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Organizational Strategic Agility And Goal Achievement: An Empirical Study In Electronic Commerce

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Abstract.

The objectives of this research are to investigate the relationship of organizational strategic agility (operational agility, customer alertness agility, competitor awareness agility, and strategic business relationship agility) and goal achievement. The conceptual model is drawn using dynamic capability and quantitative design is applied. The data was collected using a questionnaire from 401 e-Commerce businesses in Thailand. Structural equation modelling is used to assess the construct validity, reliability and test the posited hypotheses. the result represents that operational agility, customer alertness agility, and strategic business relationship agility all favourably affect goal achievement, while competition awareness agility adversely affects all two aspects of goal success, according to the findings. Cloud computing flexibility and cloud computing integration are two dimensions of cloud computing competence that positively affect company strategic agility. Market turbulence has a favourable impact on organizational strategic agility, but technological turbulence has a negative impact. This research developed and empirically examines organizational strategic agility and its impacts on goal achievement in e-Commerce business. These findings are interpreted and discussed, as well as their theoretical and practical ramifications.

Keywords: organizational strategic agility, goal achievement, environmental turbulence, cloud computing capability.

JEL Classification: L26, M15, O33, O34

Introduction

Organizational agility is widely acknowledged as a key strategic dynamic capability in assisting organizations in accomplishing business goals (Teece,

Peteraf & Leih, 2016) by detecting and responding to changes in the environment rapidly and effectively (Arbussa, Bikfalvi & Marquès, 2017; Nurcholis, 2019). Moreover, organizational agility in the literature is commonly divided into three categories including agile capability, agile drivers, and agile enablers (Walter, 2021). Recently, the agile capability is more attractive to researchers because it is necessary for maximizing sustainable competitive performance in the disruptive environment surrounding organizations of all business industries (Yusuf, Menhat, Abubakar & Ogbuke, 2020). Based on dynamic capability theory, this research argues that organizational strategic agility is a multidimensional agile capability to sense change and respond to uncertain circumstances (Baškarada & Koronios, 2018).

This organizational strategic agility is more necessary to organizations especially since the rapid advancement of new technology has led to hypercompetitive markets have emerged, posing serious dangers to business survival (Nurcholis, 2019). Moreover, the effect of a coronavirus disease 2019 (COVID-19) pandemic drove the electronic commerce (e-Commmerce) industry forward in a matter of months, increasing the adoption of online shopping, digital communications, website construction, and other industry trends at a rate that would have taken years prior (Koch, Frommeyer & Schewe, 2020). Therefore, the recent situation forces businesses to be agile organizations and provide organizational strategic agility for supporting businesses and it emerges as a critical issue for existence and success (Walter, 2021).

However, major agile research has looked at agility as a supply chain principle, a manufacturing principle, or organizational agility characteristics and tended to highlight the sophisticated methods of the relationship between agility and spending money on digital infrastructure (Baškarada & Koronios, 2018). Therefore, this research intends to investigate the significant influencing role of organizational strategic agility on goal achievement. The two main research questions are how organizational strategic agility does influence goal achievement? How environmental turbulence and cloud computing capability do influence organizational strategic agility?

Empirical results of this research give fresh innovative understanding of the agility paradigm through exploring the effect of organizational strategic agility on goal achievement and combining knowledge from cloud computing capacity and environmental turbulences as the important antecedents in encourage organizational strategic agility. The findings contribute towards the theoretical implication through creating organizational strategic agility concept with dynamic capability theory as

well as proposing four dynamic capabilities underpinning organizational strategic agility, which include the four dimensions of agile capabilities: (1) operational agility, (2) customer alertness agility, (3) competitor awareness agility, and (4) strategic business relationship agility.

2. Literature review and hypotheses development

2.1 Dynamic Capability theory

In today's intensely competitive business world, agility has emerged as a vital firm capability (Walter, 2021). Agility refers to organization's capacity to detect and adapt swiftly to changes in the external environment, which typically necessitates rearranging company resources (Tallon, Queiroz, Coltman & Sharma, 2019; Walter, 2021). Grant (1996) and, more subsequently, Ayabakan, Bardhan and Zheng (2017) outline a hierarchical capability structure inside organizations, in which lower-order capabilities translate into higher-order skills. Higher-order capabilities provide a significant competitive advantage since they are both valued and uncommon (Gaviria, Matute & Baier 2021). Agility is a dynamic capacity since it embodies these characteristics and is utilized to create and change other skills (Ghasemaghaei, Hassanein, & Turel, 2017). The dynamic capability theory views agility as critical high-order dynamic capability that is obtained through the development of work routines and the usage of low-order operational capabilities that enable organizations to align, enhance, and reconfigure other capabilities and resources (Ghasemaghaei et al., 2017; Ravichandran, 2018; Teece et al., 2016). From dynamic capability perspective, this research creates organizational strategic agile as the higher-order capabilities to provide a significant competitive advantage to affect organizational goals since they are both valuable and rare (Ravichandran, 2018; Teece, 2007).

2.2 Organizational strategic agility and goal achievement

Organizational strategic agility is defined as multidimensional agility capabilities to perceive changes and adapt to unpredictability by swiftly shifting resources from both inside and outside the organization to meet organizational goals achievement (Baškarada & Koronios, 2018; Nurcholis, 2019; Teece et al., 2016). The concept of agility has gotten a lot of attention in the literature, there is a lot of variety in its area (Walter, 2021). Major supply chain research conducts three dimensions including (1) customer agility reflects the ability to identify customer needs; (2) operational agility involves the capacity to clarify organizational procedures such as logistic or manufacturing processes while increasing the speed time development;

(3) partnering agility reflects the capacity to maintain stakeholders to maximize resources and acquire knowledge such as suppliers' knowledge (Felipe, Leidner, Roldán & Leal-Rodríguez, 2020; Liu, Chan, Yang & Niu, 2018; Sambamurthy, Bharadwaj & Grover, 2003; Walter, 2021). Marketing research often applies market capitalizing agility and operational adjustment agility as dimensions of organizational agility (Walter, 2021). Some academics go further into aspects like internal marketing agility, which is a vital dynamic characteristic of an organization's ability to adjust quickly to worldwide market shifts and rivalry (Asseraf, Lages & Shoham, 2019; Gomes, Sousa & Vendrell, 2020; Li, Liu & Bustinza, 2019; Walter, 2021). Major entrepreneurial research applies two dimensions including (1) entrepreneurial agility as the capacity to proactively forecast and capture opportunities of markets and (2) adaptive agility as the capacity to identify and defensively react to the turbulence market (Walter, 2021).

Consequently, this research conceptualizes a framework and the relationship between organizational strategic agility, goal achievement, environmental turbulence, cloud computing capability on the dynamic capabilities perspective and previous research, indicating that organizational strategic agility is a vital dynamic capability for effectively managing organizational resources in environmental uncertainty and resulted to the success of organizational objectives of overall goals through four dimensions: operational agility, competitor awareness agility, customer alertness agility, strategic business relationship agility (Bakarada & Koronios, 2018; Mandal, 2019; Tallon et al., 2019; Walter, 2021). Four dimensions are intertwined, and agile businesses will have more capabilities with all four dimensions since each one reinforces the others.

Operational agility is defined as an ongoing process' capacity to rapidly make outstanding decisions and operate organizational processes in quickly responding (Bakarada & Koronios, 2018; Carvalho, Sampaio, Rebentisch, Carvalho & Saraiva, 2019). It denotes the organization's capacity to make quick adjustments and efficiently adapt internal procedures in reaction to such changes, emphasizing the organization's flexibility and fast response methods (Liu et al., 2018). In the face of change, such operational processes are the precondition that enable businesses to quickly present appropriate answers (Lu & Ramamurthy, 2011). Agile organizations that excel at implementing a new business planning model can fulfill financial and marketing goals by combining the capacity to make excellent judgments and quickly incorporate new strategies and business models with the ability to use distinctive strategic assets and goods (Felipe et al., 2020; Huang, Pan & Ouyang, 2014; Nurcholis, 2020). Scholars proposed that agility in organizational

operations facilitates e-Commerce businesses' successful decision by integrating the production, supply chain, and marketing of products, as well as fastening the circulation link and expanding the chain's value, which leads to increased organizational goals (Huang et al., 2014; Li, Lin, Turel, Liu & Luo, 2020). Clearly, operational agility is the capacity to meet organizational goals while obtaining and/or sustaining a competitive edge in the face of fast and unpredictable change (Huang et al., 2014). Thus, the hypotheses are proposed as follows:

Hypothesis 1a: Operational agility positively influences strategic goal achievement.

Hypothesis 1b: Operational agility positively influences financial goal achievement.

Customer alertness agility is defined as the capacity to detect and respond quickly to changing client demands to gather market intelligence (Chatfield & Reddick, 2018; Felipe, Roldán & Leal, 2016; Gölgeci, Arslan, Dikova & Gligor, 2019). Customer alertness agility emphasizes the importance of customers in motivating enterprises' competitive actions in a volatile environment by focusing on continuous interactions with them (Chatfield & Reddick, 2018). Growing speed of globalization, fluctuating customer needs, competitive rivalry, and quick technical breakthroughs define today's corporate environment, making it challenging to build durable competitive advantages (Verhoef et al., 2021). Instead, in a hypercompetitive market, the capacity to continually launch and leverage competitive activities to establish a succession of transient advantages, known as customer alertness agility, becomes crucial to survival and profitability (Roberts & Grover, 2012). Customer alertness agility allows businesses to tailor their products that fit the demands of customers while also increasing customer happiness (Zhou et al., 2018). Greater crucially, customer agility helps firms to absorb new customer ideas that drive service and product breakthroughs, resulting in more potential for competitive action (Chatfield & Reddick, 2018; Roberts & Grover, 2012). As a result, e-Commerce businesses that confront severe competition and changing consumer expectations must prioritize customer adaptability. Thus, the hypotheses are proposed as follows:

Hypothesis 2a: Customer alertness agility positively influences strategic goal achievement.

Hypothesis 2b: Customer alertness agility positively influences financial goal achievement.

Competitor awareness agility is defined as the capacity to perceive rivals' actions fast and deliver critical information to alert businesses for preparing and responding promptly to competitors' activities (Altschuller,

Gelb & Henry, 2010; Lim, 2013). The necessity of competition evaluation as part of strategic analysis and planning is frequently emphasized in the strategy literature (Reddy & Reddy, 2002). Competitive awareness agility, or the capacity to feel and accurately foresee opponents' upcoming movements, can provide a foundation for long-term competitive advantage that led organizations achieve objective goals (Lim, 2013). Competitive awareness agility provides scanning ability to identify major rivals is critical for companies, especially in a hyper-competitive environment, so they devote themselves to developing organizational strategies and operational procedures to obtain a competitive edge and outperform their competitors (Gao, Tang, Wang & Yin, 2018). Businesses that develop competitive awareness agility can build a prediction capability over time see greater gains in business profit and strategic goals over the same time span (Lim, 2013; Zajac & Bazerman, 1991). Thus, the hypotheses are proposed as follows:

Hypothesis 3a: Competitor awareness agility positively influences strategic goal achievement.

Hypothesis 3b: Competitor awareness agility positively influences financial goal achievement.

Strategic Business Relationship Agility is defined as the organization's capability to utilize cooperation potentials with excellent detecting, then quickly seizing by utilizing those good opportunities to revise and broaden its entire network to gain access to information, competencies, and resources from business connections, unless they own something or not (Sambamurthy, 2003; Teece et al., 2016). Organizations, where apply strategic business relationship agility, can create a network of expanded strategic or virtual relationships allows companies to swiftly locate relevant partners, adjust current alliances, and explore solution or competitive opportunities (Liu, Yang, Qu & Liu, 2016). Business connection that is strategic agility is crucial in many businesses, notably in high-tech industry which they primarily work collaboratively in the areas of research and development (R&D) (Crick, Crick & Tebbett, 2020; Kilubi, 2016). As a result, these types of collaborations are expected to have a significant impact on the respective enterprises' long-term product-market partnerships (Kilubi, 2016). Given that R&D alliances could have a different impact on resource topologies than other forms of alliances, it's important focusing on that type of collaboration rather than strategic alliances overall generally (Hagedoorn, Roijakkers & Van, 2006). Hence, strategic business relationship agility allows organizations to adopt or adapt to their business relationships while they require access to competency, asset, or knowledge that using benefits organizations to quickly identify appropriate

partners or implement new business relationships (Crick et al., 2020; Kilubi, 2016). Thus, the hypotheses are proposed as follows:

Hypothesis 4a: Strategic business relationship agility positively influences strategic goal achievement.

Hypothesis 4b: Strategic business relationship positively influences financial goal achievement.

2.3 The relationship among organizational strategic agility, environmental turbulence, and cloud computing capability.

Organizations are challenged by the ambiguity in translating technical innovations into solutions which should suit consumers' expectations, as well as the uncertainty connected with the market prospects that a new technology may provide (Liu et al., 2018). As a result, organizational agility is a critical approach for businesses to manage their assets and capabilities swiftly in response to environment turbulence, volatile market conditions and technological development (Tallon et al., 2019). Thus, this research implies two antecedents, which are environmental turbulences and cloud computing capability, influence formulating of organizational strategic agility.

Environmental turbulence refers to the fluctuation in the environment as a consequence of shifting consumer preferences, product and service development, technological advances or competitiveness (Coreynen, Matthyssens, Vanderstraeten & Witteloostuijn, 2020; Gomezel & Aleksić, 2020). Environmental turbulence results both external linkages and the rate of changing cycle of organization by increasing uncertainty and risk in the corporation's business operations, as well as the causal relationship between strategy and capabilities of organizations (Gomezel & Aleksić, 2020; Wang, Dou, Zhu & Zhou, 2015). As a result, this research divides environmental turbulence into two categories: technology turbulence and market turbulence. The degree of unpredictability in a technology context is characterized as technical turbulence (Coreynen et al., 2020) and the pace of change in the makeup of consumers and their preferences is referred to as market turbulence (Ashrafi, Zare, Trkman & Afshari, 2019; Wang et al., 2015). Organizational strategic agility is viewed as the key dynamic competence that required in the face of a certain level of environmental volatility and it is mostly generated by organizations when they face market unpredictability and new technological changing (Tallon et al., 2019; Teece et al., 2016). The most of management research reveals the possible contingent role of technology and market turbulences that companies struggle to understand changing market trends or new technology (Cek & Eyupoglu, 2020; Walter, 2021). As a result, businesses are driven to develop organizational strategic agility to deal with the

turbulence in the business environment and the hypotheses are proposed as follows:

Hypothesis 5a: Technological turbulence positively influences organizational strategic agility.

Hypothesis 5b: Market turbulence positively influences organizational strategic agility.

Cloud computing capability is defined as organization's ability to deploy IT service patterns in which both hardware and software services are provided on-demand via a network in a self-service model to customers, operations, rivals, and partners, regardless of location or device (Liu et al., 2018). Cloud computing offers distinct advantages such as pay-per-use, collaborative, and scalability, these qualities may be divided into two categories: (1) cloud computing flexibility is defined as the speed and efficacy with which organizations deploy cloud-based computer technology services to help them run their businesses and (2) cloud computing integration is defined as the extent to which organizations have combined technological infrastructure, such as information and data technology tools, using cloud computing technologies (Khayer, Jahan, Hossain & Hossain, 2020; Liu et al., 2018; Schneider & Sunyaev, 2016). Cloud computing flexibility can help a business's peak load capacity and ability to swiftly install IT applications, which significantly alters the technological architecture of an organization's data system and changes how IT tools are shipped and deployed (Battleson, West, Kim, Ramesh & Robinson, 2016). Cloud computing integration can assist IT architecture incorporation to increase information flow and process communication between functional divisions within an organization, allowing organizations to easily respond to market changing requirements and, as a result, better organizational strategic agility (Felipe et al., 2020). Previous results consensus with Liu et al. (2018) and Senyo et al. (2018) whose confirm that both flexibility and integration remain crucial for businesses to establish and retain strategic agility. Thus, the hypotheses are proposed as follows:

Hypothesis 5a: Cloud computing flexibility positively influences organizational strategic agility.

Hypothesis 5b: Cloud computing integration positively influences organizational strategic agility.

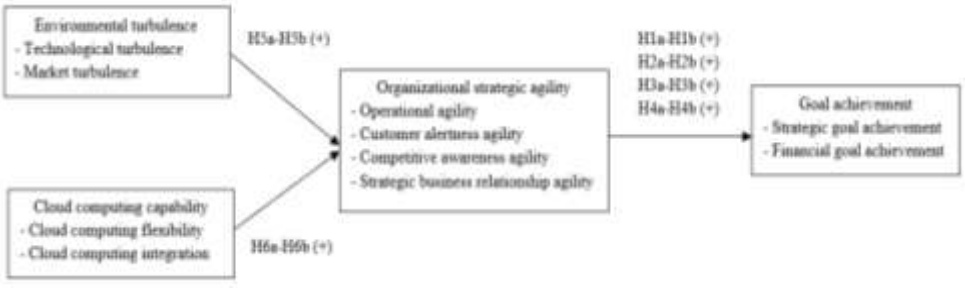

Figure 1. Research framework

3. Method

3.1 Sample selection and data collection procedures

This research investigates into e-Commerce businesses in Thailand, which is considered a developing market. Respondents are the administrators of e-Commerce enterprises in software, Computing, and technology from the Department of Business Development dataset, which can be found at www.dbd.go.th. However, many respondents opt not to take questionnaire sheets by post owing to the corona virus disease 2019 (COVID-19) pandemic. Hence, electronic and traditional questionnaires are used in this research, and questionnaires are sent in two ways. The first section of the surveys sends out vital information by post (each package of the sent letter has a cover letter containing an interpretation of the research, a questionnaire, and a postage-prepaid return envelope). The second section involves sending electronic mails over the internet and scanning QR codes using a line program (depending on the requirement of the key information).

In early January 2021, a total of 1,574 surveys were sent and 111 electronic mails were delivered (companies preferred). The researcher got complete questionnaires in the first two weeks. While, the second part, after three weeks, the researcher followed up with e-Commerce enterprises that had not yet responded to check and remind them to complete the questionnaire using the website's chat box function and electronic mails. There were 455 questionnaires returned, 401 of which were useable and 54 of which were incomplete and useless. As a result, the effective response rate was at 23.798 percent, which is a representative sample size (Nulty, 2008).

The demographic profile of respondents reveals that there are more females (65.59%) and the majority of respondents are between the ages of 30 and 40 (44.49%). Most respondents (56.36%) had a bachelor's degree and job experience ranging from one to five years (54.11%). The majority of respondents (31.92%) have monthly incomes in the range of 25,000 to 50,000 baths, while the rest have incomes in the range of 50,001

to 100,000 baths (25.19%), more than 100,000 baths (24.93%), and less than 25,000 baths (17.96%).

3.2 Measurements

3.1.1 Dependent Variable

Goal achievement is a critical outcome of organizational operations in accordance with organizational plan put into place to reflect the consequences of organizational strategic agility, which include (1) financial goal achievement of maximizing profits, revenues, sales volumes, and decline of reduced sales, and (2) strategic goal achievement of gaining competitive advantage, market share, trust, and recognition in quality of the product (Durmuşoğlu, Apfelthaler, Nayir, Alvarez & Mughan, 2012). This research adapts a four-item scale for financial goal achievement and a four-item scale for strategic goal achievement adapted from Durmuşoğlu et al. (2012), Elbashir et al. (2008), Kuo and Chen (2008) research.

3.1.2 Independent Variables

Operational agility is the ability of dynamic processes to make outstanding decisions and put organizations into action quickly included efficient decision is unbiased, and new capabilities are integrated with changing strategy and business models. This construct includes a four-item scale and was modified from Felipe et al. (2016), Park, Sawy and Fiss (2017) and Nurcholis (2019).

Customer alertness agility is the capacity to recognize market changes quickly and find new market trends and opportunities became part of the strategic dynamic competence to swiftly detect and respond to unpredictable customers' demands to generate market intelligence (Chatfield & Reddick, 2018; Felipe et al., 2016; Gölgeci et al., 2019). This construct, which includes a four-item scale, was developed from Nurcholis (2019) and Mandal (2019).

Competitor awareness agility is the strong dynamic capability to sense competitors' activities and respond to competitors' activities with rapidly time frame included the informational process to collects data of competitors with short time frame (Lim, 2013; Reddy & Reddy, 2002; Yang & Liu, 2012). A four-item scale of Yang and Liu (2012) research is adapted for this construct.

Strategic business relationship agility is building ability of new networks for strategic proposals and the capacity to harness the benefits of business networks are examples of the ability to leverage cooperation possibilities and develop new partnership networks or stakeholder networks in a short time period (Sambamurthy et al., 2003; Teece et al., 2016; Vagnoni & Khoddami, 2016).

3.1.3 Antecedent Variables

Environmental turbulence is unsteady situation assessed by (1) technical turbulence, which is connected to the effect and velocity of technological advances, and (2) market turbulence, which is related to the impact and efficiency of rivals' strength, speed, uniqueness, and marketing strategy (Coreynen et al., 2020). This construct, which includes an eight-item scale, is modified from Zhou et al. (2018) and Coreynen et al. (2020).

Cloud computing capability is the ability to swiftly install mass cloud computing technologies while reducing capital costs and respond promptly to highly volatile business environments, which is divided into two types: (1) cloud computing flexibility refers to a company's ability to quickly and efficiently supply cloud-based information systems solutions to help them run their business, (2) cloud computing integration is information and data technological applications provided by the cloud technologies are included in level to which internal and external information systems capabilities are integrated (Khayer et al., 2020; Schneider & Sunyaev, 2016). This construct, which includes an eight-item scale, is modified from Liu et al. (2016).

3.1.4 Control Variables

Organizational size is the number of employees and represented as a dummy variable. Previous organizational agility studies, the workforce was included as a control variable since the number of employees can impact organizational agility (Panda & Rath, 2017).

Organizational age represented by a dummy variable, and it has both advantages as well as disadvantages on organizational competency in terms of technology, mobility, and profitability derived from agile operations (Ravichandran, 2018).

Organizational capital is the concepts of money that businesses use to acquire things or deliver services to the aspect of the economy that business operations are based on, and this variable represented by a dummy variable. Financial capital has the potential to affect organizational capacities, resulting in the successful implementation of organizational strategies and spectacular goal attainment (Teece et al., 2016).

Organizational type is the organizational form that a business selects have an impact on a variety of issues, many of which will determine the company's success (Boddy, 2010). This variable represented by a dummy variable.

3.3 Test of Non-Response Bias

This research used a t-test to compare data from the early and recent groups to see whether there was non-response bias (Armstrong & Overton, 1977). All 401 surveys received were sorted into basically two equal groups: the first 201 replies were considered early responders, while the

remaining 200 responses were considered late respondents. The results of the data analysis in this research revealed no differences to every variable on both early and late respondents, indicating that there are no statistically significant differences between the two groups at the confidence level of 95 %, indicating that non-response bias is not a serious elective subject (Armstrong & Overton, 1977; Clottey & Grawe, 2014).

3.4 Common method variance (CMV)

This research decreases CMV by firstly following the principles set out by Podsakoff, MacKenzie, Lee & Podsakoff (2003) which include safeguarding respondents' anonymity and strengthening the item scale by carefully developing measuring items existing theoretical and constructive measurements from earlier research. Secondly, to limit socially desired replies, respondents were promised of secrecy when responding survey questions (Podsakoff et al., 2003). Thirdly, the common method factor analysis was used, as described by Podsakoff, MacKenzie, and Podsakoff (2012) and the common method factor analysis revealed that the common method factor explains a small portion of the variation. Finally, confirmatory factor analysis (CFA) is used to look at a single factor model that includes all of the indications (Kearns & Sabherwal, 2006).

3.5 Validity

3.5.1 Content Validity

To convert the measurements from the original measures, the back translation technique is utilized. Five academics with expertise and understanding of administration critique the substance, sequencing, face validity, and clarity of the measurements in the questionnaire. The total Item-Objective Congruence (IOC) indices (equal 0.91) show the content validity appropriateness based on the assessments of five experts with knowledge in this field. The aggregate IOC index is more than.50, indicating that the content validity is acceptable (Turner & Carlson, 2003).

3.5.2 Construct validity

Confirmatory Factor Analysis (CFA) is applied to critique decreasing constructs or items consisting of insisting. The results showed that all 11 measurement models fit the research data well, with the following model fit indices: absolute fit index (χ^2/df) equals 1.061, goodness of fit index (GFI) equals 0.920, comparative fit index (CFI) equals 0.996, normed fit index (NFI) equals 0.941, incremental fit index (IFI) equals 0.996, and relative fit index (RFI) equals 0.924, root mean square error of approximation (RMSEA) equals 0.012.

Convergent validity refers the intrinsic coherence and harmony of a theoretical notion and a concrete concept (Carlson & Herdman, 2012). The average variance extracted (AVE) and composit reliability (CR) of research

data is investigated in this research. The result found AVE values are between 0.476 to 0.704 and CR values are between 0.637 to 0.905 of all constructs. According to Fornell and Larcker (1981), the AVE 0.40 cut-off value is appropriate if the CR value is greater than 0.6, and the construct's convergent validity is still satisfactory. As a result, all constructs' AVE and CR values show appropriate convergent validity.

Discriminant validity means the variation shared among various constructs is larger than to the variance shared between each concept and its measurements (Compeau, Higgins & Huff, 1999). Table 1 shows that the square root of the AVE values in the diagonal is greater than any of constructs across their columns and rows, indicating that perhaps the latent constructs employed to measure causal links in this study are unique (Fornell & Larcker, 1981).

Table 1. Discriminant Validity by Fornell-Larcker, 1981

Constructs	OA	AA	CA	RA	TT	MT	CF	CI	SA	FA
OA	0.709									
AA	0.540	0.733								
CA	0.512	0.497	0.631							
RA	0.510	0.549	0.502	0.776						
TT	0.481	0.366	0.412	0.312	0.745					
MT	0.448	0.408	0.439	0.390	0.529	0.689				
CF	0.421	0.359	0.444	0.312	0.484	0.493	0.690			
CI	0.396	0.396	0.427	0.390	0.440	0.385	0.367	0.605		
SA	0.361	0.409	0.312	0.344	0.155	0.199	0.186	0.193	0.740	
FA	0.414	0.409	0.390	0.448	0.207	0.243	0.262	0.203	0.545	0.727

3.6 Reliability

3.6.1 Cronbach's alpha coefficient

Cronbach's alpha has a cut-off value of.60, while a value of.80 is deemed acceptable, and internal consistency is demonstrated in the case of items bigger than.07 (Hair, 2009; Nunnally & Bernstein, 1978). The Cronbach's alpha coefficients of all variables range from .782 to .908 which are higher than 0.70 as and it proves the internal consistency of the entire items exists in this research (Nunnally, 1978).

3.6.2 Composite reliability

This composite reliability (CR) is used to examine the inter-item consistency of the measurement items. All CR value of this research ranges from 0.790 - 906 indicate that good internal consistency reliability (Hair Jr, Sarstedt, Hopkins & Kuppelwieser, 2014).

3.7 Statistical techniques

This research utilizes descriptive and inferential statistics such as standard deviation, mean, correlation analysis, and structural equation modeling (SEM). Confirmatory factor analysis (CFA) is used to prove suitability of constructs in this research to the model fit test and SEM investigates the links between constructs and assesses the model's predictive potential of hypothesis testing.

4. Results

4.1 Univariate normality test

Skewness and kurtosis values are used to evaluate normality in this research. The outcome of skewness ranging from -0.871 to -0.245 and kurtosis ranging from -1.000 and.584, its frond values not more than ±2 is considered acceptable (Hair, 2009).

4.2 Correlation Analysis, Variance Inflation Factors (VIF's), and Tolerance

The variance inflation factor (VIF), tolerance value, and condition index of constructs are investigated to ensure there are no multicollinearity problem and results show in table 2.

Table 2. Correlation Matrix, VIFs, and Tolerance

Constructs	OA	AA	CA	RA	TT	MT	CF	CI	SA	FA
OA	1.000									
AA	.733**	1.000								
CA	.708**	.700**	1.000							
RA	.714**	.740**	.698**	1.000						
TT	.693**	.603**	.638**	.627**	1.000					
MT	.667**	.638**	.653**	.635**	.731**	1.00				

CF	.648**	.598**	.661**	.629**	.696**	.703**	1.00			
CI	.628**	.627**	.650**	.643**	.662**	.620**	.607**	1.00		
SA	.601**	.638**	.557**	.587**	.393**	.442**	.431**	.436**	1.00	
FA	.641**	.635**	.618**	.666**	.448**	.488**	.507**	.446**	.744**	1.00
VIF	3.213	2.996	2.902	2.947	3.001	2.954	2.709	2.326	-	-
Tolerance	.311	.334	.345	.339	.333	.339	.369	.430	-	-

Note: ** Correlation is significant at the .01 level (2-tailed)

The correlation matrix (r =.393 to.744, p.01) shows the link between two variables (r =.393 to.744, p.01), among each pair of relations being less than.80 (Hair et al., 2006). All predictors have VIF values less than 5, and tolerance values range from 0.425 to.837, suggesting greater values than the 0.20 threshold, prove that multicollinearity is not a concern in this research (Rogerson, 2001; O'Brien, 2007).

4.3 Measurement and structural of model assessment

Table 3 shows the fit statistics indexes for both the measurement and structural models that found the model's fit is satisfactory and Table 4 summarizes the relationships with in preliminary structural model, including the outcomes of parameter estimation and the p-value test. From table 4, the hypotheses assessment results show that hypothesis 1a-b, hypothesis 2a-b, hypothesis 4a-b, hypothesis 5b, and hypothesis 6a-b are all supported, whereas hypothesis 3a-b and hypothesis 5a are not.

Table 3. Correlation Matrix, VIFs, and Tolerance

Fit indexes	Level of acceptance	Measurement models	Structural models	Description
Chi-square	p > .05	.118	.267	Good fit

Absolute Fit Index	≤ 2.00 good fit	1.061	1.032	Good fit
Root Mean Square Error of Approximation	< 0.05 good fit	0.012	0.009	Good fit
Goodness of Fit Index	> 0.95 good fit 0.90 – 0.95 acceptable	0.920	0.923	Acceptable
Comparative Fit Index	> 0.95 good fit	0.996	0.998	Good fit
Relative Fit Index	> 0.95 good fit 0.90 – 0.95 acceptable	0.924	0.924	Acceptable
Normed Fit Index	≥ 0.90	0.941	0.940	Acceptable

Note: Level of acceptance by Diamantopoulos, Adamantios and Siguaw (2000); Bollen (1989)

Table 4. Standardized structural equation parameter estimates and t-value

Hypotheses	Expected Sign	Standardized Coefficients (β)	S.E.	t-value	p-value	Hypotheses Results
H1a	+	.788	.228	3.464***	.000	Supported
H1b	+	.921	.236	3.903***	.000	Supported
H2a	+	1.111	.404	2.746**	.006	Supported
H2b	+	1.771	.494	3.585***	.000	Supported
H3a	+	-1.492	.552	-2.704**	.007	*Not Supported*
H3b	+	-1.946	.601	-3.237**	.001	*Not Supported*
H4a	+	.995	.204	4.879***	.000	Supported

H4b	+	.543	.189	2.873**	.004	Supported
H5a	+	-.080	.103	-.769	.442	Not Supported
H5b	+	.311	.096	3.238**	.001	Supported
H6a	+	.341	.114	2.998**	.003	Supported
H6b	+	.498	.080	6.219***	.000	Supported

Note: OA is operational agility; AA Customer alertness agility; CA is competitor business relationship agility; RA is strategic business relationship agility, TT is technology turbulence, MT is market turbulence, CF is cloud computing flexibility, CI is cloud computing integration, FA is financial goal achievement, and SA is strategic goal achievement.

*** significance level at .001; ** significance level at .01;* significance level at .05

5. Discussions

This research explores the role of organizational strategic agility as a strategic capability intent and its influence on goal achievement. Operational agility, customer alertness agility, competitor awareness agility, and strategic business relationship agility are three dimensions of organizational strategic agility that have a favorable impact on financial and strategic goal achievement. This is in line with the findings of Teece et al. (2016) and Li et al. (2020), who claim that organizations effectively deploy resources to meet goals through organizational agility. However, competitive awareness agility has a detrimental impact on financial and strategic goal attainment. This is in line with Banerji and Fang's (2021) explanation that money burning will result in lower financial performance and strategic goals will not be achieved until they outperform the competition. Antecedents of organizational agility, the research theorized that variance in organizational strategic agility can be explained by cloud computing flexibility, cloud computing integration and marketing turbulence, while technological turbulence cannot. According to Zhou et al. (2019), not all e-Commerce businesses in developing nations can turn the advantage of technological volatility into a chance for organizational strategic agility.

5.1 Theoretical Contribution

By using the perspectives of the dynamic capability to investigate the influence of organizational strategic agility on goal achievement with

antecedent factors, this research has improved the challenge of the agility literature and recommends the following theoretical contributions to the literature on organizational agility:

To begin, the newer underlying theoretical contribution is to conceptualize organizational strategic agility as a multi - dimensional construct as a key dynamic capability with four new dimensions: (1) operational agility, (2) customer alertness agility, (3) competitor awareness agility, and (4) strategic business relationship agility.

Secondly, empirical data of this research supports an alternate conclusion of competitive awareness agility, namely that this capacity has a detrimental impact on firms' strategic and financial goals. In contrast to most past studies in agility literature and in e-Commerce business contexts, this inverse variation contributes to the dynamic capability theory by offering additional information on how dynamic capacity might have a varied influence on organizational performance.

Thirdly, based on a dynamic capability approach, the findings suggested that cloud computing competence is a required antecedent. By building rapid links with business partners and merging, recombining, and creating new business processes, organizations may swiftly adapt modern technology to match business operations.

5.2 Managerial Contributions

Firstly, this study offers a management contributions strategy that might be useful for e-Commerce businesses, or any company interested in implementing agile capabilities. Managers might combine all discovered data to better comprehend the unpredictability of customers' requirements or preferences, environmental turbulences, and the use of cloud computing from outside suppliers.

Second, while applying, managers or marketing managers should pay close attention to competitor awareness agility. The risk stems from the circumstances and competitive strategies of distinct firms, which differ from one another. In the e-Commerce company setting in Thailand, competition awareness agility has a detrimental impact on both financial and strategic goal attainment, according to this research.

Thirdly, managers and technology directors should indeed be concerned of cloud computing's rapid adoption of advanced technological architecture. This capacity to use cloud computing can help an organization's strategic agility by allowing it to change and build new technological applications to meet the needs of its operations.

5.3 Limitations and Future Research Directions

This research was undertaken during the COVID-19 epidemic, which had an impact on the questionnaire return rate. Many responders choose to

utilize QR codes or e-mails instead of traditional paper questionnaires. Furthermore, the Thai government enforces regulations or policies such as shutting down in some regions, forcing organizations to close and relocate, preventing researchers from communicating with them. The data was analyzed on a population of e-Commerce in Thailand. Future study might test the research model in diverse organizational situations, such as distinct cultural or national contexts, in order to validate the conclusions of a larger range.

6. Conclusion

The major emphasis of this research is on organizational strategic agility, as well as its antecedents and consequences. This research utilized dynamic capacity theory to provide a conceptual model that explains the natural functions of organizational strategic agility and their influence on goal achievement. Three dimensions of organizational strategic agility influence organizational goal achievement including operational agility, customer alertness agility, strategic business relationship agility, while competitor awareness agility has a negative influence. The capacity to use cloud computing to enable the construction of organizational strategic agility in terms of flexibility and integration is a critical competence. Marketing turbulence has a positive impact on organizations, allowing them to respond quickly to changing client demands, but technology turbulence has a negative impact.

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