

Influential Article Review - Social Customer Relationship Management (SCRM): What Factors Affect It?

Ramona Webster

Felix Mathis

Ricky Barnett

This paper examines customer relationship management. We present insights from a highly influential paper. Here are the highlights from this paper: The rise of social media technology has led to new customer relationship management tools that engage customers more easily and directly (social customer relationship management, SCRM). However, the usefulness of SCRM is contingent upon a successful adoption by an organization. Various technology adoption theoretical frameworks have been proposed for social media technologies generally, and for SCRM specifically. This paper extends the literature by exploring network externalities as a potential driver of SCRM adoption in organizations by surveying 363 supply chain professionals regarding their behaviors and uses of SCRM. The results suggest that network externalities have a substantial effect on adoption of SCRM in business organizations and that a perception of higher network externalities has a positive effect on adoption. This implies that organizations should select SCRM systems with better network externalities and also that they should educate their workforce about those strong network externalities leading up to the adoption. For our overseas readers, we then present the insights from this paper in Spanish, French, Portuguese, and German.

Keywords: Social CRM, CRM, Technology adoption, Supply chain management

SUMMARY

- Table 8 reports analysis results from applying linear regression, which demonstrates strong support for the hypotheses. Table 8 presents two models: model 1 shows the results of the construct-level model, while model 2 shows the results of the dimensionlevel model. R square value is a measure of how much of the variability in the outcome is accounted for by the predictors.
- This supports the acceptance of H1a and H1b, where higher levels of perceived direct and indirect network effects are positively associated with the intent to adopt SCRM in organizations.
- Lastly, none of the control variables were significant. This supports the contention that the variable relationships established in this study are not significantly influenced by control factors of firm size, industry, and job tenure.
- The aim is to stimulate further research in this area where application of SCRM in organizations is in the infant stages. SCRM, the remainder of which can perhaps be filled by previously identified

SCRM technologies will be most readily adopted, as a consequence of direct and indirect network externalities.

- The results of this study suggest that practitioners must be mindful of the shift that is happening now in the use of big data in managing customer relationships. They must also examine the interorganizational effects to understand SCRM and be prepared to participate in it. Due to the very nature of being a part of a network, leaders in supply chain management in particular should seek to understand SCRM technology and consider playing a leadership role in the adoption of SCRM technology within their organizations.
- When large, industry-leading firms in the supply chain start to adopt SCRM, the network effect they create will likely be strong. SCRM to share and collaborate with customers.
- On the other hand, when medium or smaller firms adopt SCRM technology before their key large accounts do, these firms will have the advantage of being the early adopters. In addition to potentially gaining the ability to tap into unprecedented market trend and customer feedback data, these firms, due to their lower organizational complexities, will have the opportunity to understand the technology and its adoption from both the intraorganizational and interorganizational perspectives.
- For managers, it is important to note that these results rely on the perceptions of SCRM users or potential SCRM users, rather than on any objective values related to ease of use, system reliability, or authorizations. The implications of this fact are that managers may, to some extent, influence SCRM adoption by influencing the perceptions of the target adopters. The data suggest that successful efforts to train, obtain buy-in, and emphasize system usability and reliability may, in turn, influence perceptions of related network externalities and thereby drive SCRM adoption.
- There are several limitations of the study. First, this study is based on a cross-sectional design where data were collected from different business types across various industries. However, the cross-sectional design has its limitations, as it does not eliminate all the external factors in gathering industry-specific information. Future research will strive to explore both individual categories of industries as well as a broader collection of industries within this research framework. In doing so, the sample size of the survey will need to be increased.

HIGHLY INFLUENTIAL ARTICLE

We used the following article as a basis of our evaluation:

Gu, V., Davis, J., Cao, R., & Vogt, J. (2017). The effect of externalities on adoption of social customer relationship management (SCRM). *International Journal of Quality Innovation*, 3(1), 1–15.

This is the link to the publisher's website:

<https://jqualityinnovation.springeropen.com/articles/10.1186/s40887-017-0021-x>

INTRODUCTION

Much has been written about the rising importance of customer relationship management (CRM) in augmenting a company's ability to interact with its customers and potential customers. The application of CRM contributes not only to the acquisition and retention of customers for the company through identification and satisfaction of the customers' needs; it also facilitates the communication between the company and their customers [1]. However, this is a peer-to-peer capability where the company directly interacts with one customer.

The recent emergence and growing popularity of social media has introduced a new element into CRM. By adding the important social media dimension to the existing CRM systems, companies are able to combine the existing knowledge about each prospective and current customer with new information about their social media activities. When the companies or their related products are communicated via LinkedIn,

Facebook, or Twitter accounts, companies can track and manage the conversation, respond more quickly and better, and anticipate the customers' or potential customers' needs. This also leads to positive spillover effects through social media pages where network members interact [2, 3]. Thus, social CRM (SCRM) is the use of social media platforms and tools to manage customer relationships.

Due to the newness of SCRM, there is limited research concerning its adoption [4]. This study takes SCRM as its main theme and proposes network externalities as the overarching theory in explaining SCRM adoptions in business organizations. Network externalities theory is the theory that the value of a technology is dependent upon the larger network of users of that technology. Network externality has been defined in economics and business as a change in the benefit, or surplus, that an agent derives from a good or service when the number of other agents consuming the same kind of good or service changes [5]. This applies fittingly to SCRM adoption because the very nature of social media technology is that it allows a user to engage with a network of other users, and so, the value of that social media technology will be impacted by, and perhaps even determined by, its user network. For SCRM, the implication would be that the more firms use the technology, the more valuable it is to each firm, and the more firms will adopt and use it [6, 7].

The objective of this study is to investigate network externality as an antecedent that impacts SCRM adoption and also to describe its impact.

Aforementioned, SCRM is a state-of-the-art technology and its adoption is still in its infancy. To the best of our knowledge, this study is the first attempt to explore the SCRM adoption in the SCM context. This study provides both researchers and managers theoretical and empirical evidence that a firm's network externalities in SCRM have a positive effect on its SCRM adoption. From a theoretical perspective, this study endeavors to explore the adoption behavior of SCRM applying network externality theory and empirically test it in a SCM arena. From a managerial standpoint, the findings of the research suggest that practitioners need to examine the interorganizational effects to understand SCRM technology to be well prepared for its implementation.

The next section is a review of the literature for this study. In the "Literature review" section, the research model, as well as the underlying hypotheses, is described. Subsequently, the research method, together with the data analysis results and discussion, is presented. Finally, in the "Discussion and conclusions" and "Limitations and future research" sections, the conclusions, implications, and future research opportunities are discussed.

CONCLUSION

Limitations and Future Research

There are several limitations of the study. First, this study is based on a cross-sectional design where data were collected from different business types across various industries. However, the cross-sectional design has its limitations, as it does not eliminate all the external factors in gathering industry-specific information. Future research will strive to explore both individual categories of industries as well as a broader collection of industries within this research framework. In doing so, the sample size of the survey will need to be increased.

The second limitation is that the survey data (questionnaires) are based upon managers' perceptions. While this is a viable operational process for measuring various constructs, all questionnaire surveys are restricted by the knowledge and "good faith" of the respondents. Nevertheless, the validation and reliability analyses undertaken in this study provided some level of assurance of the instrument's ability to capture useful measures.

Third, and finally, as other literature in technology (particularly social technology) adoption suggests, network externalities alone might not be adequate to fully explain innovation adoption. The authors further hypothesize that network externalities may have a combinatorial effect with other adoption theories (e.g., technology, organization, and environment (TOE) framework, task-technology fit model) that have been previously suggested in the literature. Future research will seek to explore these combinations and find more valuable SCRM adoption models thereby.

APPENDIX**TABLE 1
DEMOGRAPHIC INFORMATION**

Industry	Number of respondents	Percentage of respondents
Manufacturing		
Manufacturing	37	17.29%
Oil and gas	9	4.21%
Subtotal	46	21.50%
Service		
Communication	4	1.87%
Construction	4	1.87%
Education	13	6.07%
Financial services	25	11.68%
Government	2	0.93%
Healthcare	5	2.34%
Real estate	21	9.81%
Services	26	12.15%
Supply chain management	14	6.54%
Subtotal	114	53.27%
Other	54	25.23%
Total	214	100%
Company size (employee no.)		
Small organization		
Less than 50	53	24.77%
51–100	9	4.21%
101–500	27	12.62%
Subtotal	89	41.59%
Medium organization		

501–1000	14	6.54%
1001–10,000	44	20.56%
Subtotal	58	27.10%
Large organization		
10,000–50,000	31	14.49%
Greater than 50,000	36	16.82%
Subtotal	67	31.31%
Job position		
Employee	132	61.68%
Manager	63	29.44%
Full-time student	2	0.93%
Intern	3	1.40%
Other	14	6.54%
Job tenure		
Job tenure \leq 5 years		
Less than 1 year	46	21.50%
1–5 years	116	54.21%
Subtotal	162	75.70%
Job tenure > 5 years		
6–10 years	31	14.49%
11–15 years	16	7.48%
16–20 years	3	1.40%
20 + years	2	0.93%
Subtotal	52	24.30%

TABLE 2
DESCRIPTIVE STATISTICS

Item	N	Minimum	Maximum	Mean	Standard deviation	Skewness		Kurtosis	
						Statistic	Std. error	Statistic	Std. error
DNE1	213	1.0	7.0	4.150	2.004	-.276	.167	-1.172	.332
DNE2	213	1.0	7.0	3.798	2.040	-.046	.167	-1.293	.332
INE1	213	1.0	7.0	4.615	1.792	-.600	.167	-.535	.332
INE2	213	1.0	7.0	4.366	1.739	-.495	.167	-.548	.332
INE3	213	1.0	7.0	4.080	1.983	-.156	.167	-1.169	.332
INE4	213	1.0	7.0	4.601	1.852	-.611	.167	-.569	.332
SCRMA	213	1.0	7.0	4.535	2.179	-.325	.167	-1.274	.332

DNE1 direct network externality 1, DNE2 direct network externality 2, INE1 indirect network externality1, INE2 indirect network externality 2, INE3 indirect network externality 3, INE4 indirect network externality 4, SCRMA social CRM adoption

**TABLE 3
CORRELATIONS**

Item	DNE1	DNE2	INE1	INE2	INE3	INE4	SCRMA
DNE1	1						
DNE2	.664**	1					
INE1	.558**	.628**	1				
INE2	.520**	.611**	.875**	1			
INE3	.393**	.371**	.434**	.429**	1		
INE4	.513**	.537**	.704**	.694**	.534**	1	
SCRMA	.438**	.488**	.528**	.459**	.409**	.473**	1

**refers to p = 0.05

TABLE 4
KMO AND BARTLETT'S TEST

KMO and Bartlett's test		
Kaiser-Meyer-Olkin measure of sampling adequacy		.840
Bartlett's test of sphericity	Approx. chi-square	787.654
	<i>df</i>	15
	Sig.	.000

TABLE 5
RELIABILITY

Item	Variable	Reliability	Composite reliability
DNE1	DNE	.798	.883
DNE2			
INE1	INE	.859	
INE2			
INE3			
INE4			

Determinant = .023

DNE1 direct network externality 1, DNE2 direct network externality 2, INE1 indirect network externality 1, INE2 indirect network externality 2, INE3 indirect network externality 3, INE4 indirect network externality 4, SCRMA social CRM adoption

TABLE 6
FACTOR MATRIX

Item	Factor
	2
DNE1	.755
DNE2	.797
INE1	.891
INE2	.877
INE3	.630

INE4	.835
------	------

**TABLE 7
FIT INDICES**

Fit statistic	Value	Description
Likelihood ratio		
chi2_ms(0) $p >$	0.000	Model vs. saturated baseline vs. saturated
chi2_chi2_bs(2) p	91.157	
> chi2	0.000	
Population error		
RMSEA	0.000	Root-mean-square error of approximation Probability RMSEA \leq 0.05
90% CI	0.000	
Lower bound	0.000	
Upper bound	1.000	
p close		
Baseline comparison		
CFI	1.000	Comparative fit index
TLI	1.000	Tucker-Lewis index

**TABLE 8
RESULTS**

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
Model 1 (construct)					
(Constant)	1.094	.350		3.127	.002
NTE	.820	.078	.584	10.464	.000
Model 2 (dimension)					
(Constant)	.946	.371		2.546	.012
DNE	.146	.045	.246	3.266	.001
INE	.551	.106	.390	5.175	.000
Model 1: $R = .584$; R square = .341; adjusted R square = .337; std. error = 1.7701; F value = 109.490; $p = .000$					

Model 2: $R = .585$; R square = .342; adjusted R square = .336; std. error = 1.7763; F value = 54.581; $p = .000$

REFERENCES

- Acker O, Gröne F, Akkad F et al (2011) Social CRM: how companies can link into the social web of consumers. *J Direct Data Digital Mkt Prac* 13:3–10
- Amelina D, Hidayanto AN, Budi NFA et al (2016) Investigating critical factors of social CRM adoption using technology, organization, and environment (TOE) framework and analytical hierarchy process (AHP). In: *Advanced Computer Science and Information Systems (ICACSIS), 2016 International Conference on*. IEEE, pp 233–238
- Askool S, Nakata K (2011) A conceptual model for acceptance of social CRM systems based on a scoping study. *AI Soc* 26:205–220
- Bagozzi RP (1980) *Causal models in marketing*. Wiley, New York
- Bollen KA (1989) A new incremental fit index for general structural equation models. *Sociol Method Res* 17:303–316
- Chang W, Park JE, Chaik S (2010) How does CRM technology transform into organizational performance? A mediating role of marketing capability. *J Bus Res* 63:849–855
- Chau PY (1999) On the use of construct reliability in MIS research: a meta-analysis. *Info & Mngt* 35:217–227
- Chau PY, Tam KY (1997) Factors affecting the adoption of open systems: an exploratory study. *Mis Quart*:1–24
- Chen IJ, Popovich K (2003) Understanding customer relationship management (CRM) people, process and technology. *Bus Process Manag J* 9:672–688
- Chiu C-M, Cheng H-L, Huang H-Y et al (2013) Exploring individuals' subjective well-being and loyalty towards social network sites from the perspective of network externalities: the Facebook case. *Int J Inform Manage* 33:539–552
- Chwelos P, Benbasat I, Dexter AS (2001) Research report: empirical test of an EDI adoption model. *Inf Syst Res* 12:304–321
- Cooper D, Schindler P (1998) *Business research methods*. Irwin/McGraw-Hill, Burr Ridge, IL
- Faase R, Helms R, Spruit M (2011) Web 2.0 in the CRM domain: defining social CRM. *IJECRM* 5:1–22
- Fabiani S, Schivardi F, Trento S (2005) ICT adoption in Italian manufacturing: firm-level evidence. *Ind Corp Change* 14:225–249
- Flynn BB, Sakakibara S, Schroeder RG et al (1990) Empirical research methods in operations management. *J Oper Manag* 9:250–284
- Frederick FR, Thomas T (1996) *The loyalty effect: the hidden force behind growth, profits, and lasting value*. Harvard Business School Press, Boston, Massachusetts
- Gallaughier JM, Wang Y-M (2002) Understanding network effects in software markets: evidence from web server pricing. *Mis Quart*:303–327
- Goldenberg B (2000) What is CRM? What is an e-customer? Why you need them now. In: *Proceedings of DCI CRM*, Boston, MA, pp 27–29
- Goodhue DL (1995) Understanding user evaluations of information systems. *Manag Sci* 41:1827–1844
- Goolsbee A, Klenow PJ (2002) Evidence on learning and network externalities in the diffusion of home computers. *J Law Econ* 45:317–343
- Gowrisankaran G, Stavins J (2004) Network externalities and technology adoption: lessons from electronic payments. *RJE* 35
- Greenberg P (2009) Social CRM comes of age. In: *White paper sponsored by Oracle*

- Greenberg P (2010) CRM customer relationship management, social CRM strategies, tools, and techniques for engaging your customers, at the speed of light. McGraw Hill Professional, New York
- Grzybowski L (2015) The role of network effects and consumer heterogeneity in the adoption of mobile phones: evidence from South Africa. *Telecomm Policy* 39:933–943
- Gu VC, Schniederjans MJ, Cao Q (2015) Diffusion of innovation: customer relationship management adoption in supply chain organizations. *Int J Qual Innov* 1:6
- Gurbaxani V (1990) Diffusion in computing networks: the case of BITNET. *Commun ACM* 33:65–75
- Hasani T, Bojei J, Dehghantanha A (2017) Investigating the antecedents to the adoption of SCRM technologies by start-up companies. *Telemat Inform*, 5(34), 655–675.
- Heller Baird C, Parasnis G (2011) From social media to social CRM: reinventing the customer relationship. *Strat Leadersh* 39:27–34
- Hu L-T, Bentler PM (1998) Fit indices in covariance structure modeling: sensitivity to underparameterized model misspecification. *Psy Meth* 3:424
- Jackson DW (1994) Relationship selling: the personalization of relationship marketing. *AMJ* 2:45–54
- Jayachandran S, Sharma S, Kaufman P et al (2005) The role of relational information processes and technology use in customer relationship management. *JMarketing* 69:177–192
- Katz ML, Shapiro C (1985) Network externalities, competition, and compatibility. *Am Econ Rev* 75:424–440
- Katz ML, Shapiro C (1986) Technology adoption in the presence of network externalities. *J Polit Econ* 94:822–841
- Kauffman RJ, Mcandrews J, Wang Y-M (2000) Opening the “black box” of network externalities in network adoption. *Inf Syst Res* 11:61–82
- Kietzmann JH, Hermkens K, Mccarthy IP et al (2011) Social media? Get serious! Understanding the functional building blocks of social media. *Bus Horizons* 54:241–251
- Kim J-O, Mueller CW (1978) Introduction to factor analysis: what it is and how to do it. Sage Publications, Beverly Hills, CA
- Kline RB (1998) Principles and practice of structural equation modeling. Guilford Press, New York, NY
- Küpper T, Lehmkuhl T, Wittkuhn N et al (2015) Social CRM performance model: an empirical evaluation. In: 28th bled eConference:# eWellBeing, pp 418–435
- Lee D, Mendelson H (2007) Adoption of information technology under network effects. *Inf Syst Res* 18:395–413
- Lehmkuhl T, Jung R (2013) Towards social CRM-scoping the concept and guiding research. In: 26th Bled eConference: eInnovations: challenges and impacts for individuals, organizations and society, Bled, Slovenia
- Levine J (1993) Relationship marketing. In: *Forbes*, pp 232–234
- Lin K-Y, H-P L (2011) Why people use social networking sites: an empirical study integrating network externalities and motivation theory. *Comput Human Behav* 27:1152–1161
- Metcalfe RM (2007) It’s all in your head: the latest supercomputer is way faster than the human brain. But guess which is smarter? *Forbes* 179:52
- Mithas S, Krishnan MS, Fornell C (2005) Why do customer relationship management applications affect customer satisfaction? *J Marketing* 69:201–209
- Nunnally J (1978) Psychometric methods. McGraw-Hill, New York, NY
- Pai J-C, F-M T (2011) The acceptance and use of customer relationship management (CRM) systems: an empirical study of distribution service industry in Taiwan. *Expert Syst Appl* 38:579–584
- Parthasarathy M, Bhattacharjee A (1998) Understanding post-adoption behavior in the context of online services. *Inf Syst Res* 9:362–379
- Pedhazur EJ, Schmelkin LP (1991) Measurement, design, and analysis: an integrated analysis. Psychology Press, Hillsdale, NJ
- Premkumar G, Ramamurthy K, Nilakanta S (1994) Implementation of electronic data interchange: an innovation diffusion perspective. *J Manage Inform Syst* 11:157–186

- Raman P, Wittmann CM, Rauseo NA (2006) Leveraging CRM for sales: the role of organizational capabilities in successful CRM implementation. *J Pers Selling Sales Manage* 26:39–53
- Riggins FJ, Kriebel CH, Mukhopadhyay T (1994) The growth of interorganizational systems in the presence of network externalities. *Manag Sci* 40:984–998
- Rodriguez M, Trainor K (2016) A conceptual model of the drivers and outcomes of mobile CRM application adoption. *J Res Interact Mark* 10:67–84
- Russell DM, Hoag AM (2004) People and information technology in the supply chain: social and organizational influences on adoption. *Int J Phys Distrib Logist Manag* 34:102–122
- Sarner A, Thompson E, Drakos N et al. (2011) Magic quadrant for Social CRM. Gartner
- Scaglione M, Giovannetti E, Hamoudia M (2015) The diffusion of mobile social networking: exploring adoption externalities in four G7 countries. *Int J Forecasting* 31:1159–1170
- Shapiro C, & Varian H (1999) *Information Rules*. Harvard Business School Press, Boston, MA.
- Sigala M (2011) eCRM 2.0 applications and trends: the use and perceptions of Greek tourism firms of social networks and intelligence. *Comput Human Behav.* 27:655–661
- Song M, Parry ME, Kawakami T (2009) Incorporating network externalities into the technology acceptance model. *J Prod Innovat Manag* 26:291–307
- Srinivasan R, Moorman C (2005) Strategic firm commitments and rewards for customer relationship management in online retailing. *J Marketing* 69:193–200
- Trainor KJ (2012) Relating social media technologies to performance: a capabilities-based perspective. *J Pers Selling Sales Manage* 32:317–331
- Trainor KJ, Andzulis JM, Rapp A et al (2014) Social media technology usage and customer relationship performance: a capabilities-based examination of social CRM. *J Bus Res* 67:1201–1208
- Verhoef PC, Reinartz WJ, Krafft M (2010) Customer engagement as a new perspective in customer management. *J Serv Res* 13:247–252
- Vickery SK, Droge C, Markland RE (1993) Production competence and business strategy: do they affect business performance? *Decision Sci* 24:435–456
- Wamba SF, Carter L (2016) Social media tools adoption and use by SMEs: an empirical study. In: *Social media and networking: concepts, methodologies, tools, and applications*. IGI global, pp 791–806
- Weitzel T, Beimborn D, König W (2006) A unified economic model of standard diffusion: the impact of standardization cost, network effects, and network topology. *Mis Quart* 30:489–514
- Woodcock N, Green A, Starkey M (2011) Social CRM as a business strategy. *J Database Mark Cust Strategy Manag* 18:50–64
- YA A, Kauffman RJ (2001) Should we wait? Network externalities, compatibility, and electronic billing adoption. *J Manage Inform Syst* 18:47–63
- Yawised K, Marshall P (2015) Social CRM: a review of the literature and the identification of new research directions. *Int J Vircom & SocNet* 7:14–20
- Yawised K, Marshall P, Stockdale R (2013) Social CRM: a review of the academic and practitioner literatures and research agendas. In: *MCIS*, pp 101–107
- Zhu K, Kraemer KL, Gurbaxani V et al (2006) Migration to open-standard interorganizational systems: network effects, switching costs, and path dependency. *Mis Quart* 30:515–539

TRANSLATED VERSION: SPANISH

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

VERSION TRADUCIDA: ESPAÑOL

A continuación se muestra una traducción aproximada de las ideas presentadas anteriormente. Esto se hizo para dar una comprensión general de las ideas presentadas en el documento. Por favor, disculpe cualquier error gramatical y no responsabilite a los autores originales de estos errores.

INTRODUCCIÓN

Mucho se ha escrito sobre la creciente importancia de la gestión de relaciones con los clientes (CRM) en el aumento de la capacidad de una empresa para interactuar con sus clientes y clientes potenciales. La aplicación de CRM contribuye no sólo a la adquisición y retención de clientes para la empresa a través de la identificación y satisfacción de las necesidades de los clientes; también facilita la comunicación entre la empresa y sus clientes [1]. Sin embargo, esta es una capacidad peer-to-peer donde la empresa interactúa directamente con un cliente.

La reciente aparición y creciente popularidad de las redes sociales ha introducido un nuevo elemento en CRM. Al agregar la importante dimensión de las redes sociales a los sistemas CRM existentes, las empresas son capaces de combinar los conocimientos existentes sobre cada cliente potencial y actual con nueva información sobre sus actividades en redes sociales. Cuando las empresas o sus productos relacionados se comunican a través de cuentas de linkedin, Facebook o Twitter, las empresas pueden rastrear y administrar la conversación, responder más rápidamente y mejor, y anticiparse a las necesidades de los clientes o clientes potenciales. Esto también conduce a efectos de contagio positivos a través de las páginas de redes sociales donde los miembros de la red interactúan [2, 3]. Por lo tanto, social CRM (SCRM) es el uso de plataformas de redes sociales y herramientas para gestionar las relaciones con los clientes.

Debido a la novedad del SCRM, hay investigaciones limitadas sobre su adopción [4]. Este estudio toma el SCRM como tema principal y propone externalidades de red como la teoría general en la explicación de las adopciones de SCRM en organizaciones empresariales. La teoría de las externalidades de la red es la teoría de que el valor de una tecnología depende de la red más grande de usuarios de esa tecnología. La externalidad de la red se ha definido en la economía y el negocio como un cambio en el beneficio, o superávit, que un agente deriva de un bien o servicio cuando el número de otros agentes que consumen el mismo tipo de bien o servicio cambia [5]. Esto se aplica adecuadamente a la adopción de SCRM porque la naturaleza misma de la tecnología de redes sociales es que permite al usuario interactuar con una red de otros usuarios, y por lo tanto, el valor de esa tecnología de medios sociales se verá afectado por, y tal vez incluso determinado por, su red de usuarios. Para el SCRM, la consecuencia sería que cuantas más empresas utilicen la tecnología, más valiosa será para cada empresa, y cuantas más empresas la adopten y la utilicen [6, 7].

El objetivo de este estudio es investigar la externalidad de la red como un antecedente que afecta a la adopción del SCRM y también describir su impacto.

Antes mencionada, SCRM es una tecnología de vanguardia y su adopción todavía está en su infancia. Hasta biencósimo es que este estudio es el primer intento de explorar la adopción del SCRM en el contexto del SCM. Este estudio proporciona tanto a los investigadores como a los gerentes pruebas teóricas y empíricas de que las externalidades de la red de una empresa en scrm tienen un efecto positivo en su adopción del SCRM. Desde una perspectiva teórica, este estudio se esfuerza por explorar el comportamiento de adopción de SCRM aplicando la teoría de la externalidad de la red y la prueba empíricamente en un ámbito DE SCM. Desde un punto de vista gerencial, los resultados de la investigación sugieren que los profesionales deben examinar los efectos interorganizacionales para entender que la tecnología SCRM esté bien preparada para su implementación.

La siguiente sección es una revisión de la literatura para este estudio. En la sección "Revisión de la literatura", se describe el modelo de investigación, así como las hipótesis subyacentes. Posteriormente, se presenta el método de investigación, junto con los resultados del análisis de datos y la discusión. Por último, en las secciones "Discusión y conclusiones" y "Limitaciones e investigación futura", se discuten las conclusiones, las implicaciones y las oportunidades de investigación futuras.

CONCLUSIÓN

Limitaciones de una investigación futura

Hay varias limitaciones del estudio. En primer lugar, este estudio se basa en un diseño transversal en el que se recopilaban datos de diferentes tipos de negocios en diversas industrias. Sin embargo, el diseño transversal tiene sus limitaciones, ya que no elimina todos los factores externos en la recopilación de información específica de la industria. La investigación futura se esforzará por explorar tanto categorías individuales de industrias como una colección más amplia de industrias dentro de este marco de investigación. Al hacerlo, será necesario aumentar el tamaño de la muestra de la encuesta.

La segunda limitación es que los datos de la encuesta (cuestionarios) se basan en las percepciones de los gerentes. Si bien se trata de un proceso operativo viable para medir varias construcciones, todas las encuestas a cuestionarios están restringidas por el conocimiento y la "buena fe" de los encuestados. No obstante, los análisis de validación y fiabilidad realizados en este estudio proporcionaron cierto nivel de garantía de la capacidad del instrumento para capturar medidas útiles.

En tercer lugar, y por último, como sugiere la adopción de otra literatura en tecnología (particularmente la tecnología social), las externalidades de la red por sí solas podrían no ser adecuadas para explicar plenamente la adopción de la innovación. Los autores presumen además que las externalidades de la red pueden tener un efecto combinatorio con otras teorías de adopción (por ejemplo, el marco de tecnología, organización y medio ambiente (TOE), modelo de ajuste de tecnología de tareas) que se han sugerido previamente en la literatura. Las investigaciones futuras tratarán de explorar estas combinaciones y encontrar modelos de adopción de SCRM más valiosos.

TRANSLATED VERSION: FRENCH

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

VERSION TRADUITE: FRANÇAIS

Voici une traduction approximative des idées présentées ci-dessus. Cela a été fait pour donner une compréhension générale des idées présentées dans le document. Veuillez excuser toutes les erreurs grammaticales et ne pas tenir les auteurs originaux responsables de ces erreurs.

INTRODUCTION

Beaucoup a été écrit sur l'importance croissante de la gestion de la relation client (CRM) dans l'augmentation de la capacité d'une entreprise à interagir avec ses clients et clients potentiels. L'application de CRM contribue non seulement à l'acquisition et à la rétention de clients pour l'entreprise par l'identification et la satisfaction des besoins des clients; il facilite également la communication entre l'entreprise et ses clients [1]. Toutefois, il s'agit d'une capacité peer-to-peer où l'entreprise interagit directement avec un client.

L'émergence récente et la popularité croissante des médias sociaux ont introduit un nouvel élément dans CRM. En ajoutant l'importante dimension des médias sociaux aux systèmes CRM existants, les entreprises sont en mesure de combiner les connaissances existantes sur chaque client potentiel et actuel avec de nouvelles informations sur leurs activités de médias sociaux. Lorsque les entreprises ou leurs produits connexes sont communiqués via linkedin, Facebook ou comptes Twitter, les entreprises peuvent suivre et gérer la conversation, répondre plus rapidement et mieux, et anticiper les besoins des clients ou des clients potentiels. Cela entraîne également des retombées positives à travers les pages des médias sociaux où les membres du réseau interagissent [2, 3]. Ainsi, le CRM social (SCRM) est l'utilisation de plates-formes et d'outils de médias sociaux pour gérer les relations avec les clients.

En raison de la nouveauté du SCRM, les recherches sur son adoption sont limitées [4]. Cette étude prend SCRM comme son thème principal et propose les externalités de réseau comme la théorie globale dans l'explication des adoptions SCRM dans les organisations d'affaires. La théorie des externalités de réseau est la théorie que la valeur d'une technologie dépend du plus grand réseau d'utilisateurs de cette technologie. L'externalité du réseau a été définie en économie et en affaires comme un changement dans l'avantage, ou l'excédent, qu'un agent tire d'un bien ou d'un service lorsque le nombre d'autres agents consommant le même genre de bien ou de service change [5]. Cela s'applique à juste titre à l'adoption de SCRM parce que la nature même de la technologie des médias sociaux est qu'elle permet à un utilisateur de s'engager avec un réseau d'autres utilisateurs, et donc, la valeur de cette technologie des médias sociaux sera affectée par, et peut-être même déterminée par, son réseau d'utilisateurs. Pour scrm, l'implication serait que plus les entreprises utilisent la technologie, plus elle est précieuse pour chaque entreprise, et plus les entreprises l'adopteront et l'utiliseront [6, 7].

L'objectif de cette étude est d'étudier l'externalité du réseau en tant qu'antécédent qui a une incidence sur l'adoption du SCRM et aussi de décrire son impact.

Ce qui précède, SCRM est une technologie de pointe et son adoption est encore à ses balbutiements. Au meilleur de notre connaissance, cette étude est la première tentative d'explorer l'adoption du SCRM dans le contexte du SCM. Cette étude fournit aux chercheurs et aux gestionnaires des preuves théoriques et empiriques que les externalités réseau d'une entreprise dans scrm ont un effet positif sur son adoption SCRM. D'un point de vue théorique, cette étude s'efforce d'explorer le comportement d'adoption de SCRM appliquant la théorie de l'externalité du réseau et de le tester empiriquement dans une arène SCM. D'un point de vue managérial, les résultats de la recherche suggèrent que les praticiens doivent examiner les effets interorganisationnels pour comprendre la technologie SCRM pour être bien préparés à sa mise en œuvre.

La section suivante est un examen de la littérature pour cette étude. Dans la section « Examen de la littérature », le modèle de recherche, ainsi que les hypothèses sous-jacentes, sont décrits. Par la suite, la méthode de recherche, ainsi que les résultats de l'analyse des données et la discussion, sont présentées. Enfin, dans les sections « Discussion et conclusions » et « Limitations et recherches futures », les conclusions, les implications et les possibilités de recherche futures sont discutées.

CONCLUSION

Limitations unerecherche d'avenir nd

Il y a plusieurs limites de l'étude. Premièrement, cette étude est fondée sur une conception transversale où les données ont été recueillies auprès de différents types d'entreprises dans diverses industries. Toutefois, la conception transversale a ses limites, car elle n'élimine pas tous les facteurs externes dans la collecte d'informations propres à l'industrie. Les recherches futures s'efforceront d'explorer à la fois les catégories individuelles d'industries ainsi qu'un ensemble plus large d'industries dans le cadre de la recherche. Ce faisant, la taille de l'échantillon de l'enquête devra être augmentée.

La deuxième limite est que les données de l'enquête (questionnaires) sont fondées sur les perceptions des gestionnaires. Bien qu'il s'agisse d'un processus opérationnel viable pour mesurer diverses constructions, tous les questionnaires sont limités par les connaissances et la « bonne foi » des répondants. Néanmoins, les analyses de validation et de fiabilité effectuées dans le présent étude ont fourni un certain niveau d'assurance quant à la capacité de l'instrument à prendre des mesures utiles.

Troisièmement, et enfin, comme le suggèrent d'autres documents sur l'adoption de la technologie (en particulier les technologies sociales), les externalités des réseaux à elles seules pourraient ne pas être suffisantes pour expliquer pleinement l'adoption de l'innovation. Les auteurs émettent en outre l'hypothèse que les externalités du réseau peuvent avoir un effet combinatoire avec d'autres théories d'adoption (p. Ex., cadre de technologie, d'organisation et d'environnement (TOE), modèle d'ajustement de la technologie des tâches) qui ont déjà été suggérées dans la littérature. Les recherches futures chercheront à explorer ces combinaisons et à trouver ainsi des modèles d'adoption de SCRM plus précieux.

TRANSLATED VERSION: GERMAN

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

ÜBERSETZTE VERSION: DEUTSCH

Hier ist eine ungefähre Übersetzung der oben vorgestellten Ideen. Dies wurde getan, um ein allgemeines Verständnis der in dem Dokument vorgestellten Ideen zu vermitteln. Bitte entschuldigen Sie alle grammatikalischen Fehler und machen Sie die ursprünglichen Autoren nicht für diese Fehler verantwortlich.

EINLEITUNG

Es wurde viel über die wachsende Bedeutung des Customer Relationship Management (CRM) für die Erweiterung der Interaktion eines Unternehmens mit seinen Kunden und potenziellen Kunden geschrieben. Die Anwendung von CRM trägt nicht nur durch die Ermittlung und Befriedigung der Kundenbedürfnisse zur Gewinnung und Bindung von Kunden für das Unternehmen bei; sie erleichtert auch die Kommunikation zwischen dem Unternehmen und seinen Kunden [1]. Dies ist jedoch eine Peer-to-Peer-Funktion, bei der das Unternehmen direkt mit einem Kunden interagiert.

Die jüngste Entstehung und wachsende Popularität von Social Media hat ein neues Element in CRM eingeführt. Durch die Hinzufügung der wichtigen Social-Media-Dimension zu den bestehenden CRM-Systemen sind Unternehmen in der Lage, das vorhandene Wissen über jeden potenziellen und aktuellen Kunden mit neuen Informationen über ihre Social-Media-Aktivitäten zu kombinieren. Wenn die Unternehmen oder ihre verwandten Produkte über linkedin-, Facebook- oder Twitter-Konten kommuniziert werden, können Unternehmen das Gespräch verfolgen und verwalten, schneller und besser reagieren und die Bedürfnisse der Kunden oder potenziellen Kunden antizipieren. Dies führt auch zu positiven Spillover-Effekten über Social-Media-Seiten, auf denen Netzwerkmitglieder interagieren [2, 3]. Social CRM (SCRM) ist daher der Einsatz von Social-Media-Plattformen und Tools zur Verwaltung von Kundenbeziehungen.

Aufgrund der Neuheit von SCRM gibt es nur begrenzte Forschungsergebnisse über seine Annahme [4]. Diese Studie nimmt SCRM als Hauptthema und schlägt Netzwerkexternalitäten als übergreifende Theorie bei der Erklärung von SCRM-Adoptionen in Unternehmensorganisationen vor. Die Theorie der Netzwerkexternalitäten ist die Theorie, dass der Wert einer Technologie vom größeren Netzwerk der Benutzer dieser Technologie abhängt. Die Externalität des Netzwerks wurde in Wirtschaft und Wirtschaft als eine Änderung des Vorteils oder Überschusses definiert, den ein Agent aus einer Gut oder Dienstleistung ableitet, wenn sich die Anzahl der anderen Agenten, die die gleiche Art von Waren oder Dienstleistungen konsumieren, ändert [5]. Dies gilt passenderweise für die SCRM-Einführung, da die Natur der Social-Media-Technologie darin besteht, dass sie es einem Benutzer ermöglicht, mit einem Netzwerk anderer Benutzer in Kontakt zu treten, und daher wird der Wert dieser Social-Media-Technologie durch sein Benutzernetzwerk beeinflusst und vielleicht sogar von ihm bestimmt. Für SCRM würde dies zur Folge haben, dass je mehr Unternehmen die Technologie nutzen, desto wertvoller ist sie für jedes Unternehmen, und je mehr Unternehmen sie übernehmen und nutzen [6, 7].

Ziel dieser Studie ist es, die Externalität des Netzwerks als Vorläufer zu untersuchen, die sich auf die SCRM-Einführung auswirkt, und auch deren Auswirkungen zu beschreiben.

Das SCRM ist eine hochmoderne Technologie, deren Einführung noch in den Kinderschuhen steckt. Nach bestem Wissen und Gewissen ist diese Studie der erste Versuch, die SCRM-Einführung im SCM-Kontext zu untersuchen. Diese Studie liefert sowohl Forschern als auch Managern theoretische und empirische Belege dafür, dass sich die externen Effekte eines Unternehmens in SCRM positiv auf die SCRM-Einführung auswirken. Aus theoretischer Sicht versucht diese Studie, das Akzeptanzverhalten von SCRM unter Anwendung der Netzwerkexternalitätstheorie zu untersuchen und empirisch in einer SCM-

Arena zu testen. Aus Management-Sicht deuten die Ergebnisse der Forschung darauf hin, dass Praktiker die interorganisatorischen Effekte untersuchen müssen, um die SCRM-Technologie zu verstehen, um gut auf ihre Implementierung vorbereitet zu sein.

Der nächste Abschnitt ist ein Überblick über die Literatur für diese Studie. Im Abschnitt "Literaturkritik" wird das Forschungsmodell sowie die zugrunde liegenden Hypothesen beschrieben. Anschließend wird die Forschungsmethode zusammen mit den Datenanalyseergebnissen und der Diskussion vorgestellt. Schließlich werden in den Abschnitten "Diskussion und Schlussfolgerungen" und "Beschränkungen und zukünftige Forschung" die Schlussfolgerungen, Implikationen und zukünftigen Forschungsmöglichkeiten erörtert.

SCHLUSSFOLGERUNG

Einschränkungen einernd-Zukunftsforschung

Es gibt mehrere Einschränkungen der Studie. Erstens basiert diese Studie auf einem Querschnittsentwurf, bei dem Daten aus verschiedenen Unternehmenstypen in verschiedenen Branchen gesammelt wurden. Das Querschnittsdesign hat jedoch seine Grenzen, da es nicht alle externen Faktoren bei der Erfassung branchenspezifischer Informationen eliminiert. Die künftige Forschung wird sich bemühen, sowohl einzelne Branchenkategorien als auch eine breitere Sammlung von Industrien innerhalb dieses Forschungsrahmens zu untersuchen. Dabei muss der Stichprobenumfang der Erhebung erhöht werden.

Die zweite Einschränkung besteht darin, dass die Erhebungsdaten (Fragebögen) auf der Wahrnehmung der Manager basieren. Obwohl dies ein praktikabler operativer Prozess zur Messung verschiedener Konstrukte ist, werden alle Fragebogenerhebungen durch das Wissen und den "guten Glauben" der Befragten eingeschränkt. Die in dieser Studie durchgeführten Validierungs- und Zuverlässigkeitsanalysen lieferten jedoch ein gewisses Maß an Sicherheit für die Fähigkeit des Instruments, nützliche Maßnahmen zu erfassen.

Drittens und schließlich, wie andere Literatur im Bereich der Technologie (insbesondere der sozialen Technologie) nahelegt, könnten die externen Netzeffekte allein nicht ausreichen, um die Einführung von Innovationen vollständig zu erklären. Die Autoren vermuten ferner, dass Netzwerkexternalitäten einen kombinatorischen Effekt mit anderen Adoptionstheorien (z. B. Technologie, Organisation und Umwelt (TOE) Framework, Task-Technology Fit-Modell) haben können, die zuvor in der Literatur vorgeschlagen wurden. Zukünftige Forschungsarbeiten werden versuchen, diese Kombinationen zu erforschen und dabei wertvollere SCRM-Adoptionsmodelle zu finden.

TRANSLATED VERSION: PORTUGUESE

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

VERSÃO TRADUZIDA: PORTUGUÊS

Aqui está uma tradução aproximada das ideias acima apresentadas. Isto foi feito para dar uma compreensão geral das ideias apresentadas no documento. Por favor, desculpe todos os erros gramaticais e não responsabilize os autores originais responsáveis por estes erros.

INTRODUÇÃO

Muito tem sido escrito sobre a crescente importância da gestão de relacionamento com o cliente (CRM) no aumento da capacidade da empresa de interagir com seus clientes e potenciais clientes. A aplicação do CRM contribui não apenas para a aquisição e retenção de clientes para a empresa por meio da identificação

e satisfação das necessidades dos clientes; também facilita a comunicação entre a empresa e seus clientes [1]. No entanto, este é um recurso peer-to-peer onde a empresa interage diretamente com um cliente.

O recente surgimento e crescente popularidade das mídias sociais introduziu um novo elemento no CRM. Ao adicionar a importante dimensão das mídias sociais aos sistemas de CRM existentes, as empresas são capazes de combinar o conhecimento existente sobre cada cliente prospectivo e atual com novas informações sobre suas atividades de mídia social. Quando as empresas ou seus produtos relacionados são comunicados via contas do linkedin, Facebook ou Twitter, as empresas podem rastrear e gerenciar a conversa, responder mais rapidamente e melhor e antecipar as necessidades dos clientes ou potenciais clientes. Isso também leva a efeitos positivos de repercussão através de páginas de mídia social onde os membros da rede interagem [2, 3]. Assim, o CRM social (SCRM) é o uso de plataformas de mídia social e ferramentas para gerenciar o relacionamento com os clientes.

Devido à novidade da SCRM, há pesquisas limitadas sobre sua adoção [4]. Este estudo tem a SCRM como tema principal e propõe externalidades de rede como a teoria geral na explicação das adoções da SCRM em organizações empresariais. A teoria das externalidades da rede é a teoria de que o valor de uma tecnologia depende da maior rede de usuários dessa tecnologia. A externalidade da rede tem sido definida na economia e nos negócios como uma mudança no benefício, ou excedente, que um agente deriva de um bem ou serviço quando o número de outros agentes que consomem o mesmo tipo de bom ou serviço muda [5]. Isso se aplica adequadamente à adoção do SCRM porque a própria natureza da tecnologia de mídia social é que permite que um usuário se envolva com uma rede de outros usuários, e assim, o valor dessa tecnologia de mídia social será impactado por, e talvez até mesmo determinado por sua rede de usuários. Para a SCRM, a implicação seria que quanto mais as empresas usam a tecnologia, mais valiosa ela é para cada empresa, e mais as empresas a adotarão e usarão [6, 7].

O objetivo deste estudo é investigar a externalidade da rede como um antecedente que impacte a adoção da SCRM e também descrever seu impacto.

Acima mencionado, a SCRM é uma tecnologia de ponta e sua adoção ainda está em sua infância. Para o melhor de nosso conhecimento, este estudo é a primeira tentativa de explorar a adoção do SCRM no contexto SCM. Este estudo fornece aos pesquisadores e gestores evidências teóricas e empíricas de que as externalidades de rede de uma empresa no SCRM têm um efeito positivo em sua adoção de SCRM. Do ponto de vista teórico, este estudo se esforça para explorar o comportamento de adoção da SCRM aplicando a teoria da externalidade da rede e testá-la empiricamente em uma arena SCM. Do ponto de vista gerencial, os achados da pesquisa sugerem que os profissionais precisam examinar os efeitos interorganizadores para entender a tecnologia SCRM para estar bem preparado para sua implementação.

A próxima seção é uma revisão da literatura para este estudo. Na seção "Revisão da Literatura", o modelo de pesquisa, bem como as hipóteses subjacentes, é descrito. Posteriormente, é apresentado o método de pesquisa, juntamente com os resultados da análise de dados e a discussão. Finalmente, nas seções "Discussão e conclusões" e "Limitações e pesquisas futuras", são discutidas as conclusões, implicações e futuras oportunidades de pesquisa.

CONCLUSÃO

Limitações and Future Research

Existem várias limitações do estudo. Em primeiro lugar, este estudo baseia-se em um projeto transversal onde os dados foram coletados de diferentes tipos de negócios em vários setores. No entanto, o desenho transversal tem suas limitações, pois não elimina todos os fatores externos na coleta de informações específicas do setor. Pesquisas futuras se esforçarão para explorar tanto categorias individuais de indústrias como uma coleção mais ampla de indústrias dentro deste quadro de pesquisa. Ao fazê-lo, o tamanho amostral da pesquisa precisará ser aumentado.

A segunda limitação é que os dados da pesquisa (questionários) são baseados na percepção dos gestores. Embora este seja um processo operacional viável para medir diversos construtos, todos os questionários são restritos pelo conhecimento e "boa fé" dos respondentes. No entanto, as análises de validação e

confiabilidade realizadas neste estudo forneceram algum nível de garantia da capacidade do instrumento de capturar medidas úteis.

Em terceiro lugar, e finalmente, como sugere outra literatura em tecnologia (particularmente tecnologia social), as externalidades da rede por si só podem não ser adequadas para explicar totalmente a adoção da inovação. Os autores ainda afirmam que as externalidades da rede podem ter um efeito combinatório com outras teorias de adoção (por exemplo, tecnologia, organização e ambiente (TOE), modelo de ajuste de tecnologia de tarefas) que foram previamente sugeridas na literatura. Pesquisas futuras buscarão explorar essas combinações e encontrar modelos de adoção SCRM mais valiosos.