

Leveraging Organizational Performance through Employee Commitment and Organizational Citizenship Behaviour: A Conceptual Review

Fariba Nokhah

Abstract— This research was aimed to create a conceptual model that investigates the role of organizational citizenship behavior (OCB) in the relationship between employee commitment and organizational performance. The research expands on previous research on organizational behavior and how it affects performance. Six hypotheses are proposed as a result of the literature review. A framework is built by integrating employee commitment with organizational performance, using OCB as a moderating variable. Researchers and practitioners can use the framework as a starting point to investigate organizational performance further. The framework clarifies the determinants of employee commitment components, OCB, and organizational performance, as well as their potential linkages, for researchers. The paradigm can be utilized by practitioners to better understand the function of OCB in employee commitment and organizational performance.

Keywords— Employee Commitment, OCB, Organizational Performance, Moderator

I. INTRODUCTION

Several companies have discovered that employee performance is crucial in determining the company's success [1], [2]. As a result, understanding how to get the most out of staff is crucial for both employers and managers. One of the contributing aspects to worker performance is employee commitment [3], [2].

Employee commitment, whether referred to as employee commitment or organizational commitment, is defined by Michael Armstrong as an employee's identification with the hiring organization's values, goals, and principles, as well as a genuine desire to belong and remain within the organization and to make an effort and an endeavour on its behalf [4]. It is impossible to overestimate the importance of employee devotion to the company. Companies encourage employee commitment because it is expected to reduce absenteeism, tardiness, and turnover. A dedicated employee remains with the company regardless of the company's favourable or unfavourable circumstances [5].

In order for a company to gain a competitive advantage, its leaders must constantly look for ways to strengthen employee

commitment. Organizational commitment is a metric that indicates if an organization's human resource management methods are capable of fostering emotional associations between the organization's and employees' goals.

The issue of organizational commitment is a hot topic among company executives. It is an intangible result of a human resource management system; it is critical in keeping employees and realizing their full potential over time [6], [7]. The organization is at the centre of organizational commitment. It is the individuals identify with and attachment to the organization. Organizational commitment has been associated to increased effort, motivation, improved work satisfaction, decreased absenteeism, lower turnover, and higher retention (e.g. [8], [9]).

A. Statement Of The Problem

Employee commitment (EC) and organizational performance (OP) have been studied in several scholarly works (e.g., [10], [11]), but little or no research has been done when organizational citizenship behaviour (OCB) moderates the relationship between EC and OP. Consequently, this study will as a matter of urgency, look into the moderating role of OCB on the relationship between the proxies of organisational commitment and organizational performance. The objectives are as follows:

- i. To examine the influence of affective commitment on organizational performance
- ii. To assess the impact of continuance commitment on organizational performance
- iii. To determine the effect of normative commitment on organizational performance
- iv. To explore the moderating role of organizational citizenship behaviour on the relationship between affective commitment and organizational performance
- v. To explore the moderating role of organizational citizenship behaviour on the relationship between continuance commitment and organizational performance
- vi. To explore the moderating role of organizational citizenship behaviour on the relationship between

normative commitment and organizational performance

B. Statement of the Hypotheses

- i. Affective commitment will be positively related to organizational performance
- ii. Continuance commitment will be positively related to organizational performance
- iii. Normative commitment will be positively related to organizational performance
- iv. Organizational citizenship behaviour will moderate the relationship between affective commitment and organizational performance?
- v. Organizational citizenship behaviour will moderate the relationship between continuance commitment and organizational performance?
- vi. Organizational citizenship behaviour will moderate the relationship between affective commitment and organizational performance?

The study aims to examine the moderating role of organizational Citizenship Behaviour on the relationship between Employee Commitment and Organizational Performance.

referees, and to make it easy for you to distribute preprints.

II. CONCEPTUAL REVIEW AND HYPOTHESE DEVELOPMENT

A. Employee Commitment

Organizational commitment, according to [12], is an attitude associated to job outcomes that has received a lot of academic attention in human resource management studies. Many studies have attempted to define organizational commitment. According to [13], commitment is defined differently depending on the perspective from which it is viewed. For example, [14] suggested that an individual's attitude toward his or her organization is associated to commitment. As a result, they place a premium on attitudinal commitment. [15] proposed that commitment is defined as the balance between inputs and outcomes. Case in point of perspectives are social exchanges [16], marriage [17], organisations [18], [19], business relationships [20] and strategic networks [21], [22]. In the case of business relationships and strategic networks, it means that the committed actors consider a relationship to be worth working on to ensure that the relationship lasts. Commitment has also been defined slightly more generally as a lasting wish to retain a relationship which is considered valuable [23].

2.1.1 Dimensions of Organizational Commitment

As mentioned above that the construct of commitment has been viewed as comprised of three components:

Affective commitment, continuance commitment and

normative commitment [24], [25], [26].

(1) Affective commitment (AC)

[24] indicated that affective commitment pertains to the extent to which an individual identifies with the organization and reflects employee affective orientation towards an organization. In furtherance to the definitions of organizational commitment, the most broadly acknowledged definitions were put forth by [19]. From their perspective, organization commitment is a multidimensional concept. Three proxies— affective, continuance and normative—are encompassed. Affective commitment refers to employees' emotional attachment to the organization. When employees' expectation matches self-fulfilment and accomplishment in their organization, they tend to have stronger affective attachment. When the degrees of congruence of individual and organizational values are greater, the degree of employee affective commitment is greater too [27].

Continuance commitment reflected the level percent that employee will not to leave the organization and intent to continue to work for the organization [28]. In this study, continuance commitment was the awareness of the loss for employees to leave the organization, and intention to continue to work for the organization, in order to not to lose treatment that investment many years to exchange. [27] asserted that a variety of factors, including the organization's culture, appear to influence long-term commitment. The organizational culture was more positive and supportive, and the employee continuance commitment could get greater degree.

(3) Normative commitment (NC)

Employee perceptions of ongoing employment obligation or sense of responsibility to the organization were referred to as normative commitment [25]. Normative commitment is distinct from affective commitment in that it is motivated by a feeling of moral obligation rather than an emotional relationship. Organizational socialization produces normative commitment, particularly in businesses that value loyalty and systematically convey that value to employees [27].

Employee commitment to the organization was viewed by several experts as a fundamental foundation for success in today's competitive economy [29], [26]. Employee behaviour is influenced by organizational commitment, and organizational commitment can impact employee behaviour [26]. Employees with higher degrees of commitment to the organization had higher levels of work satisfaction, lower levels of work stress, and lower levels of work-life conflicts, according to [5]. According to studies, the focus of organizational commitment study over the last three decades has been on the relationship between organizational commitment and other organizational behaviours such as employee satisfaction and organizational culture [29].

B. Organizational Performance

Although organizational performance as a concept has been considered extensively and as a result numerous works of

literature exist, conversely, its definition is difficult for the reason of its several meanings. Consequently, there is not a generally established description of this notion. Organizational performance was described in the 1950s as the extent to which organizations, regarded as a social system, achieved their goals [30]. During this time, performance evaluations were centered on work, people, and organizational structure. Performance was described as an organization's capacity to exploit its environment for accessing and using limited resources [31] later in the 1960s and 1970s as firms began to explore new ways to measure their performance. The revelation that identifying organizational objectives is more challenging than previously thought distinguished the 1980s and 1990s.

Management researchers have recently continued to develop more sophisticated concepts regarding organizational performance. [32] defines organizational performance as an organization's accomplishments in relation to a set of metrics. They measure success in terms of production, such as quantifiable goals or profit margins. Organizational performance encompasses both behaviour and outcomes. This concept includes achieving expected levels as well as defining and reviewing objectives. The main idea behind this research is to look at this link, keeping in mind that if management behaviour is correct, the predicted levels of output will be met (success), and vice versa for failure. The performance continuum is divided into two ends: success and failure [33]. Organizational performance is defined as an organization's actual output or results compared to its expected outputs [34]. While the authors' definitions may differ, they all agree that organizational performance is about generating superior results and/or meeting objectives.

Within organizations, there are three degrees of performance: financial performance, business performance, and organizational effectiveness, albeit the latter has been renamed organizational performance [35].

C. Organizational Citizenship Behaviour

[36] explain how OCB was coined by Organ in 1988 to characterize employee freewill behavior that directly supports an establishment's successful functioning, regardless of an individual's objective productivity. OCB represents certain conducts that are not mandated or indicated in an employee's work schedule. Because the conduct is largely a question of personal preference, it is not frequently punished [37]. Customers' perceptions of service quality can be positively or negatively influenced by the actions and attitude of employees in an organization [38]. Managers and administrators of institutions can create OCB by creating a favorable working environment that fosters a sense of commitment, contentment, and loyalty among employees [37]. When employees are satisfied, they are more likely to demonstrate OCB and have a lower turnover rate [39]. Furthermore, [40] discuss how several scholars (e.g. OCB is defined by [41], [42] as "discretionary acts that are not formally rewarded and go beyond conventional job obligations but are critical to team and organizational efficiency."

[(1) Helping Behaviour, (2) Sportsmanship, (3) Organizational Loyalty, (4) Organizational Compliance, (5) Individual Initiative, (6) Civic Virtue, and (7) Self Development are some of the elements of OCB described by [43].

- Helping behaviour entails voluntarily assisting people with work-related issues or preventing them from occurring.
- Sportsmanship is a form of citizenship behaviour. [44] defined sportsmanship as "a willingness to tolerate the inevitable inconveniences and impositions of work without complaining."
- Organizational loyalty entails promoting the organization to outsiders, protecting and defending it against external threats, and remaining committed to it even under adverse conditions.
-
- Organizational Compliance: This dimension appears to reflect a person's internalization and acceptance of the organization's rules, regulations, and processes, resulting in a strict adherence to them, even when compliance is not observed or monitored.
- Individual Initiative: This type of behaviour conveys the impression that the employee is going "above and beyond" his or her responsibilities.
- Civic virtue denotes a broad interest in or dedication to the organization as a whole. This is demonstrated by a willingness to actively participate in its governance (e.g., attend meetings, engage in policy debates, express one's opinion about what strategy the organization should follow, etc.); to monitor its environment for threats and opportunities (e.g., keep up with changes in the industry that may affect the organization); and to look out for its best interests (e.g., reporting fire hazards or suspicious activities, locking doors, etc.); and to monitor its environment for threats and opportunities.

Self-development refers to the voluntary actions taken by employees to better their knowledge, skills, and talents. As referenced by [45] this might include "seeking out and taking advantage of advanced training courses, keeping abreast of the latest developments in one's field and area, or even learning a new set of skills so as to expand the range of one's contributions to an organization."

III. RESEARCH METHODOLOGY

A. Research Design

Understanding research techniques and designs is critical when it comes to the research process, because each research method is a unique approach to the study process [46]. It is critical to comprehend the goals of various research methods in order to select the most appropriate research approach for the topic. [46] noted that evaluating the advantages and disadvantages of various research approaches is critical. Quantitative, qualitative, and mixed-methods research methodologies are all common [47], [48]. This research employs a quantitative approach. In this study, the quantitative method is suited for investigating the link between the independent factors and the dependent variable, as well as the moderating variable. Furthermore, because the data will be collected at a particular moment in time, this study will use a cross-sectional research design [49], [50], [51]. The cross-sectional design was chosen because of its cost effectiveness and time savings, which fit the study's requirements [52], [53].

In terms of data analysis, the study will use structural equation modelling (SEM) with partial least square (PLS) software. The PLS is a useful tool for estimating causal models with latent variables and systems of simultaneous equations with measurement errors [54]. It can also handle extremely complicated models with a large number of constructs, indicators, and interactions [55], [56].

IV. CONCLUSION

Using a conceptual framework, this study examines the moderating effect of OCB on the link between employee commitment and organizational performance. Previous research, however limited, have found evidence that employee commitment and OCB boost competitiveness and increase enterprise value. This study's proposed conceptual framework may have some significant corollaries. To begin, the proposed model will assist top management in appreciating the impact of an all-inclusive EC framework on businesses. The highlighted model may help businesses grasp and discover crucial aspects, and it can also help them improve their economic performance. The role of OCB as a moderator between EC and organizational performance is hypothesized in this paper. The combination of EC and OCB aids businesses in achieving their objectives.

REFERENCES

- [1] W. Zheng, K. Sharan and J. Wei, "New Development of Organizational Commitment: A Critical Review (1960-2009)", *African Journal of Business Management*. 4(1), Pp. 12-20, 2010.
- [2] C. Ajila, and A. Awonusi, "Influence of Rewards on Workers Performance in an Organization", *Journal of Social Science*. 8(1): Pp.7-12, 2004.
<https://doi.org/10.1080/09718923.2004.11892397>
- [3] I. Ali, K.U. Rehman, S.L. Ali, J. Yousaf, and M. Zia, "Corporate social responsibility influences, employee commitment and organizational performance", *African journal of Business management*, 4(13), 2796-2801, 2010.
- [4] M. Armstrong, "Handbook of Employee Reward Management and Practice", 2nd ed. Kogan Page. London and Philadelphia. Pp. 135-137, 2007.
- [5] J.P. Meyer, and N.J. Allen, "Commitment in the workplace, theory, research and application", California: Sage, 1997.
<https://doi.org/10.4135/9781452231556>
- [6] A.A Şendoğdu, A. Kocabacak, and Ş. Güven, "The relationship between human resource management practices and organizational commitment: a field study", *Procedia – Social and Behavioural Sciences*, Vol. 99, pp.818–827.doi:10.1111/corg.12006, 2013.
- [7] A. Ghina, "The influence of corporate culture on organizational commitment; case study of civil government organizations in Indonesia", *International Journal of Basic and Applied Science*, Vol. 1, No. 2, pp.156–170, 2012.
<https://doi.org/10.17142/ijbas-2012.1.2.1>
- [8] C. Nagele, and M.P Neuschwander, "Adjustment processes and fit perceptions as predictors of organizational commitment and occupational commitment of young workers", *Journal of Vocational Behaviour*, Vol. 85, pp.385–393, 2014.
<https://doi.org/10.1016/j.jvb.2014.08.011>
- [9] J.P. Meyer, D.J. Stanley, T.A. Jackson, K.J. McInnis, E.R. Maltin, and L. Sheppard, "Affective, normative, and continuance commitment levels across cultures: a meta-analysis", *Journal of Vocational Behaviour*, Vol. 80, pp.225–245, 2012.
<https://doi.org/10.1016/j.jvb.2011.09.005>
- [10] M. Heydari, and K.K Lai, "The Effect Employee Commitment on Service Performance through a Mediating Function of Organizational Citizenship Behaviour Using Servqual and Collaborative Filtering Modeling: Evidence From China's Hospitality Industry", *Journal of Tourism & Hospitality*, 8(2), 1-10, 2019.
<https://doi.org/10.35248/2167-0269.19.8.405>
- [11] R.M. Nguru, and D. Gichuhi, "Influence of Quality of Work Life Factors on Employee Commitment in Parastatals: A Case Study of National Hospital Insurance Fund in Nakuru, Kenya", *International Journal of Economics, Commerce and Management* Vol. VI, Issue 5, May 2018
- [12] C.M.Yeh, "The relationship between tourism involvement, organizational commitment and organizational citizenship behaviours in the hotel industry", *Tourism and hospitality management*, 25(1), 75-93, 2019.
<https://doi.org/10.20867/thm.25.1.10>
- [13] T. Roxenhall, and E. Andréen, "Affective, Calculative and Normative Commitment: An Assessment of Relationship", *World Review of Business Research* Vol. 2. No. 5. September 2012. Pp. 86 – 96
- [14] R.T. Mowday, R.M. Steers, and L.M. Porter, "The measurement of organizational commitment", *Journal of Vocational Behaviour*, Vol. 14, No. 2, pp. 224-224. DOI: [https://doi.org/10.1016/0001-8791\(79\)90072-1](https://doi.org/10.1016/0001-8791(79)90072-1), 1979.
- [15] J.H. Morris, and D.J. Sherman, "Generalizability of an organizational commitment model", *Academy of Management Journal*, Vol. 24, No. 3, pp. 512-526, 1981, DOI: <https://doi.org/10.5465/255572>,
- [16] K. Cook, and R.M. Emerson, "Power, equity, and commitment in exchange networks", *American Sociological Review*, vol. 43, pp. 721-739, 1978.
<https://doi.org/10.2307/2094546>
- [17] L. Thompson, and G.B. Spanier, "The end of marriage and acceptance of marital termination", *Journal of Marriage and the Family*, vol. 45, February, pp. 103-113, 1983.
<https://doi.org/10.2307/351299>
- [18] J.P. Meyer, and N.J. Allen, "Testing the "side-bet theory" of organizational commitment: Some methodological considerations", *Journal of Applied Psychology*, vol. 69, pp. 372-378, 1984.
<https://doi.org/10.1037/0021-9010.69.3.372>
- [19] J.P. Meyer, and N.J. Allen, "A three component conceptualization of organizational commitment", *Human Resource Management Review*, Vol. 1, No. 1, pp. 61-89, 1991. DOI: [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- [20] R.M. Morgan, and S.D. Hunt, "The commitment-trust theory of relationship marketing", *Journal of marketing*, 58(3), 20-38, 1994.
<https://doi.org/10.1177/002224299405800302>

- [21] E. Andrésen, H. Lundberg, and T. Roxenhall, “Designing for commitment in regional strategic networks”, *Management Research Review*, 35(6), 531-552, 2012.
<https://doi.org/10.1108/01409171211238280>
- [22] T. Roxenhall, “Network structure and network commitment in innovation networks”, *World Journal of Management*, 3(1), 60-74, 2011.
- [23] C. Moorman, G. Zaltman, and R. Deshpande, “Relationships between providers and users of market research: the dynamics of trust within and between organizations”, *Journal of marketing research*, 29(3), 314-328, 1992.
<https://doi.org/10.1177/002224379202900303>
- [24] N.J. Allen, and J.P. Meyer, “The measurement and antecedents of affective, continuance and normative commitment to the organization” *Journal of occupational psychology*, 63(1), 1-18, 1990.
<https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- [25] N. Sajjad, N. Ali, K.A. Hemin, S. Nazari-Shirkouhi and M. R. Dalvand “Investigating the relationship between organizational justice, psychological empowerment, job satisfaction, organizational commitment and organizational citizenship behaviour: An empirical model. *African Journal of Business Management*, 13 (5), 5241-5248, 2011.
- [26] M.S. Crow, C.B. Lee, and J.J. Joo, “Organizational justice and organizational commitment among South Korean police officers: An investigation of job satisfaction as a mediator”, *International Journal of Police Strategies & Management*, 35 (2), 402 – 423, 2012.
<https://doi.org/10.1108/13639511211230156>
- [27] F.J. Slack, J.N. Orife, and F.P. Anderson, “Effects of Commitment to Corporate Vision on Employee Satisfaction with their Organization: An Empirical Study in the United States” *International Journal of Management*, 27 (3), Part 1, 2010.
- [28] H.Y. Lee and K. Z. Ahmad. “The moderating effects of organizational culture on the relationships between leadership behaviour and organizational commitment and between organizational commitment and job satisfaction and performance”, *Journal of Leadership & Organization Development* 30 (1), 53 – 86, 2009.
<https://doi.org/10.1108/01437730910927106>
- [29] M.D. Khalil and K. P. Kuchinkeb, “Job satisfaction and organizational commitment: validating the Arabic satisfaction and commitment questionnaire (ASCQ), testing the correlations, and investigating the effects of demographic variables in the Lebanese banking sector” *The International Journal of Human Resource Management*, 22 (3), 1180–1202, 2011.
<https://doi.org/10.1080/09585192.2011.556801>
- [30] B.S. Georgopoulos, and A.S. Tannenbaum, “A study of organizational effectiveness”, *American Sociological Review*, 22(5), 534-540, 1957.
<https://doi.org/10.2307/2089477>
- [31] E. Yuchtman, and S.E. Seashore, “A system resource approach to organizational effectiveness”, *American Sociological Review*, 891-903, 1967.
<https://doi.org/10.2307/2092843>
- [32] M. Otieno, “Strategic Issue Management practices By Small and Medium Enterprises in Mombasa County, Kenya”, (MBA), University of Nairobi, 2013. Nairobi, Kenya.
- [33] W. Njanja, “An Investigation into management strategies affecting performance of micro, small and medium enterprises in Kenya”, Unpublished Phd Thesis-UNISA, 2009.
<https://doi.org/10.5539/ijbm.v5n11p66>
- [34] T. Ngugi, E. Mukulu, and H. Gachunga, “Effect of Reward and Compensation Strategies on the Performance of Commercial Banks in Kenya”, *International Journal of Education and Research*, 2(1), 2014.
- [35] M. Terziovski, and D. Samson, “The effect of company size on the relationship between TQM strategy and organisational performance”, *The TQM magazine*, 12(2), 144-149, 2000.
<https://doi.org/10.1108/09544780010318406>
- [36] G. Dwomoh, L.A. Gyamfi, and A.W. Luguterah, “Effect of Organizational Citizenship Behaviour on Performance of Employees of Kumasi Technical University: Moderating Role of Work Overload”, *Journal of Management and Economic Studies*, 1(2), 18-34, 2019.
<https://doi.org/10.26677/TR1010.2019.70>
- [37] F. Farahbod, M. Azadehdel, M. Rezaei, and M. Nezhadi, “Organizational citizenship behavior: The role of organizational justice and leader-member exchange”, *Interdisciplinary journal of contemporary research in business*. 3 (9), 893-903, 2012.
- [38] T. Yaffe, and R. Kark, “Leading by example: the case of leader OCB”, *Journal of Applied Psychology*, 96(4), 806 – 826, 2011.
<https://doi.org/10.1037/a0022464>
- [39] Z. Awang, J.H. Ahmad, and N.M. Zin, “Modelling job satisfaction and work commitment among lecturers: A case of UiTM Kelantan”, *Journal of Statistical Modeling and Analytics*, 1(2), 45-59, 2010.
- [40] D. De Clercq, and I. Belausteguigoitia, “Political skill and organizational identification: Preventing role ambiguity from hindering organizational citizenship behaviour”, *Journal of Management & Organization*, 1-20, 2019.
<https://doi.org/10.1017/jmo.2019.31>
- [41] D.G. Bachrach, B.C. Powell, B.J. Collins, and R.G. Richey, “Effects of task interdependence on the relationship between helping behaviour and group performance”, *Journal of Applied Psychology*, 91, 1396–1405, 2006.
<https://doi.org/10.1037/0021-9010.91.6.1396>
- [42] C.C. Lin, and T.-K. Peng, “From organizational citizenship behaviour to team performance: The mediation of group cohesion and collective efficacy” *Management and Organization Review*, 6, 55–75, 2010.
<https://doi.org/10.1111/j.1740-8784.2009.00172.x>
- [43] P.M. Podsakoff, S.B. MacKenzie, J.B. Paine, and D.G. Bachrach, “Organizational citizenship behaviours: A critical review of the theoretical and empirical literature and suggestions for future research”, *Journal of management*, 26(3), 513-563, 2000.
<https://doi.org/10.1177/014920630002600307>
- [44] D.W. Organ, “The subtle significance of job satisfaction”, *Clinical Laboratory Management Review*, 4:94 –98
- [45] J.M. George, and A.P. Brief, “Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship”, *Psychological Bulletin*, 112: 310 –329, 1992.
<https://doi.org/10.1037/0033-2909.112.2.310>
- [46] R.K. Yin, “Case study research: Design and methods” (5th Ed.). Thousand Oaks, CA: Sage, 2014.
- [47] A. Kumar, “Using phenomenological research methods in qualitative health research”, *International Journal of Human Sciences*, 9, 790-804, 2012. doi: 10.14687/ijhs
- [48] T. McNulty, and A. Zattoni, “Developing corporate governance research through qualitative methods: A review of previous studies”, *Corporate Governance*, 21, 183-198, 2013.
<https://doi.org/10.1111/corg.12006>
- [49] M. Kumar, S. Abdul Talib, and T. Ramayah, “Business Research Methods”, New York: Oxford University Press, 2013.
- [50] W.G. Zikmund, J.B. Barry, C. Jon, and C.M.G. Griffin, *Business Research Method*. 8th edition. New York: Cengage Learning, 2013.
- [51] U. Sekaran, and R. Bougie, “Research Methods for Business: A Skill Building Approach”, 6th edition. Chichester: John Wiley and Sons Ltd, 2013.
- [52] U. Sekaran, “Research Methods for Business: A Skill Building Approach”, 4th edition. New York: John Wiley and Sons, Inc, 2010.
- [53] J. Wilson, “Essentials of Business Research- A Guide to Doing Your Research Project”, New Delhi: Sage Publication, 2013.
- [54] J. Henseler, C.M. Ringle, and R.R. Sinkovics, “The Use of Partial Least Squares Path Modeling in International Marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.)”, *Advances in International Marketing* (Vol. 20, pp. 277-320). Bingley: Emerald, 2009.
[https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- [55] D. Barclay, C. Higgins, and R. Thompson, “The partial least squares (PLS) approach to casual modeling: Personal computer adopting and use as an illustration”, *Technology Studies*, 2(2), 285-309, 1995.
- [56] P.H. Garthwaite, “An interpretation of partial least squares”, *Journal of the American Statistical Association*, 89(425), 122-127, 1994.networks,” *IEEE Trans. Neural Networks*, vol. 4, pp. 570–578, July 1993.
<https://doi.org/10.1080/01621459.1994.10476452>
- [57] R. W. Lucky, “Automatic equalization for digital communication,” *Bell Syst. Tech. J.*, vol. 44, no. 4, pp. 547–588, Apr. 1965.
<https://doi.org/10.1002/j.1538-7305.1965.tb01678.x>
- [58] S. P. Bingulac, “On the compatibility of adaptive controllers (Published Conference Proceedings style),” in *Proc. 4th Annu. Allerton Conf. Circuits and Systems Theory*, New York, 1994, pp. 8–16.

- [59] G. R. Faulhaber, "Design of service systems with priority reservation," in *Conf. Rec. 1995 IEEE Int. Conf. Communications*, pp. 3–8.
- [60] W. D. Doyle, "Magnetization reversal in films with biaxial anisotropy," in *1987 Proc. INTERMAG Conf.*, pp. 2.2-1–2.2-6.