	3.43	1.31	Agreed
Average	3.73	1.02	Agreed

Source*:* author.

4.29 and SD 0.66) strongly agreed. The artists have good looks and personality (Mean 4.28 and SD 0.64) strongly agreed. Artists have multiple communication channels (Mean 4.23 and SD 0.67) strongly agreed. So overall the fans are very happy with their K-Pop groups (Mean 4.38 and SD 0.59).

Customer loyalty

Table 2 shows K-Pop fans also display a high degree of customer loyalty as expressed in the responses to the following questions. The participants purchase merchandise promoted by their K-pop artists. (Mean 4.06 and SD 0.91) strongly agreed. Recommendation of K-Pop artists to others (Mean 4.03 and SD 1.00) was also strongly agreed. Twitter trending and voting for artists on a regular basis was only agreed on (Mean 3.76 and SD 1.18) Prioritizing members over favorite band were also agreed upon (Mean 3.52 and SD 1.38). Attending concerts and/or fan meetings on a regular basis was agreed upon (Mean 3.45 and SD 1.29). The willingness to travel to meet with the K-Pop artists when they visit Thailand was also agreed upon (Mean 3.39 and SD1.30). Donations of money to projects promoted by artists was agreed upon (Mean 3.26 and SD 1.24) but was the lowest on the list of expressions of customer loyalty of K-Pop fans. But overall, the respondents agreed to customer loyalty with a mean of 3.63 and a SD of 1.18.

Customer satisfaction

Table 2 shows that the K-Pop fans or should they be called customers are very satisfied when it comes to public appearances of their group at concerts and fan gatherings (Mean 4.09 and SD 0.63). The fans are also strongly satisfied with the various communication channels to connect with their artists (Mean 4.02 and SD 0.67). The fans also enjoy the various social media apps that have been introduced (Mean 3.98 and SD 0.75) and agreed on this dimension of customer satisfaction. They also were satisfied with the PR campaigns and public relations the artists maintained with their fan base (Mean 3.95 and SD 0.78). And fans were also satisfied with the promotion campaigns of their K-Pop bands (Mean 3.95 and SD 0.67). Overall, the customer satisfaction was agreed upon by the Thai K-Pop respondents (Mean 3.99 and SD 0.70).

Customer brand loyalty

The following research questions look at the role of the K-Pop artists as social influencers and creators of brand loyalty through product endorsements. Table 2 shows that the fans feel proud when they use a product that has been endorsed by their favorite artists (Mean 4.02 and SD 0.80) and was strongly agreed. They are also more than willing to participate in activities that bring them closer to the artist (Mean 3.87 and SD 1.05) and were strongly agreed upon by the participants. The fans are also willing to purchase the products that are endorsed by the artist (Mean 3.85 and SD 0.95) was agreed upon. They also promote by word of mouth and recommend the products endorsed by the artist to friends and others (Mean 3.84 and SD 0.93) and were agreed upon. The fans even continued purchasing the endorsed products after they found out that these products are the same as the regular products (Mean 3.83 and SD 0.96) and this was agreed upon. And fans even purchase the product through other channels if the products are not yet available in Thailand (Mean 3.59 and SD 1.16) and were agreed upon. Customers even continue to purchase the product after the endorsement contract of the artist expires as form of true brand loyalty (Mean 3.43 and SD 1.05) and were agreed upon by the respondents. The loyalty of the fans goes so far that they will continue to purchase the product even after they found out that the product quality is lower than what they expected (Mean 3.43 and SD 1.31) and was agreed upon by the participants of the study. Overall, the social influence of the K-pop artists was agreed upon by the fans and they also have developed a strong brand loyalty to the endorsed products (Mean 3.73 and SD 1.02).

Correlation coefficient analysis – Purchase intentions

With the data a correlation coefficient analysis was performed with the correlation coefficient r measuring the strength and direction of a linear relationship between two variables on a scatterplot. Here the value r = 1 represents a perfect positive correlation and the value r = -1 represents a perfect negative correlation. And +0.30 shows a weak uphill (positive) linear relationship while +0.50 is a moderate uphill (positive) linear relationship and +0.70 a strong uphill (positive) linear relationship and + 1.00 represents a perfect uphill (positive) linear relationship.

The requirements for the Pearson correlation coefficient were met: The measurement scale was a ratio. And the variables were almost normally distributed. The association was also linear and there were no outliers in the data collected. The researcher also performed a correlation coefficient analysis which explored the K-Pop fans purchase intention factors which included the following:

1) Gender
2) Age
3) Income
4) Education
5) Customer expectations
6) Customer loyalty
7) Customer satisfaction
8) Social influencer

Correlation analysis

Table 3 shows the correlation coefficient analysis created rather complicated results with no clear linear relationships. Education (0.135) naturally was a relationship with age and gender also played a role predominantly for females. Income (0.092) and in particular discretionary income also affects the level to which fans can participate. Customer expectations had a relationship (0.242) with age and education (0.197). Customer loyalty depends on customer expectations (0.119). Customer satisfaction was related to age (0.274) income (0.380) and customer expectations (0.314) and the brand equity was depending on gender (0.524) income (0.170), customer expectations (0.207) customer loyalty (0.212) and customer satisfaction (0.257).

Regression analysis *(***N=431***)*

The regression analysis determines the degree to which

Table 3. Correlation coefficient analysis.

Variable	1	2	3	4	5	6	7	8
1. Gender	1.00							
2. Age	0.114	1.00						
3. Education level	0.135*	0.143*	1.00					
4. Income	0.092*	0.061	-0.072	1.00				
5. Customer expectations	0.085	0.242**	0.197**	0.064	1.00			
6. Customer loyalty	0.094	0.061	-0.073	-0.061	0.119*	1.00		
7. Customer satisfaction	0.274*	-1.00	0.44	0.380**	0.314**	0.110**	1.00	
8. Influencing of artists through brand loyalty	0.524*	0.072	0.133	0.170**	0.207**	0.212**	0.257**	1.00

* Correlation is significant at the 0.05 level (2-tailed), **. Correlation is significant at the 0.01 level (2-tailed).

Table 4. Regression analysis customer purchasing intentions.

Variable	Customer Purchasing Intentions		
	β	R-Squared	Sig.
Customer expectations	0.340**	0.172	0.000
Customer loyalty	0.327**	0.124	0.000
Customer satisfaction	0.451**	0.145	0.000
Customer brand loyalty	0.398**	0.121	0.000

**p< .01.

the independent variables are associated with any changes to the purchase intentions which is the dependent variable. The coefficients inform us about these changes and p-values let us know if these coefficients are significantly different from zero. The unknown parameters, denoted as a scalar or vector beta (β). R-Squared informs us of the proportion of variation in the dependent (response) variable purchase intentions that has been explained by this framework. We don’t necessarily discard a model based on a low R-Squared value. The hypothesis testing is a fundamental statistical procedure in research. The hypothesis test evaluated the two mutually exclusive statements about a population in order to determine which statement is best supported by the sample data collected (N=431). When it can be said that the finding is statistically significant, it is based on the hypothesis test regarding customer expectations, customer loyalty, and customer satisfaction and influencing of artists through brand loyalty. Customer expectations received a beta (β=0.340 and an R-Squared of 0.172) and was higher than the customer loyalty with a beta (β=0.327 and an R-Squared of 0.124) and lower than customer satisfaction with a beta (β=0.451 and an R-Squared of 0.145) while influencing of artists through brand loyalty received a beta (β=0.398 and an R-Squared of 0.121) which is shown in Table 4.

DISCUSSION

The influences of customer expectations, customer loyalty, customer satisfaction and influences of K-Pop artist influencer on brand loyalty resulted to customer purchasing intentions of K-POP artist fans. The following hypothesis was examined.

The customer expectations were met and strongly agreed upon. The K-Pop fans strongly agreed that the K-Pop artists not only have a wide range of talents both in terms of singing and dancing but they also constantly work on themselves in terms of appearance and personality and display a positive attitude towards their fans. The fans feel to be taken serious by the K-Pop artist and that the love is a two-way street expressed in a close relationship between fans and celebrities.

The customer loyalty ranked lower than customer expectations but was still agreed upon. The fans strongly agreed with the concept of purchasing merchandise promoted by artists. And respondents also strongly agreed with the idea of recommending their favorite performers to others by word of mouth. But the other factors of the survey were only agreed upon such as regularly voting and twitter trending of the K-Pop groups. Also attending fan meetings and life concerts did not rank as high which may be due to the social distancing requirements during covid-19. The willingness and possibility to travel to meet artists in Bangkok was also reduced during the pandemic. Fans were also not that eager to donate money to projects sponsored by the artists, an explanation for that may also be the dire economic situation in Thailand due to the collateral damage caused by the several months of lock-downs.

Customer satisfaction overall was only agreed upon.

Strongly agreed upon were public appearances of artists at concerts and fan gatherings as well as the communication channels the artists used. Fans love to see their favorite artists in person or on various media. Only agreed upon were social media apps as well as public relations (PR) and promotion campaigns. A good example is the Thai bank Kasikornbank (KBank) which had launched a commercial featuring the K-Pop girl group BLACKPINK. This commercial was aimed at encouraging Gen Zs to use KBank's debit card in order to practice social distancing and most importantly bring contactless payment to the forefront of the shopping experience. BLACKPINK has shared values that truly represented the persona of Gen Zs, the band values individuality, creativity, aspiration and freedom which is so important in these fluid times in Thailand.

Customer brand loyalty was strongly agreed upon when asked if fans feel proud when they use the product that artists are endorsing. The K-Pop fans were also very interested to participate in activities that bring them closer to their favorite artists. But they only agreed upon the following like willingness to purchase products that are endorsed by the artist.

Fans would recommend to others to purchase products K-Pop the artist endorses. Some fans will even continue purchasing endorsed product even if they find out that the Kpopped products are the same as the regular products. Fewer fans will continue to purchase products even if the Kpopped product quality is below their expectations. Some fans will go out of their way and find other channels to purchase K-Pop products that are not yet available in Thailand. A good example is purchasing these products on-line and have them shipped to Thailand. Fans will continue to purchase the endorsed brand even after the K-Pop artist's endorsement contract is expired. This is called true brand loyalty.

Conclusion

This particular research employed a theoretical research framework derived from an academic and practical consumer behavior discourse on customer purchasing intentions of K-Pop fans. The data collected from four hundred thirty-one Thai respondents was subjected to various statistical tests, including standard deviations, mean, correlation analysis as well as regression analysis. The results of this study suggest that Thai K-Pop fans almost blindly follow their idol which has theoretical and practical implications. Furthermore, the research found that Thai K-Pop fan behavior almost uniformly cuts across age, gender, education and income level. In conclusion these findings present several useful theoretical and practical implications that enhance the overall knowledge of K-Pop's international impact on consumer purchasing intentions. The study confirmed the existing literature discussed earlier and their findings in terms of K-Pop and its development from the early days into the future particularly in Thailand and attempted to add to the Thai dimension to the existing body of literature.

Overall, it can be confirmed that K-Pop artists greatly influence customer expectations, customer loyalty, customer satisfaction and the customer brand loyalty of their fans. Not only when it comes to purchasing their music but also the products they endorse. K-Pop culture is here to stay and is growing all over the world as it speaks not only to the young generations of Asia but the world and gives them hope in the New Normal of covid-19.

Recommendations

Recommendations informed by this study are that K-Pop worldwide will continue to influence customer expectations, customer loyalty, customer satisfaction and customer brand loyalty on customer purchasing intentions like no other artists. The researcher intends to follow up this study over time with a larger sample of followers of various specific boy and girl K-Pop groups. Another suggestion is to apply the same instruments to other towns in Thailand such as Chiangmai, Pattaya and Phuket to see if the rural population various from the one in the capital. It is also recommended to replicate the study with foreigners living and visiting Thailand who may be grouped by country of origin to determine how their purchasing intentions may vary from those of the Thai customers. We also intend to expand the scope of the study and focus on various other aspects of purchasing intentions as well as K-pop fans in other contexts in Thailand and neighboring ASEAN countries such as Myanmar, Laos and Cambodia maybe also Vietnam.

Limitations

This study like any study is a snapshot in time and is limited to the present time and the current situation in Thailand. Why Thai K-Pop fans may have a lot in common with K-Pop fans in other countries there are also specific characteristics which may limit the transferability. It must further be stated that these findings refer to K-Pop fans and other fan groups may have different dynamics and loyalty factors.

CONFLICT OF INTERESTS

The author has not declared any conflicts of interests.

REFERENCES

Aaker DA (1991). Managing Brand Equity. The Free Press, New York.

Aggarwal P (2004). The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior. Journal of Consumer Research

31(1):87-101.
Alanzalon SM (2011). Kpopped! Understanding the Filipino Teens' Consumption of Korean Popular Music and Videos. Unpublished Undergraduate Thesis.
Alnawas I, Shadi AS (2015). Exploring the Role of Brand Identification and Brand Love in Generating Higher Levels of Brand Loyalty. Journal of Vacation Marketing 22(2):111-128.
Capistrano E (2019). Understanding Filipino Korean Pop Music Fans. Asian Journal of Social Science 47(1):59-87.
Carbone LP, Haeckel SH (1994). Engineering Customer Experiences. Marketing Management 3(3):8-19.
Chen S (2016) Cultural Technology: A Framework for Marketing Cultural Exports—Analysis of Hallyu (the Korean Wave). International Marketing Review 33(1):25-50.
Choi J, Maliangkay R (2014). K-Pop-The international rise of the Korean music industry. Routledge.
Choi JB, Maliangkay R (2015). Why Fandom Matters to the International Rise of K-Pop. In: Choi JB, Maliangkay R (eds.), K-Pop: The International Rise of the Korean Music Industry. New York, NY: Routledge.
Choi YJ (2011). The Globalization of K-Pop: Is K-Pop Losing Its Korean-Ness? Situations 5(1):61-67.
Decrop A (2004). Trustworthiness in qualitative tourism research. In: Phillimore J, Goodson L (eds.), Qualitative research in tourism: Ontologies, epistemologies, and methodologies. London: Routledge. pp. 165-196.
Decrop A., Derbaix M (2014). Artist-Related Determinants of Music Concert Prices. Psychology and Marketing 31(8):660-669.
Doherty T (1987). Mtv and the Music Video: Promo and Product. Southern Journal of Communication 52(4):349-361.
English BG, Solomon MR, Ashmore RD (1994). Beauty before the Eyes of Beholders: The Cultural Encoding of Beauty Types in Magazine Advertising and Music Television. Journal of Advertising 23(2):49-64.
Guido G (2015). Customer satisfaction. Wiley encyclopedia of management. pp. 1-8.
Gustafsson A, Johnson M, Roos I (2005). The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention. Journal of Marketing, 69(4):210-218.
Hanifah RN (2019). Customer Advocacy as a result of the relationship between idol attachment and customer loyalty in the K-Pop industry. East African Scholars Journal of Economics, Business and Management 3(2):197-201.
Huang S (2017). Social Media and the New Korean Wave. Media, Culture and Society 39(5):773-777.
Igno JAM, Cenidoza MCE (2016). Beyond the Fad: Understanding Hallyu in the Philippines. International Journal of Social Science and Humanity 6(9):723-727.
Keller KL (1998). Strategic Brand Management, Prentice Hall, Upper Saddle River, New Jersey.
Kim G (2017). Between Hybridity and Hegemony in K-Pop's Global Popularity: A Case of Girls' Generation's American Debut. International Journal of Communication 11(1):2367-2386.
Kim JH, Jung SH, Roh J, Choi HJ (2021). Success Factors and Sustainability of the K-Pop Industry: A Structural Equation Model and Fuzzy Set Analysis. Sustainability 13:5927.
Kim YJ, Lee J, Lee M (2018). Purchasing Behavior of K-pop Idol Goods Consumers in Korea. Journal of Fashion Business 22(6):1-13.
Lee HW, Kim JH (2020). Brand loyalty and the Bangtan Sonyeondan (BTS) Korean dance: Global viewers' perceptions. Journal of Psychology in Africa 30(6):551-558.
Maminiaina AR (2019). A thorough literature review of customer satisfaction definition, factors affecting customer satisfaction and measuring customer satisfaction. International Journal of Advanced Research 7(9):828-843.
Mark T (2015). Using customer expectations to manage project outcomes to ensure success. Available at: https://www.linkedin.com/pulse/using-customer-expectations-manage-project-outcomes-ensure-tallman
Martin D, Simmons P (1999). Customer Expectations. Journal of Hospitality and Leisure Marketing 6(1):67-81.
McMullen R (2005). A multiple scale for measuring Customer Loyalty development. Journal of Services Marketing 19(7):470-481.
Mellens M, DeKimpe MG, Steenkamp EM (1996). A Review of Brand-Loyalty Measures in Marketing. Journal of Economic Management 4:507-533.
Miller HE (2000). Managing Customer Expectations. Information Systems Management 17(2):1-4.
Oh I, Lee HJ (2013). Mass Media Technologies and Popular Music Genres: K-Pop and Youtube. Korea Journal 53(4):34-58.
Oh I, Park GS (2012). From B2c to B2b: Selling Korean Pop Music in the Age of New Social Media. Korea Observer 43(3):365-397.
Oliver LR (1999). When customer loyalty? Journal of Marketing 63(4):33-44.
Overby J, Assouad A (2016). The Impact of Culture on Customer Expectations. Journal of Management Policy and Practice 17(2):19-32.
Pacis J (2012). Popping the K-Pop Bubble: A Study on the World of K-Pop Fandom as a Subculture. University of the Philippines.
Parc J, Moon HC (2013). Korean Dramas and Films: Key Factors for Their International Competitiveness. Asian Journal of Social Science 41(2):126-149.
Park GS (2013). Manufacturing Creativity: Production, Performance, and Dissemination of K-Pop. Korea Journal 53(4):14-33.
Rosen R (2018). Professional judgment v customer expectations. BMJ 36
Saboo AR, Kumar V, Ramani G (2016). Evaluating the Impact of Social Media Activities on Human Brand Sales. International Journal of Research in Marketing 33(3):524-541.
Seo MS (2012a). Lessons from K-Pop's Global Success. SERI Quarterly 5(3):60-66.
SeoMS (2012b). What Business Can Learn from K-Pop for Global Strategy. CEO Information, Samsung Economic Research Institute. No. 841.
Uncle MD, Dowling GR, Hammond K (2003). Customer loyalty and customer loyalty programs. Journal of Consumer Marketing, 20(4):294-316.
Wong A, Sohal A (2003). Service quality and customer loyalty perspectives on two levels of retail relationships. Journal of Services Marketing 17(5):495-513.
Yi HT, Yeo C, Amenuvor FE, Boateng H (2021). Examining the relationship between customer bonding, customer participation, and customer satisfaction. Journal of Retailing and Consumer Services 62(1):102598.
Yoon TJ (2017). The Korean Wave: Retrospect and prospect: Introduction. International Journal of Communication 11:2241-2249.

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Family CEO and company performance during the COVID-19 crisis: The case of Cameroon

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This study analyses the resilience of family businesses in a developing country like Cameroon during the covid-19 crisis by applying measures of association, regression analysis, and comparison tests to data collected by administering a questionnaire on a panel of 280 companies of which 196 are family businesses and 84 non-family businesses. The results show that throughout the pandemic period, family companies are more resilient in terms of financial and social performance relative to non-family businesses. We also find that among family businesses, the most successful are those with a family member as CEO or those whose management is dominated by the family controlling the firm. The results extend former research by showing that family leadership is a form of management that can provide responses to unexpected events that affect the company.

Key words: Family leadership, social performance, financial performance, COVID-19 crisis, family businesses.

INTRODUCTION

The health crisis related to Covid-19 has affected the existence of humans and organisations in both developed and developing countries (Azimli, 2020). According to Singh (2020), this crisis is likely to affect the performance and survival of companies and the wellbeing of economies as a whole. Although certain researchers (La Porta et al., 1999; Morck and Yeung, 2003) hold that family businesses are the dominant social and economic force in the world, Van Essen et al. (2015) hold that the long-run orientation of family businesses makes them more resilient in times of crisis. This explains the growing attention researchers (Van Essen et al., 2015; Crespí-Cladera and Martín-Oliver, 2015; Minichilli et al., 2016; Fidrmuc and Korhonene, 2018; Joe et al., 2019) place on explaining the advantages and disadvantages of family involvement on the ownership and management of companies in times of crisis, and its effects on the performance of the company.

Empirical evidence on the effect of family CEOs on business performance during a crisis have been found by Minichilli et al. (2016) in Italy. The authors find that Italian family businesses perform better during periods of crisis when the CEO is a family member. Using a similar reasoning, this study in Cameroon seeks to address the following questions: is the financial and social performance of family businesses that are not registered in the stock exchange different from those of non-family businesses? Does the performance of family businesses depend on the mode of leadership? This study makes two main contributions to the literature on family businesses:

Firstly, it focuses on both financial and social performance in times of crisis and shows that Cameroonian family businesses perform better both

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financially and socially in this period of COVID-19 relative to non-family businesses.

Secondly, it focuses on the differences in performance according to the mode of leadership of family businesses during this crisis period. We find that the most resilient family companies in terms of performance are those in which the CEO is a member of the controlling family and in which the management is dominated by family members.

The rest of this study is in three parts. In the first part, we present a literature review of the framework of analysis of the relationship between family CEOs and company performance during crisis. In the second part, we present the methodology used. In the third part, we present and discuss the results.

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

The literature mainly focuses on the effects of a crisis on the financial performance of family businesses in developed countries and Asian countries (Joe et al., 2019). Globally, the meta-analysis by Hansen and Block (2020) shows that family businesses perform better than non-family businesses in all phases of the business cycle in developed countries. Other studies focus on their resilience via access to credit. Specifically, Crespí-Cladera and Martín-Oliver (2015) find that family companies face more credit restrictions than non-family businesses in periods of crisis and this enables them to overcome the effect of lack of credit during periods of uncertainty. Few studies analyse the effects of crisis on the social performance of family businesses. Van Essen et al. (2015) find that family businesses are less likely to reduce their manpower or wages of their employees not only before but also during the crisis. The authors also find that the fall in these two indicators of social performance is less in countries where laws on the protection of investors and their application are little developed.

A look at various previous studies reveals that the question of family CEO is largely neglected. However, Miller et al. (2013, 2014) highlight a positive bond between family CEO and the performance of the company in a crisis period. Several reasons can explain the fact that family companies managed by a family member resist crisis better.

Firstly, the family as a shareholder is more willing to support the family business when the CEO is a member of the controlling family (Villalonga and Amit, 2010). Family ties also represent an important resource that enables the company to gain easier access to loans during a crisis (Miller and Breton-Miller, 2005). CEOs from the controlling family not only seek to perform their role in the company, but also seek to fight for the long-term interests of the family by protecting its wealth and reputation (Miller et al., 2013; Minichilli et al., 2016). Also, agency theory suggests that the owner-manager has a greater level of engagement in the company in the long run.

Secondly, a CEO who is a family member is more likely to develop a tacit knowledge of the identity, culture and strategy of the company. These elements are very difficult for an external manager to reproduce and are essential in overcoming difficulties (Miller et al., 2013).

Closeness with the controlling family makes the CEO who is member of this family particularly qualified to speak in the name of the company and create a close relationship with customers, suppliers, employees, and banks (Miller et al., 2013). This close relationship reinforces the bonds of the company with local communities and other stakeholders, and allows faster decision-making, thus conferring more freedom of action to the manager than a non-family CEO would enjoy (de Vries, 1993).

It should be noted that differences in performance can also be explained within the theoretical framework of the theory of resources (Hitt et al., 2021). According to this theory, differences in company performance are not determined by external opportunities and threats but by internal resources which determine the company strategy. However, from another perspective, the survival of companies during the Covid-19 crisis is attributable to a change in the management style (Gibbons et al., 2021).

Despite the 155 studies covering 61 countries listed in the meta-analyses of Hansen and Block (2020), none focuses on Africa. The emerging countries listed are almost exclusively located in Asia because the family companies included are registered in the stock exchange. Also, the results differ according to the measure of performance used. Studies undertaken in periods of no crisis in emerging countries can be informative if the literature reaches a clear consensus, which is far from being the case. In fact, concerning the bond between family companies and financial performance, the meta-analysis conducted by Wagner et al. (2015) concludes that this relationship varies with the measuring instrument (ROA is significant but not ROE) while the bond between family companies and social performance depends on many institutional factors, the family's share in the capital, and its involvement in the management of the business (Canavati, 2018).

This study seeks to fill this gap in the literature by comparing the financial and social performance of family companies with those of non-family companies not listed on the stock exchange, and comparing performance among family companies with different modes of leadership in Cameroon which is a developing country affected by COVID-19 like the rest of the world. In Central African countries characterized by weak systems of governance and social protection as well as a very ineffective legal system, the majority of companies are family businesses and are managed by a member of the

Table 1. Measurement of variables.

Variable	Definition	Measurement	Reference authors
FAMOWN	Family ownership	Percentage of the capital held by members of the same family	Mazzi (2011)
FAMCEO	Management or not of the company by a member of the founder's family	Binary variable taking value 1 if the firm is managed by a family member and 0 if not	Minichilli et al. (2016), Xu and Zhang (2018)
FAMDOM	Family domination in management	Binary variable and takes value 1 in the case of a family company (over 50% family-controlled), if the manager is a member of the family and 0 if not	Charlier and Lambert (2013)
MANAGOWN	Managerial ownership	Percentage of the capital held by the manager	Belkhir and Al (2014)
SIZE	Size of the company	Number of employees	Hashmi et al. (2020)
SECTACT	Sector or line of business	Nominal variable taking the values from 1 to 3 according to whether the company is in the industrial sector, trade or the services	Miller et al. (2013)
ENDET	Possibility of access to credit	Binary variable taking value 1 if the company has the possibility of borrowing for the crisis period and 0 if not	Crespí-Cladera and Martín-Oliver (2015))
PERFIN	Financial performance	Score based on 6 items; the turnover, the number of employees, the operating results, profitability, investments and liquidity, evaluated on a 5-point Likert scale.	Messeghem (1999)
PERFSOC	Social performance	Score based on 7 items specific to the African firms: working conditions, level of remuneration of employees, regular payment of wages, fair treatment of employees, respect for employee rights, taking care of employees affected by COVID, and defending employee rights. Assessed using on a5-point Likert scale.	Makani (2018)

The evolution of the various criteria retained in each dimension of performance (social and financial) since the beginning of COVID-19 is assessed by managers for their company using a 5-point Likert scale, ranging from "Very low" to "Very high". Then, the score of each item is calculated to obtain the score of financial and social performance which are standardized on a scale ranging from 0 to 100. We are thus interested in the variations of these criteria and not in their absolute values. The psychometric properties of this scale areas sedusing Cronbach's alpha of 0.881 and 0.74 respectively for the financial and social dimensions. Subjective measurements of performance are used for two reasons. First of all, this study explores the consequences of COVID-19. Therefore it would otherwise be necessary to use the annual reports of 2020, which are not available at the time of developing this study (they will be available from June 2021 at the earliest). Also, the Cameroonian SMEs included in this study are not listed on the stock exchange, the financial and accounting information which they communicate in their annual reports have a limited degree of reliability or are not even available. It can thus use only subjective measurements to analyse their performance.

controlling family (Mbaduet et al., 2019). Given these objectives, the authors formulate the following hypotheses:

Hypothesis 1: during the crisis related to COVID-19, family business performs better than non-family ones.
Hypothesis 2: during the crisis related to COVID-19, family businesses managed by a family member perform better than those managed by a non-family member. The authors now present the methodology used to test these hypotheses.

METHODOLOGY

Sample and data collection

In order to obtain the sample used, the authors go from 672 public companies identified by the National Institute of Statistics (INS) of Cameroon during its latest census in 2016. They then exclude financial companies, banks, and companies with less than100 employees. They administer 300 questionnaires to the CEOs of the non-excluded companies using random sampling between the months of August and September 2020. The questionnaire contains data on the characteristics of the companies, their ownership structure, the status of the CEO and performance. The questionnaires are administered only in the towns of Douala and Yaoundé since these towns according to the 2017 report of the INS of Cameroon harbour more than 69% of Cameroonian companies. From these questionnaires, 280 responses were considered useable. The sample thus includes 280 companies of which 196 are family and 84 are non-family businesses. The distinction between family and non-family companies is made by adopting the criterion of Poulain-Rehm (2006). According to this author, a family company is one in which a family holds more than 50% of the capital and the absolute majority of voting rights in the general assembly, whether this family directly exercises management duties or not. To check for the presence of selection bias between the two subsamples, three criteria are used: geographical location, industry sector, and size of the company.

Model and measurement of variables

According to the literature review, the performance of a company can be affected by the structure of ownership, family leadership, and certain characteristics specific to the company in times of crisis (Minichilli et al., 2016; Miller et al., 2014; Miller et al., 2013). Based on this, the model below is developed depending on whether performance is measured using its social or financial dimension. Table 1 shows the measurement of the variables.

$$\mathrm{PERF_i}=\beta_0+\beta_1\mathrm{FAMOWN_i}+\beta_2\mathrm{FAMCEO_i}+\beta_3\mathrm{MANAGOWN}_i+\beta_4\mathrm{FAMDOM_i}+\beta_5\mathrm{ENDET_i}+\beta_6\mathrm{SECTACT_i}+\beta_7\mathrm{SIZE_i}+\mu_i$$

Where PERF is either PERFSOC (social performance) or PERFIN (financial performance), FAMOWN: is the percentage of capital held by members of the same family, FAMCEO is the management or not of the company by a member of the founder's family, MANAGOWN: managerial ownership, FAMDOM: family dominant in management, ENDET: possibility of access to credit. SECTACT: sector of business, SIZE: size of the company.

Table 2. Correlation matrix.

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) FAMOWN	1								
(2) FAMCEO	0.290	1							
(3) MANAGOWN	-0.045	0.112	1						
(4) FAMDOM	0.800**	0.825**	0.036	1					
(5) ENDET	0.373*	0.055	0.114	0.350**	1				
(6) SECTACT	-0.193*	-0.210*	0.068	-0.176*	-0.113	1			
(7) SIZE	0.115	-0.029	-0.048	0.192*	-0.003	-0.034	1		
(8) PERFSOC	0.448**	0.277**	-0.089	0.396**	0.301**	-0.136*	0.016*	1	
(9) PERFFIN	0.404**	0.121*	0.060*	0.267**	0.303**	-0.049**	0.094*	0.688**	1

FAMOWN : percentage of capital held by members of the same family, FAMCEO: management or not of the company by a member of the founder's family, MANAGOWN: managerial ownership, FAMDOM: family domination in management, ENDET: possibility of access to credit, SECTACT: sector of activity of the business, SIZE: Size of the company, PERFSOC: social performance, PERFIN: financial performance.
**;*: correlations significant at the respective levels of 99 and 95%.

RESULTS AND DISCUSSION

Before estimating the econometric model, it is necessary to present Table 2 which shows the correlation matrix between the variables in order to detect the existence of a possible multicollinearity problem.

A look at Table 1 shows that the family ownership, the management of the company by a family member, loan possibilities, and the fact that the management of the company is dominated by a family positively affect the social and financial performance of the company during a crisis at the 1% significance level. However, management by owners, the sector of activity, and the size of the business do not produce significant results.

The correlation matrix shows that serious problems of multi-collinearity exist between family ownership, the management of the company by one of its members, and family domination in management since the coefficients of correlation between these variables are higher than 0.8 which is greater than the threshold recommended by Wooldridge (2014). In order to circumvent this problem, the first model is estimated in the absence of the "family domination in management" (FAMDOM) variable, and in the second model, this variable is introduced to replace the two variables relating to the family: "family ownership" (FAMOWN) and "management of the firm by one of the family members" (FAMCEO). Table 3 presents the results of the estimation of econometric models.

Firstly, this study reveals that family companies perform better from an economic and social point of view (the coefficient of FAMOWN is positive and highly significant in Models 1 and 3). The rank comparison test of Kruskal Wallis presented in Table 4 shows that the level of performance is significantly different depending on whether the company is family owned or not. This finding is in line with those of van Essen et al. (2015), Minichili et al. (2016), Zhou et al. (2017) and Hansen and Block (2020) who find family businesses perform better non-family ones during financial crises and Amore et al. (2021) who focus on the case of the COVID-19 crisis. Family businesses are more resilient during crises because of their long-run focus which incites them to have a social policy and do their best to avoid lay-offs (Kim et al., 2020) inspite of the weak social protection system.

Secondly, the variables relating to the mode of leadership are important determinants of the performance of family companies in periods of crisis. The effect of family domination (variable FAMDOM in all the models) on the decisions of the company is positive on financial and social performance. The variable FAMCEO also has a positive effect (Models 1 and 3) but its size is smaller. For Models 5 to 8, the two variables FAMDOM and FAMCEO are equivalent because the sample only includes firms in which more than 50% of the capital is owned by the family. These findings contradict those obtained by Miller et al. (2014) in Italy, Sánchez Pulido et al. (2019) in Spain and Saidat et al. (2020) in Jordan but are in line with Miller et al. (2013) and Amore et al. (2021) who find that the management of the company by a member of the owner family or majority shareholder is a factor that enables the performance of the company to be acceptable in difficult times. These two mechanisms which are linked by common values enable the company to react faster in times of crisis. Thus, decision scan be taken faster and shareholders are focused on the objectives and other priorities of the company.

Thirdly, the results of the explanatory analysis (correlation and regression) show a weak bond between managerial ownership and financial performance for all the companies of the sample, but this becomes insignificant for family companies (Models 5 to 8 and Table 4). This result contradicts those obtained during crisis by Mbaduet et al. (2019) in Cameroon and Saidu (2019) in Nigeria. These authors hold that the reduction of conflict between family shareholders and an external

Table 3. Estimates of the parameters of the models.

Model	Total sample				Sample specific to family companies (E2)			
	PERFSOC Models		PERFFIN Models		PERFSOC Models		PERFFIN Models	
	1	2	3	4	5	6	7	8
Constant	6.399	3.334	0.970	3.441	7.316	6.773	4.591**	3.495
FAMOWN	0.437***	-	0.392**	-	-	-	-	-
FAMCEO	0.041**	-	0.184**	-	0.302***	-	0.491***	-
MANAGOWN	-0.089	0.060	0.180*	0.221*	0.233	-	0.071	-
FAMDOM	-	0.263***	-	0.589***	-	0.266***	-	0.278***
ENDET	0.171**	0.109*	0.328**	0.333**	0.473***	0.506***	0.385***	0.644***
SECTACT	-0.191*	-0.089*	-0.140**	-0.085*	-0.266**	0.158**	-0.121**	-0.205**
SIZE	0.084**	0.181*	0.267**	0.191***	0.046	0.041	0.036	-0.025
R	0.539	0.472	0.458	0.401	0.569	0.567	0.520	0.480
R^2	0.290	0.223	0.210	0.161	0.324	0.321	0.270	0.231
R^2 adjusted	0.255	0.191	0.170	0.126	0.283	0.289	0.227	0.194
Test of Fischer	8.179***	6.951***	5.311**	4.628***	8.043***	10.064***	6.223***	6.370***

E2 includes only family companies that is, those in which more than 50% of the capital is held by a family, 196 companies. PERFSOC: social performance, PERFIN: financial performance, FAMOWN: percentage of the capital held by members of the same family, FAMCEO: management or not of the company by a member of the founder's family, MANAGOWN: managerial ownership, FAMDOM: family domination in management, ENDET: possibility of access to credit. SECTACT: sector of activity of the business, SIZE: size of the company. ***;**;*: tests significant at the respective levels of 99; 95 and 90%.

manager who is also a shareholder increases the performance of the company even in countries with poor governance.

Lastly, this study reveals that among the control variables, only the possibility of credit significantly impacts on the performance of the company, whatever the performance dimension selected. This finding is in line with those of many studies (Djoutsa Wamba and Koye, 2021; Larcker et al., 2020; Bose et al. 2021) in periods of insecurity for some and during the COVID-19 crisis for others. In addition, the greater the family share in the capital, the more likely the company is to appoint a member of the family to be manager, thus improving the company's access to credit. Credit enables the company to overcome crisis in both the financial and social performance equations, especially by guaranteeing the payment of wages and maintaining its wage policy. Also, the results of the tests of comparison of rank (Table 4) show that family companies which have the possibility of accessing credit during a crisis perform better than companies which do not have such access. This result corroborates that of Crespí-Cladera and Martín-Oliver (2015) who finds that family companies are less subjected to credit restrictions than non-family companies during crises. Beyond this result, differences in performance according to the size of the company also produce insignificant statistics for family companies, whereas this variable is significant for the whole sample. For family companies, size is thus not a factor of performance in periods of crisis. This result is in line with those of Saidat et al. (2020) in Jordan. For the sector of industry (SECTACT) variable, the results are in line with those of Khanchel (2009).

The second objective of their study was to verify in the Cameroonian context if the difference in performance is significant between the groups of family companies according to their modes of leadership. To achieve this goal, we use the Kruskal Wallis rank comparison test. Table 4 gives the results of the test.

According to this result, family businesses managed by a member of the family perform better, even if this effect is less pronounced for social performance than for financial performance. This finding shows that family businesses managed by a family member perform better than those managed by non-family members. Thus, in times of crisis, the low agency conflict between shareholders and the CEO results in strong family support and higher performance. Also, it is easier for a manager who is a family member to develop tacit knowledge of the identity, culture and strategy of the company and this also enables the company to reach higher social performance. This result confirms the findings of Minichilli et al. (2016) and Miller et al. (2013) in Italian industrial companies.

Conclusion

The objective of this study is to examine on the one hand whether during the current COVID-19 crisis in Cameroon, family companies are more resilient in terms of performance than their non-family counterparts, and on the other hand, if the difference in performance is significant between the group of family companies

Table 4. Tests of comparison among family companies in the sample.

Variable	Group	NR	PERFSOC		PERFIN	
			Average rank	χ² Sig.	Average rank	X² Sig.
FAMCEO	Yes	135	69.26	0.000	46.27	0.041
	No	61	29.38		25.53	
MANAGOWN	Less than 10%	52	46.50	0.284	54.15	0.139
	Between 10 and 20%	14	41.79		42.79	
	Between 20 and 30%	41	60.48		58.79	
	Between 30 and 40%	30	51.53		51.40	
	Between 40 and 50%	21	54.00		47.05	
	More than 50%	38	40.34		35.13	
FAMDOM	Yes	135	79.30	0.000	54.97	0.048
	No	61	33.73		27.59	
ENDET	Yes	122	76.15	0.000	53.23	0.003
	No	74	38.33		36.67	
SECTACT	Industrial	51	76.20	0.086	74.29	0.070
	Service	76	56.29		56.26	
	Commercial	69	44.50		48.03	
SIZE	Between 100 and 150	104	48.60	0.526	50.63	0.264
	Between 150 and 200	39	52.75		49.50	
	More than 200	53	42.48		38.30	

E2 includes only family companies, that is, those in which more than 50% of the capital is held by a family, 196 companies. FAMCEO: management or not of the company by a member of the founder's family, MANAGOWN: managerial ownership, FAMDOM: family domination in management, ENDET: possibility of access to credit. SIZE: size of the company, SECTACT: sector of activity of the business

according to their modes of leadership. Tests of association, regression, and comparison of means and rank applied to data on 280 companies, of which 196 are family companies show that during this crisis, family companies are more resilient than non-family businesses in terms of performance. Weak systems of governance and social protection as well as an ineffective legal system are not an obstacle to the performance of these Cameroonian companies. This is in line with former studies which approach the capacity of resilience from financial (Amann and Jaussaud, 2012) and social (Van Essen et al., 2015) perspectives in different contexts and which have measurement bias issues. Also, the authors find that in the group of family companies, the best performing are those managed by a family member or those whose management is dominated by a family, thus confirming the findings of Minichilli et al. (2016) and Miller et al. (2013).

These results which enable the authors to accept hypotheses H1 and H2 formulated from the literature review contribute both theoretically and empirically to the literature.

At the empirical level, the results of this study add to the literature comparing the performance of family and non-family businesses in times of economic recession caused by crisis, specifically COVID-19. For the case of family business, it is found that their performance is not homogeneous. The difference in performance is explained by the mode of leadership which is determined by the type of CEO who manages the company, (family member or not), with companies managed by a family member performing better than those managed by a non-family member.

Theoretically, this study has the main advantage of simultaneously analysing the effects of family management on financial and social performance. This is a step ahead in the analysis of the effects of family management on company performance during the Covid-19 crisis. To our knowledge, no study has compared these two measures of performance simultaneously. This study however has many limitations which should be noted and addressed in future studies.

One of the limitations of this study is the non-inclusion of some governance mechanisms that are important in the fine-tuning of the findings. These mechanisms include the composition of the board and the participation of employees in the capital of the company (Mbaduet et al., 2019). Another limit of this study is the fact that generational aspects (Ventura et al., 2020), the age of the company, the gender of the manager, and the nature of support from the local and national governments which can lead to a difference of performance in times of crisis are not taken into account.

It is important to include variables relating to the age of the company, the gender of the manager, the nature of support from local and national governments and certain characteristics of company governance like the composition of the board of directors and shareholding by employees in future studies on the relative performance of family businesses during the COVID-19 crisis.

CONFLICT OF INTERESTS

The author has not declared any conflicts of interests.

REFERENCES

Amann B, Jaussaud J (2012). Family and non-family business resilience in an economic downturn. Asia Pacific Business Review 18(2):203-223.

Amore MD, Quarato F, Pelucco V (2021). Family ownership during the covid-19 pandemic. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3773430

Azimli A (2020). The impact of COVID-19 on the degree of dependence and structure of risk-return relationship: A quantile regression approach. Finance Research Letters 36:101648.

Belkhir M, Boubaker S, Derouiche I (2014). Control–ownership wedge, board of directors, and the value of excess cash. Economic Modelling 39:110-122.

Bose S, Shams S, Ali MJ, Mihret D (2021). COVID-19 impact, sustainability performance and firm value: international evidence. Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/acfi.12801

Canavati SA (2018). Corporate social performance in family firms: a meta-analysis. Journal of Family Business Management 8:235-273.

Crespí-Cladera R, Martín-Oliver A (2015). Do family firms have better access to external finance during crises?. Corporate Governance: An International Review 23(3):249-265.

Charlier P, Lambert G (2013). Modes de gouvernance et performances des entreprises familiales françaises en fonction des conflits d'agence. Finance Contrôle Stratégie. Available at: https://journals.openedition.org/fcs/1314

De Vries MFK (1993). The dynamics of family controlled firms: The good and the bad news. Organizational Dynamics 21(3):59-71.

Djoutsa Wamba L, Koye R (2021). Accès aux financements externes et pérennité de la très petite entreprise: quelle évidence en temps de crise sécuritaire? Journal of Small Business and Entrepreneurship 2021:1-22.

Fidrmuc J, Korhonen I (2018). Meta-analysis of Chinese business cycle correlation. Pacific Economic Review 23(3):385-410.

Gibbons JP, Forman S, Keogh P, Curtin P, Kiely R, O'Leary G, Skerritt C, O'Sullivan K, Synnott K, Cashman JP, O'Byrne JM (2021). Crisis change management during COVID-19 in the elective orthopaedic hospital: Easing the trauma burden of acute hospitals. The Surgeon 19(3):59-66.

Hansen C, Block J (2020). Exploring the relation between family involvement and firms' financial performance: A replication and extension meta-analysis. Journal of Business Venturing Insights 13:e00158.

Hashmi SD, Gulzar S, Ghafoor Z, Naz I (2020). Sensitivity of firm size measures to practices of corporate finance: evidence from BRICS. Future Business Journal 6(1):1-19.

Hitt MA, Arregle JL, Holmes Jr RM (2021). Strategic management theory in a post-pandemic and non-ergodic world. Journal of Management Studies 58(1):259-264.

Joe DY, Jung D, Oh FD (2019). Owner-managers and firm performance during the Asian and global financial crises: evidence from Korea. Applied Economics 51(6):611-623.

Khanchel I (2009). Le rôle du pouvoir discrétionnaire du dirigeant dans l'amélioration de la performance: cas des entreprises tunisiennes. Revue des Sciences de Gestion 3(237/238):95-103.

Kim K, Haider ZA, Wu Z, Dou J (2020). Corporate Social Performance of Family Firms: A Place-Based Perspective in the Context of Layoffs. Journal of Business Ethics 167(2):235-252.

Larcker DF, Lynch B, Tayan B, TayLor DJ (2020). The spread of covid-19 disclosure. Rock Center for Corporate Governance at Stanford University Closer Look Series: Topics, Issues and Controversies in Corporate Governance No. CGRP-84.

La Porta R, Lopez-de-Silanes F, Shleifer A (1999). Corporate ownership around the world. The Journal of Finance 54(2):471-517.

Makani SR (2018). La propriété familiale, structure et performance sociale et environnementale des PME familiales camerounaises. Journal of Academic Finance 9(2):47-68.

Mazzi C (2011). Family business and financial performance: Current state of knowledge and future research challenge. Journal of Family Business Strategy 2(3):166-181.

Mbaduet JF, Nanfosso RAT, Djoutsa Wamba L, Sahut JM, Teulon F (2019). Pouvoir du dirigeant, gouvernance et performance financière des entreprises: le cas camerounais. Gestion 200036(2):61-82.

Messeghem K (1999). L'assurance qualité: facteur dénaturant de la PME. Revue Internationale PME Économie et Gestion de la Petite et Moyenne Entreprise 12(3):107-126.

Miller D, Le Breton-Miller I (2005). Managing for the long run: Lessons in competitive advantage from great family businesses. Harvard Business Press.

Miller D, Le Breton-Miller I, Minichilli A, Corbetta G, Pittino D (2014). When do Non-Family CEOs Outperform in Family Firms? Agency and Behavioural Agency Perspectives. Journal of Management Studies 51(4):547-572.

Miller D, Minichilli A, Corbetta G (2013). Is family leadership always beneficial? Strategic Management Journal 34(5):553-571.

Minichilli A, Brogi M, Calabrò A (2016). Weathering the storm: Family ownership, governance, and performance through the financial and economic crisis. Corporate Governance: An International Review 24(6):552-568.

Morck R, Yeung B (2003). Agency problems in large family business groups. Entrepreneurship Theory and Practice 27(4):367-382.

Poulain-Rehm T (2006). Qu'est-ce qu'une entreprise familiale ? Réflexions théoriques et prescriptions empiriques. La Revue des Sciences de Gestion (219):77-88.

Saidat Z, Bani-Khalid TO, Al-Haddad L, Marashdeh Z (2020). Does family CEO enhance corporate performance? The case of Jordan. Economics and Sociology 13(2):43-52.

Saidu S (2019). CEO characteristics and firm performance: focus on origin, education and ownership. Journal of Global Entrepreneurship Research 9(1):1-15.

Sánchez Pulido L, Gallizo JL, Moreno Gené J (2019). The influence of the CEO in listed family businesses. Intangible Capital 15(2):128-142.

Singh A (2020). COVID-19 and safer investment bets. Finance research letters 36:101729.

Van Essen M, Strike VM, Carney M, Sapp S (2015). The resilient family firm: Stakeholder outcomes and institutional effects. Corporate Governance: An International Review 23(3):167-183.

Ventura M, Vesperi W, Melina AM, Reina R (2020). Resilience in family firms: a theoretical overview and proposed theory. International Journal of Management and Enterprise Development 19(2):164-186.

Villalonga B, Amit R (2010). Family control of firms and industries. Financial Management 39(3):863-904.

Wagner D, Block JH, Miller D, Schwens C, Xi G (2015). A meta-analysis of the financial performance of family firms: another attempt. Journal of Family Business Strategy 6(1):3-13.

Wooldridge JM (2014). Introduction to econometrics. Andover MA: Cengage Learning.

Xu J, Zhang Y (2018). Family CEO and information disclosure: Evidence from China. Finance Research Letters 26:169-176.

Zhou H, He F, Wang Y (2017). Did family firms perform better during the financialcrisis? New insights from the S&P 500 firms. Global Finance Journal 33:88-103.

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Organizational transformations through business technology solutions: from the perspective of Science, Technology, and Society (STS)

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Nowadays, organizations benefit from new technologies because they improve their efficiency and their performance. These technologies are themselves developed within organizations in the form of business solutions in a perspective of transformation and innovation. This paper highlights obvious strategic and operational tools and to demonstrate the cohesion of the evolution of science and technology in society. Whether these are based on scientific research or Research and Development (R & D) in an organizational context, their social and environmental impacts remain intrinsically linked. Thus, from intraorganizational systems to interorganizational systems, there arises connection between stakeholders through ERP software packages upstream (B2B) and an interconnectivity with customers/consumers downstream (B2C) thanks in particular to social networks and digital applications.

Key words: Organizational transformations, business technology solutions, ERP, science and technology, industries transformations.

INTRODUCTION

The development of electronic information and communication management systems, integrated in organizations, often become technological innovations and solve business issues by creating value. Nowadays, we speak about intelligent organizations to qualify those that use new technologies internally and/or also communicate through them externally. From a managerial point of view, the organizational structure (division of labour, hierarchy of tasks) and the organizational culture (vision, mission, and values) would act as determining levers for the success of the implementation of such solutions. Obviously accelerated by the information revolution, Porter and Millar (1985) demonstrate that no business company can escape these effects because it changes the way of doing business. These authors argue that since competitors are using information for competitive advantage, business leaders recognize the need to be directly involved in managing the new technology. Through a succinct literature review, we will take stock of what is known about the reasons for and places of organizational changes, and then define our research paradigm based on our epistemological posture. Then, from the perspective of science and technology, we will pose the

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research questions that will guide our theoretical approach. This methodological strategy will allow us to elucidate the avenues of reflection that will serve as answers to these questions, and we will then conclude with discussions of the preliminary results in relation to this important theme of organizational transformations through business technology solutions.

LITERATURE REVIEW

Why do organisation transforming?

An organization transforms when it decides to integrate new solutions into its traditional processes that will allow it to solve an existing problem, differentiate itself, or align with new trends or organizational practices in its industry or business environment. In the 1990s, the Internet, which was once a military technology, appeared in organizations and in society as that engine of transformation. The new and newly dubbed digital technologies, meaning based on this infrastructure, took off around those years and organizations adopted them as a cornerstone of their communication and information dissemination strategies. Nwamen (2006: 111) said that the business world underwent a real change with the arrival of new information and communication technologies (NICTs), notably in the acceleration of their pace and the extent of their generalization. Amabile and Gadille (2006: 101); Lefaix-Durand et al. (2006:205) also confirm that the advent, in the 1990s, of information and communication technologies (ICT) renewed the problem of cooperation [...] by promoting computerized exchanges between organizations. Before these respective authors, Porter and Millar (1985), a decade earlier, had already reasoned in strategic terms by noting that these information technologies affected each of the five competitive forces that are the power of the suppliers, of the customers, the threat of new entrants, the threat of substitute products, and the rivalry between existing firms. More specifically, the new technologies increase the ability to exploit the links between activities, whether inside or outside the company (Abecassis and Benghozi, 1998).

Where do organizations transform themselves?

Internally: intraorganizational transformations

The deployment of ICT can provide solutions either to internal concerns of the organization, or to a modification of external relations and the development of communications and articulations with the different partners of the company (Abecassis and Benghozi, 1998; Pettigrew, 2012). In this respect, the Enterprise Resource Planning (ERP) software (Figure 1) shows how organizations are adapting by developing solutions to share internal information. They operate in the structure of the company's production and marketing cycle, the reorganization of the coordination between the company's functional departments and the integration in the design phases (Abecassis and Benghozi, 1998). Porter and Millar (1985) also consider that the informational revolution affects the rules of competition by creating competitive advantages that give company new ways of outperforming their competitors by giving rise to new professions and by altering the structure of the value chains. More precisely, the new information technologies bring about modifications in the way companies and markets position themselves, but also how they organize the flow of goods and services along value-added chains (Abecassis and Benghozi, 1998). We can thus observe an integration and standardization of processes characterized by the improvement of internal productivity factors and the ability to develop and master increasingly complex products and activities at increasingly lower costs. Through ICTs, the manager of the company masters the information, which allows the company to control its productive systems, commercial, financial, human, and informational management (Nwamen, 2006). On the other hand, Pettigrew (2012: 650) "conceptualize major transformations of the firm in terms of linkages between the content of change and its context and process and to regard leadership behaviour as a central ingredient but only one of the ingredients, in a complex analytical, political, and cultural process of challenging and changing the core beliefs, structure, and strategy of the firm." This consideration of organizational transformation from an organic point of view integrates the variables relevant to the implementation of a technological solution. Thus the ability to lead a technological or strategic change, through leadership, becomes the central element of intraorganizational transformation.

Externally: Interorganizational transformations

According to Simon (1983) in Amabile and Gadille (2006: 98), one of the essential tasks of science and technology is to create and design "efficient information processing systems" supporting decision-making in companies or administrations. Through this information system, we can see how Internet technologies can improve interorganizational relations (IORs). These relationships are often the basis of organizational transformations in which organizations that undertake powerful connections (social, economic, service/technical, etc.) aim to improve their processes or create value in terms of reciprocal benefit (increased product, customer satisfaction, or value chain). Whether NICTs are designed to manage interorganizational applications – which is the case for EDI or certain ERPs for example – or whether they are

Figure 1. Enterprise resource planning.
Source: Insight Solutions Global.

intended to be used in undifferentiated contexts (as for groupware or messaging systems), their development and use in industry are strongly influenced by the weight and the nature of the interorganizational relationship that these technologies back (Abecassis and Benghozi, 1998). The case of the automobile sector shows us that the development of EDIs has the effect of changing an industry and centering the activities and strategic decisions around the equipment suppliers who provide goods to manufacturers of the same type and who can, in fact, be competitors. Cooperation thus becomes essential to the integration of these types of systems.

Cooperation is a phenomenon that can be defined in terms of interdependence and the degree of stability in relationships (Amabile and Gadille, 2006: 103). Several types of cooperation explain the nature of these transformations, among which are sequential transactional cooperation and network cooperation. In sequential transactional cooperation (such as supplier/customer and buyer / seller relationships) or reciprocal transactional cooperation (such as, order givers / subcontractors), information is exchanged essentially between partners (Abecassis and Benghozi, 1998) through a technological infrastructure that communicates interactively via a virtual “cloud” (Figure 2); while network cooperation shares technologies for automating data exchange. This is particularly the case in the use of EDI where suppliers and customers cooperate to create and use shared databases (*Ibid.*).

With regard to this cooperative dimension, organizational transformations are carried out with openness to the outside, which is generally considered to be an uncontrollable environment of the company. Thus, thanks to ICTs, client companies can easily access information that allow them to compare different suppliers and benefit from the best market conditions in terms of quality/price and product varieties (Nwamen, 2006). On another different aspect of cooperation, it is not uncommon in a business environment for competing companies to collaborate in the pursuit of added value. In this sense, Fenneteau and Pellerin-Boucher (2007) argue that there exist both cooperative and competitive dimensions in any economic relationship. These interorganizational practices require partitioned transformations and structuring in order to collaborate only on the aspects of reciprocal exchanges of data, services or products. This type of cooperation can notably be observed in cases of oligopoly, joint venture, or consortium, where competing companies can agree respectively to set a price, define identical offers, exploit a market, or even manage a project conjointly. New technologies thus help in the implementation of intelligent information systems that will change the nature of their relationships by making their standards compatible in order to increase the size of their network and the value for the customer (*Ibid.*). During the 1990s, the intensification of globalization and the development of new production and information technologies highlighted the importance of

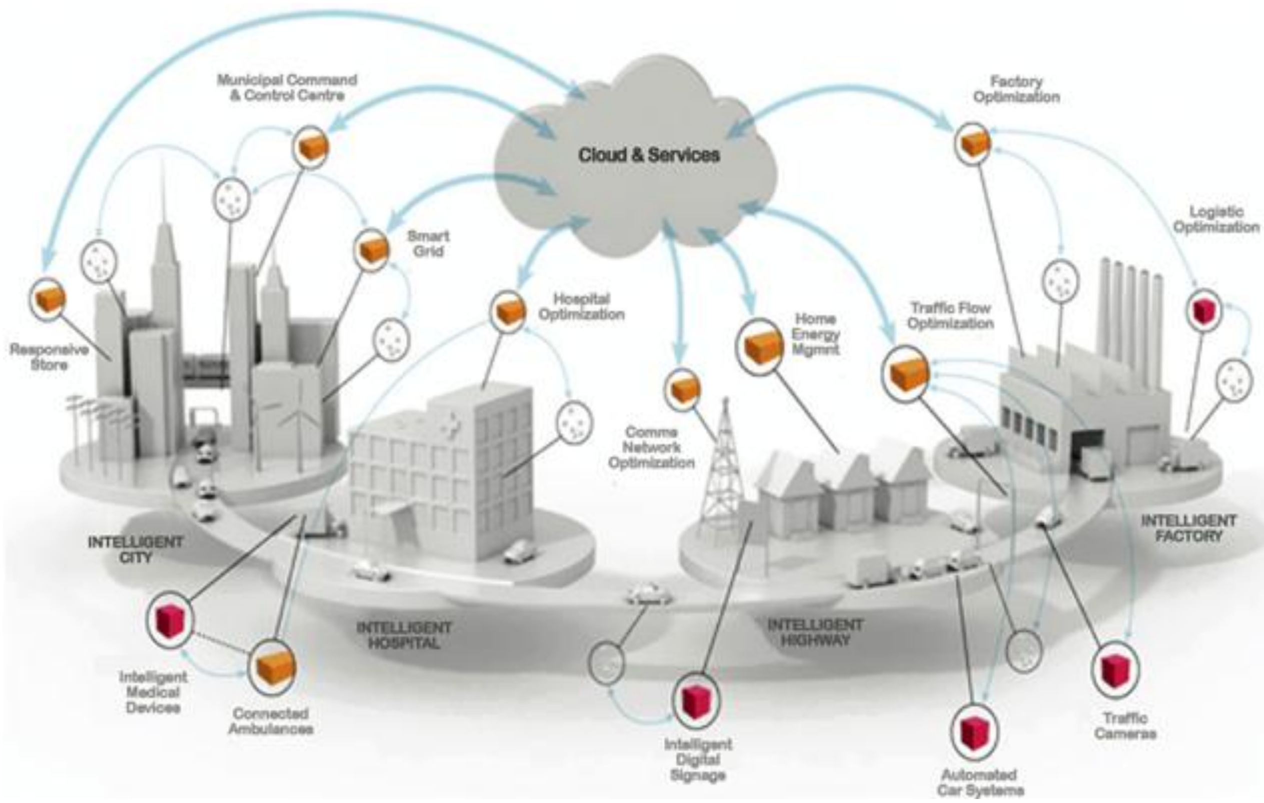

Figure 2. Cloud and Infrastructure Services
Source: Net Solutions.

“interconnections” between organizations (Lefaix-Durand et al., 2006). The latter are indeed profoundly affected by the technical developments of applications, by the trans-sectoral strategies of firms that require cooperation and collaboration between companies present in different sectors or segments of a given industry (Abecassis and Benghozi, 1998).

EPISTEMOLOGICAL POSTURE

By closely observing this structural and analytical logic of organizational transformations, we favor a positivist posture due to the scientific nature of information systems and technologies. Our managerial vision of these transformations is then part of an interactive and deductive logic of action combined with decision. This empirical-formal rationality implies radical structuralism (Figure 3) as a research paradigm, which postulates that organizations are real, objective, concrete "things" whose essential nature can be known and whose measurable characteristics determine human behavior (*Ibid.*). As an organizational decision-maker, the search for added value is the main lever for the implementation of a technological or strategic solution in an organization. This pragmatic management style arises from personal experience and reflection on the outcome of our actions within organizations (Gillberg and Vo, 2011).

RESEARCH QUESTIONS

From the perspective of Science and Technology, the first question to be asked is what is the modus operandi of organizational transformations? If the functioning or management of the organization is based on technology (“technological organization”), it would logically implement transformation through innovative solutions. However, if the technology is developed by the organization (“organizational technology”), it would generate a technological innovation system. This leads us to ask the following two research questions:

1. What are the implications of technology within the organization?
2. What are the effects of organizational technology on its transformation?

The emerging discussions from these questions aim to establish the scientific basis for the evolution of science and technology within organizations and in society. Ziman (1987) explains that the external sociology of

Figure 3. Sociological paradigms and organisational analysis.
Source: Burrell and Morgan (1979).

science simply considers it to be a social institution, integrated in society and performing certain functions for society as a whole, in the same way than other institutions associated with law, religion, political authority, and so on. Science is then considered as an instrument at the service of society and organizations. This author also informs us that the most striking influence of science on society is the generation of essentially new technology from basic, discovery-oriented research. However not all advanced technology arises from basic science. Some organizations develop their own technology. In this case, they rely on research and development (R&D) and industrial science to achieve their aim. In contemporary discourse, the notion of scientific "research" is generally closely linked to the notion of technological "development" (Ziman, 1987). At this level, it is legitimate to question whether technology is an applied science. A distinct set of arguments challenges the idea that technology is an applied science (Sismondo, 2010). The controversy that arises from this question enriches the parallel development of science and technology for the benefit of organizations and society. Some people working in STS assert the idea that science and technology are not sufficiently well-defined and distinct from one another for there to be a definite relationship between them (*Ibid.*). Ziman (1987) believes that all sciences are generating their respective technology and all technologies are generating their respective science. In the context of organizational transformation, it is important to know that science and technology are levers of change within organizations and society. The role of science in society is therefore inseparable from the role of technology (*Ibid.*).

From a practical perspective, the link between basic applied research is part of a "linear model" that traces the path of innovation from fundamental research to applied research to development, and finally to production (Sismondo, 2010). This suggests that an organization dubbed "technological" benefits from increased productivity emanating from its technology integration. Moreover, scientific knowledge is a resource that engineers and inventors can draw on and perhaps increasingly do draw on but overall, it is not a technology driver (*Ibid.*). Technoscience, biotechnology, and nanotechnology are examples of organizational technologies that turn into innovation in society.

METHODOLOGY

Our positivist epistemological posture outlined above has oriented our approach towards exploratory method, following a deductive logic that allows us to start from existing organizations in order to explain the observed or future changes (Chalmers, 1987) (Figure 4). The empirical approach then consists of selecting or identifying organizations/companies in the three existing business models (for-profit organization, cooperative organization, and non-profit organization) in order to observe intraorganizational and interorganizational implementations in the industries or sectors such as trade, distribution, agribusiness, pharmacy, education, culture, transportation, hospitality, etc. of the respective models, or in crossover organizations, in the latter case.

Two complementary strategies are available to us to collect and analyze the data:

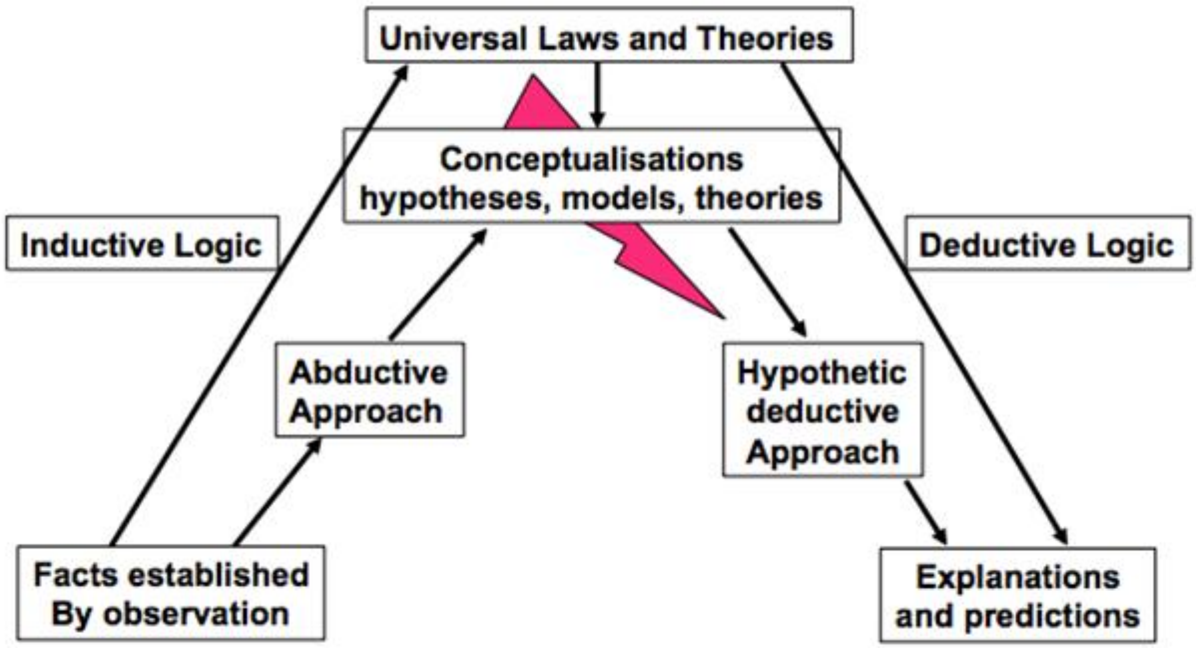

Figure 4. Modes of reasoning and scientific knowledge.
Source: Adapted from Chalmers (1987:28).

1. Scientometry as a secondary data collection method
2. Surveys as a method of collecting primary data

Scientometry

Scientometric data are developed from the Web of Science database. A search made with the terms "technological organizations" OR "organizational technologies" allows us to locate the organization in the field of science and technology and to pull the articles and journals related to our theme. Then, we create the filter.

Surveys

Firstly, we will seek to survey a sample of various organizations on the transformations that are taking place following their implementation of business technologies such as ERP. Abecassis and Benghozi (1998) explain that this integration is sometimes thought out on a local level (at the level of the terminal and the design of the workstation, as is the case with the Intranet), sometimes at the central level (client-server architecture, integrated databases, etc.) or it is outsourced to certain operators or electronic mediators (broadcasters and distributors, or technology providers). This method consists of evaluating the implementation of a solution such as SAP or *PeopleSoft* through a questionnaire survey, which will consist of measuring the productivity and/or resistance to change variables on additive satisfaction scales (Likert type), then proceeding to multivariate analysis (correlations and multiple regressions) between the variables with the help of the SPSS software. This will allow us to explain our hypothesis, and even to generalize them by extrapolation. Which means determining the levels of integration of the solutions by the organizations and the degrees of transformation of the latter following this implementation. Secondly, we will carry out another parallel study of the same nature on organizations that develop their own technologies in order to predict the effects of these on their transformations and their societal implications. This research explores the modus operandi of organizational transformations and therefore, answers the two research questions.

PRELIMINARY RESULTS

This paper highlights the processes of integration of technological business solutions and organizational transformation through these solutions (ERP, information systems, etc.) and also the development of innovative business solutions based on new technologies (digital applications, technological infrastructures, communication interfaces and EDIs, etc.).

Our practical objective is to contribute to the understanding of organizational technological changes, to their impact on management paradigms, and their impact on society. An explanation of the usefulness of the optimal management of organizational information (change resistances, leadership, adverse effects, conflicts and rejections, etc.) and the development of technological solutions by organizations lead the transformations that we consider positive (added value, surplus value) and make them more competitive and actuals.

DISCUSSION

We are well aware that new technologies are not the only causes of the changes we studied; however, a certain number of these changes could not have taken place without the development of new technologies (Abecassis and Benghozi, 1998). Humans, thanks to their leadership, can, all on their own, transform the organizations. After all, are they not at the origin of these technologies? Do we also believe that an organization changed by technology will no longer remain human? There are many questions, notably of an ethical nature, and many dilemmas arising as to how much and what space new technologies and automated infrastructures should take within organizations and in society. However, opinions are mixed as to the effect of emerging societal and environmental issues, but the organizational advantages (profitability, process simplification, etc.) tend to take the upper hand as the quality of human life is improved, etc. So, what does the future hold?

Conclusion

As observed in our paper, organizations have transformed over the years at the macro level thanks to the integration of new technologies and the standardization of their internal processes (management, governance, information system, communication, R&D, etc.) – which are intraorganizational transformations; and in their collaboration and/or cooperation strategies with their various external stakeholders (customers, members, suppliers, subcontractors, industry, market, etc.) – which are interorganizational transformations and follow the business logic of Business to Business (B2B), Business to Government (B2G) or Business to Consumer (B2C). These transformations make them more intelligent and profitable (added value), and more competitive in their operating methods or their business relationships. Thus, the effect of new ICT innovations materializes both internally and externally (Abecassis and Benghozi, 1998). An empirical perspective of this work would be to carry out this study effectively at the level of traditional business models (for-profit or not-for-profit organizations, cooperative organizations, etc.) or to consider studying these organizational transformations at the sectorial level (commerce, distribution, agri-food, pharmacy, education, culture, transportation, hotel industry, etc.) in order to better understand and observe the changes that are taking place and their impacts on contemporary society.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

REFERENCES

Abecassis C, Benghozi PJ (1998). Nouvelles technologies et réorganisation des filières industrielles: le cas de l'habillement. Systèmes D'information Et Management 4(2):91-113.

Amabile S, Gadille M (2006). Coopération interentreprise, système d'information et attention organisationnelle. Revue Française de Gestion 164(5):97-118.

Burrell G, Morgan G (1979). Sociological paradigms and organisational analysis. London: Heinemann Educational Books 432 p.

Chalmers AF (1987). Qu'est-ce que la science? L'inductivisme: La science, savoir issu des faits de l'expérience. https://efreidoc.fr/M1/%C3%89pist%C3%A9mologie/Livres/20XX-XX/20XX-XX.livres.qu-est-ce-que-la-science.alan-f-chalmers.epistemo.pdf

Fenneteau H, Pellegrin-Boucher E (2007). Filemanagement de la coopétition–le cas du secteur des ERP. Revue Française de Gestion 7(176):111-133.

Gillberg C, Vo LC (2011). Approche pragmatiste de la connaissance et de l'apprentissage dans les organisations. Management Avenir 3:410-427.

Lefaix-Durand A, Poulin D, Beauregard R, Kozak R (2006). Les relations interorganisationelles et création de valeur. Revue Française de Gestion 164:205-227.

Pettigrew AM (2012). Context and action in the transformation of the firm: A reprise. Journal of Management Studies 49(7):1304-1328.

Porter ME, Millar VE (1985). How information gives you competitive advantage. Harvard Business Review 63(4):149-160.

Nwamen F (2006). Impact des technologies de l'information et de la communication sur la performance commerciale des entreprises. La Revue des Sciences de Gestion (2):111-121.

Simon HA (1983). Administrative Behavior. A study of decision-making process in administrative organization. The Free Press, Macmillan Publishing Co., New York, USA. Available at: https://www.thriftbooks.com/w/administrative-behavior_herbert-a-simon/345711/#edition=2332537&idiq=5249985

Sismondo S (2010). Two Questions Concerning Technology. An Introduction to Science and Technology Studies, Second Edition. Malden, Wiley-Blackwell.

Ziman JM (1987). An introduction to science studies: The philosophical and social aspects of science and technology. Cambridge University Press.