



Impact of Cross-Functional Integration on Organizational Performance of a Semiconductor Company in the Philippines

Venice Ann DC Laco¹, Jesus P. Briones^{1*}, Flormando P. Baldovino²

¹First Asia Institute of Technology & Humanities, Philippines

²Manuel S. Enverga University Foundation, Philippines

Received : November 30, 2023

Revised : January 2, 2024

Accepted : January 9, 2024

Online : April 26, 2024

Abstract

Cross-functional integration (CFI) plays a crucial role in achieving the business objectives of any organization. This study assessed the impact of CFI on the organizational performance of a semiconductor company in the Philippines. This descriptive-quantitative research used an adapted questionnaire covering the three elements of CFI: collaboration, coordination, and communication. The data were gathered using Google Forms via email and Microsoft Teams from 87 employees on their supervisory levels of the subject-semiconductor company. The findings revealed that the subject-semiconductor company has a supportive culture for CFI. The present study has also provided empirical evidence that CFI is crucial to organizational performance. CFI practices in terms of the three elements have no significant differences as perceived by the respondents when grouped according to age, gender, and length of service. However, there exist significant differences in their perceptions of the practice of CFI in terms of coordination and communication when they are grouped by area/ department assignment. This suggests that the company can improve CFI by focusing on better coordination and communication across functions.

Keywords *Collaboration, Communication, Coordination, Cross-Functional Integration, Organizational Performance, Semiconductor Company*

INTRODUCTION

Cross-functional integration (CFI) has emerged as a critical factor in enhancing the overall organizational performance of companies across various industries. In the dynamic landscape of the semiconductor industry, characterized by rapid technological advancements and intense competition, the ability of companies to foster integration among different functions and departments can significantly impact their success. According to [Castañer and Oliveira \(2020\)](#), the interplay of collaboration, coordination, and communication across various departments and functions within an organization can significantly impact its overall performance. This research explores and analyses the multifaceted relationship between CFI and the organizational performance of a semiconductor company in the Philippines.

CFI is a term used to describe how people, activities, and resources are grouped across various organizational functions and departments, fostering effective collaboration, appropriate coordination, and well-informed communication to meet the organization's needs and demands. It is important to note that in the context of this research, CFI and cross-functional organization are considered synonymous terms. As such, both terms refer to the same concept of enhancing synergy and cooperation among different organizational functions.

In recent years, companies belonging to different sectors have adapted the process of grouping people, activities, and resources into processes, thereby creating cross-functional relationships that, through coordination, collaboration, and communication, can meet their company's needs and demands. Several studies pointed out the importance of CFI in product

Copyright Holder:

© Venice, Jesus, & Flormando. (2024)

Corresponding author's email: jpbbriones@firstasia.edu.ph

This Article is Licensed Under:



development (Ahmed et al., 2021; Pimenta, 2019), customer information management (Stähle et al., 2019), market responsiveness (Murillo-Oviedo et al., 2019), and supply chain management (De Abreu & Alcântara, 2015). Thus, its contribution to the achievement of the business objectives of any organization cannot be ignored. Moreover, according to Elikwu (2019), CFI improves communication and knowledge sharing among the organization's stakeholders. It influences cooperation and teamwork among cross-functional units. If the communication system or any process in one department breaks down, this will affect another, and such experience will ultimately impact the organization's performance. Elikwu's (2019) research underscores the advantages of CFI within organizations, particularly in improving communication, knowledge sharing, and team cohesion. However, it suggests several potential research gaps that warrant further investigation. These gaps include the need to focus on the semiconductor industry in the Philippines, using quantitative methods to rigorously measure the impact of CFI, exploring barriers and solutions within this specific industry context, examining the long-term effects of such collaboration on organizational growth, and conducting comparative analyses to assess how CFI differs across industries or locations. The research aimed to provide industry-specific insights and useful knowledge that will improve organizational performance in this context by addressing these gaps.

Semiconductor companies play a pivotal role in powering modern electronics and technological innovations. Their performance influences market competitiveness and contributes to regional economic development. Within this context, understanding the dynamics of CFI and its implications becomes crucial for sustainable growth and success. Organizational performance serves as a foundational measure of an organization's health and competitiveness (Contu, 2020). It encompasses various aspects, including revenue growth, profitability, and cost-effectiveness. This study aimed to investigate the intricate mechanisms governing CFI and its implications on organizational performance. Examining the interconnections between collaboration, coordination, and communication will shed light on how organizations can harness the power of synergy among diverse departments to achieve their strategic goals and objectives. With this study the researchers hope that the findings and insights derived from this study will not only contribute to the academic discourse but also provide practical guidance to organizations seeking to optimize their internal processes and ultimately excel in the contemporary business landscape. The effect of CFI on organizational performance is a vital and pressing concern, and this research seeks to address it comprehensively to provide valuable takeaways for the semiconductor industry.

Therefore, this study assessed CFI elements of collaboration, coordination, and communication and their impact on the organizational performance of the subject-semiconductor company. Within the specific organizational context of the semiconductor industry in the Philippines, the researchers presumed that there is no substantial difference in the perceived CFI among respondents when they are categorized based on their profiles. This is derived from the idea that irrespective of individual characteristics or professional backgrounds, the impact of CFI on organizational performance is expected to be consistent across various respondent profiles within the study.

LITERATURE REVIEW

The Context of CFI

CFI describes the cooperation and coordination between several functional areas of an organization to accomplish shared objectives. Collaboration across functions is a process where the different internal functions are able to successfully manage the company's processes and establish shared goals and objectives where everyone in the organization is expected to work together to achieve them. Pellathy et al. (2019) provided the latest comprehensive overview of essential

concepts and definitions around CFI. The study by [Pellathy et al. \(2019\)](#) provides strong evidence that CFI is an important factor in innovation performance. Organizations that invest in CFI and dynamic capabilities are more likely to successfully develop and launch new products and services.

One of the key trends, according to [Jeske and Calvard \(2020\)](#), is moving towards more holistic approaches to CFI. In the past, CFI was often seen as a tactical issue focused on improving coordination and communication between functions. However, organizations are now recognizing that CFI needs to be embedded in the organization's culture and strategy. This means creating a culture that values collaboration and teamwork and designing systems and processes that support CFI is now very timely and relevant. Another trend that [Jeske and Calvard \(2020\)](#) emphasized is the increasing use of digital technology to support CFI. Digital tools such as collaboration platforms and data analytics tools can help organizations to break down silos between functions and improve information sharing and communication. They also discussed several challenges that organizations face in implementing CFI. One of the biggest challenges is changing the mindset of employees. Employees need to be willing to step outside of their silos and work with colleagues from other functions. This can be difficult, especially in organizations with a long history of functional silos.

As indicated by [Murillo-Oviedo et al. \(2019\)](#), CFI warrants that a company effectively disseminate knowledge and information at all levels of the organization, thus improving the employees' awareness of internal needs. Moreover, employee engagement, being one of the drivers of job performance, can also be enhanced through CFI. Sustaining employee engagement, especially during times of adversity, is crucial in improving the productivity and expected outcomes of the company ([Mondejar & Asio, 2023](#)).

CFI concerns not only employees but also other stakeholders in the organization. [Kang et al. \(2021\)](#) revealed that CFI can indirectly enhance successful external partnerships through effective customer and supplier involvement. It can also be surmised that collaborative practices are expected to happen through CFI. Previous researchers have indicated that organizations engaging in these practices are able to sustain the different aspects of their project management ([Fobbe, 2020](#); [Larsson & Larsson, 2020](#)).

The practice of CFI in some organizations is not always successful. Organizations might face barriers that contribute to their failure. [Yin et al. \(2023\)](#) stressed that if the business objectives, functions and planned targets are not well-defined, these will contribute to the unsuccessful CFI implementation.

CFI and Organizational Performance

Organizational performance includes various elements, such as financial performance, innovation, customer happiness, and general efficiency. [Menina \(2023\)](#) emphasizes that organizations must develop new processes and practice innovations to become competitive. Businesses looking to increase their competitiveness in the semiconductor industry must comprehend the link between CFI and organizational performance. The role of CFI in improving corporate performance cannot be ignored. The study of [Szalavetz \(2018\)](#) highlighted that CFI is instrumental in addressing systemic challenges like trade-offs and interdependencies in sustainability. He further noted that if these are left unmanaged, these challenges can lead to organizational barriers such as inertia and resistance to change. His proposition suggests that CFI mitigates these barriers by promoting adequate knowledge building, appropriate information sharing, and relevant interest reconciliation.

[Jackson \(2021\)](#) investigated the impact of CFI on organizational performance. The study evaluated CFI from a triadic level perspective involving different functional units and processes of an organization. The study also incorporated the organizational structure and how it impacted CFI practice and organizational performance. His results showed a strong positive impact of CFI on

organizational performance. Also, the study found that organizational structure has a partial moderate relationship between CFI and organizational performance. He further noted a strong interaction effect on the relationship between organizational performance and the two elements of CFI, namely, coordination and communication. However, no relationship was found between organizational performance and collaboration when the organizational structure was included in the analysis. On the other hand, [Ceccagnoli et al. \(2013\)](#) mentioned in their study on research and development activities in the US manufacturing sector that the principles of knowledge integration and the interplay between different organizational functions are relevant to most organizations. Parallel to this, the researchers presumed that the specific dynamics and challenges of the semiconductor sector should guide the analysis and interpretation of the impact of CFI on organizational performance in that particular context.

RESEARCH METHOD

The study utilized a descriptive-quantitative research design where employees of a semiconductor company served as respondents. This method is appropriate for exploring a variable within a specific population and obtaining data about it ([Siedlecki, 2020](#)). The research included supervisory-level employees within the subject-semiconductor company. These employees are likely to have a comprehensive understanding of the internal operations and the impact of CFI on the organizational performance of the company. At the time of the study, the company employs 130 supervisory employees out of the 1,657 employees. Targeting all the 130 supervisory employees of the company as respondents, 87 employees selflessly answered the online survey questionnaire prepared by the researchers. The survey questionnaire prepared using Google Forms was distributed to all supervisory employees via electronic mail, and Microsoft Teams was the commonly used communication channel within the company for one week from October 16, 2023, to October 22, 2023. The survey questionnaire distribution got a 67% retrieval rate from the target respondents.

The questionnaire, which was adapted from [Jackson's \(2021\)](#) study, provided a structured approach to measure the impact of CFI on organizational performance. A very slight modification was employed to align it with the context of the semiconductor company's CFI practices so that the study can capture specific insights relevant to the operational structure of the subject-semiconductor company. The questionnaire, composed of 16 items, gathers information on the respondents' perspectives on collaboration, coordination, communication, and organizational performance. The items in the three elements were measured with a five-point Likert scale: 1.00 – 1.49 (Strongly Disagree); 1.50 – 2.49 (Disagree); 2.50 – 3.49 (Neutral); 3.50 – 4.49 (Agree); and 4.50 – 5.00 (Strongly Agree). The confidentiality note was indicated in the survey questionnaire to assure the respondents that the information provided was used only for the purpose of the study. The data gathered from the respondents were analyzed using frequency, percentage, weighted mean, and analysis of variance (ANOVA).

FINDINGS AND DISCUSSION

This part of the study presents the interpretation of data obtained from the survey questionnaires distributed to employees who are involved in the CFI implementation of the subject-semiconductor company. A detailed discussion of the tabulated responses was presented and examined in accordance with the objectives of the study.

Profile of Respondents

The 87 employees at a supervisory level from the company who served as respondents to this study were affiliated with the subject-semiconductor company. Table 1 presents the

respondents' profile information. Most of the respondents are from the manufacturing department, have a range of ages from 35 to 44 years old, and have 5 to 10 years of work experience with the company. On the other hand, the majority of the respondents are females. This is a positive sign, as shown in the respondents' profile data that the company is committed to gender diversity in its workforce and has a stable and experienced workforce.

Table 1. Profile of Respondents

Indicator	Frequency	Percentage
Area/Department Assigned		
Sales & Marketing	8	9.2
Research & Development	18	20.7
Manufacturing	36	41.4
General & Administrative	25	28.7
Total	87	100
Age		
Under 25 years old	7	8
25-34 years old	20	23
35-44 years old	28	32.2
45-54 years old	26	29.9
55 years old and above	6	6.9
Total	87	100
Gender		
Male	36	41.4
Female	51	58.6
Total	87	100
Years of Experience in the Company		
Less than 1 year	3	3.4
1-5 years	22	25.3
5-10 years	43	49.4
More than 10 years	19	21.8
Total	87	100

Assessment of CFI of the Subject-Semiconductor Company

The practice of CFI of the subject-semiconductor company in the Philippines was assessed along the three elements of collaboration, coordination, and communication.

Collaboration

It is the process where individuals or groups are working together to achieve common goals or objectives. It involves employees, departments, and external stakeholders working together to accomplish tasks, solve problems, or pursue opportunities. Its importance cannot be ignored for the successful entrepreneurial practice of an organization (Briones et al., 2023). Moreover, effective collaboration can have a significant impact on an organization in many ways. According to Darmasetiawan and Rapina (2023), effective communication systems are realized, and the group's coordinated efforts are enhanced as a result of effective collaboration. Table 2 shows respondents' assessment of the practice of CFI of the subject-semiconductor company in terms of collaboration.

Table 2 shows the highest rated indicator is "Support other functions in achieving common goals", with a weighted mean of 3.9419, which is interpreted as "agree". The data indicates that

respondents confirm that there is indeed a robust level of support among the different functions to achieve common goals. This suggests a cooperative and collaborative environment where units assist each other in reaching shared objectives. Table 2 also shows that there is homogeneity in the perceptions of respondents. This could be due to their shared work environment, similar job roles, or common training and development experiences. The respondents have a strong positive view of the importance of CFI. This is a positive sign for the organization, as it suggests that employees are committed to working together to achieve common goals.

Table 2. Assessment of CFI in terms of collaboration

No.	Statement	Weighted Mean	Std. Deviation	Descriptive Rating
1	Jointly establish the overarching goals that direct our individual functional activities	3.9070	.74562	Agree
2	Ensure an open and transparent process for establishing common goals	3.9186	.59833	Agree
3	Establish a regular process for reviewing joint functional unit goals	3.8372	.64826	Agree
4	Support other functions in achieving common goals	3.9419	.69205	Agree
Average Weighted Mean		3.9012	.6711	Agree

The table reveals a strong positive view regarding the importance of CFI, and this finding is congruent with [Pellathy et al.'s \(2019\)](#) findings. A supportive organizational culture, as highlighted by [Pellathy et al. \(2019\)](#), not only encourages collaboration but also enhances creativity and innovation within cross-functional teams. This supportive culture, as [Pellathy et al. \(2019\)](#) suggest, also plays a pivotal role in improving decision-making within cross-functional teams by leveraging team members' diverse perspectives and expertise. Employees are more likely to be willing to compromise and work together when they feel they are part of a team and their contributions are valued. A supportive culture can help increase creativity and innovation within cross-functional teams because employees are more likely to feel comfortable sharing their ideas and taking risks when they feel their team members and the organization support them. According to [Kwan \(2019\)](#), organizations highly value and prioritize collaboration that aligns the different functions towards shared objectives. This could mean that leaders and employees supporting one another in reaching common goals is critical to successful collaboration within the organization. For collaboration to be strengthened, [Nugroho and Hermawan \(2022\)](#) suggested that leaders and employees should have aligned perceptions in a cross-functional team to accomplish the shared objectives.

Coordination

It is the process of ensuring that different departments and individuals work together in a synchronized manner to achieve common goals. It is an essential element of any successful organization, as it helps to improve efficiency, productivity, communication, collaboration, quality, customer satisfaction, and financial performance. Table 3 presents respondents' assessment of the practice of CFI of the subject-semiconductor company in terms of coordination.

Table 3 shows the highest rated indicator is "Ensure that functional activities are synchronized across the different areas", with a weighted mean of 4.0233 with an interpretation of "agree", which indicates a strong consensus on the synchronization of functional activities across different areas. This suggests that activities are well-coordinated and aligned, leading to a smooth and integrated workflow among the various functional units. The data shows a positive environment for CFI in managing processes, with efforts towards synchronization and mutual

understanding of the larger process among different functional units.

Table 3. Assessment of CFI in terms of coordination

No.	Statement	Weighted Mean	Std. Deviation	Descriptive Rating
1	Actively manage lead times across functions.	3.8721	.71614	Agree
2	Ensure that functional activities are synchronized across the different areas	4.0233	.63202	Agree
3	Jointly manage interdependencies across functional areas.	3.8605	.67148	Agree
4	Make sure functional areas see themselves as part of a larger overall process	3.8837	.65832	Agree
Average Weighted Mean		3.9099	.6694	Agree

The above finding aligns with the work of [Souza et al. \(2022\)](#), which underscores the pivotal role of CFI in coordination. [Souza et al.'s \(2022\)](#) study aligned with the present study's findings on the significance attached to the synchronization of functional activities, as evidenced by the high rating in the table. [Souza et al. \(2022\)](#) found that organizations that highly value CFI skills have recognized coordination as a critical factor in achieving success. This coincides with the present study's positive environment for CFI, emphasizing the need for organizations to prioritize and enhance coordination skills across functions.

Communication

It is the exchange of information and ideas between two or more people. Any organization needs to function effectively, as it allows employees to coordinate their activities, share knowledge, and make decisions. Table 4 presents the assessment of respondents on the communication dimension of CFI practice of the subject-semiconductor company.

Table 4 shows the highest rated indicator is "Everyone understands how information is used in different functional areas", with a weighted mean of 4.0814 interpreted as "agree". This indicates that the respondents generally agree that relevant information is reaching the right people across the different functions and that everyone understands the information that needs to be communicated. The data reveals that everyone has the same perception of how information is used in the different units of the company, and those recipients of information are aware and fully understand why they are getting the information they are receiving. This finding suggests that the organization has a strong information sharing and communication culture. This confirms that the organization is well-positioned to reap the benefits of CFI, such as improved efficiency, productivity, quality, customer satisfaction, and profitability.

Table 4. Assessment of CFI in terms of communication

No.	Statement	Weighted Mean	Std. Deviation	Descriptive Rating
1	Relevant information gets to the right people in different functional areas	3.9419	.63902	Agree
2	Everyone understands what information needs to be communicated to different functional areas.	3.8837	.67595	Agree
3	Everyone understands how information is used in different functional areas.	4.0814	.63644	Agree
4	Those on the receiving end understand why they are getting the information they are	3.8837	.64019	Agree

No.	Statement	Weighted Mean	Std. Deviation	Descriptive Rating
	getting.			
Average Weighted Mean		3.9477	.6479	Agree

The finding aligns with the research conducted by [Jeske and Calvard \(2020\)](#), emphasizing the pivotal role of communication in the success of cross-functional teams. This supports the finding of the present study that effective communication is a cornerstone of successful CFI practices. The positive consensus on understanding how information is used in different functional areas, as evidenced by the study, resonates with [Jeske and Calvard's \(2020\)](#) argument that communication is crucial in building trust, rapport, and coordination among team members within cross-functional teams. As supported by the study, effective communication breaks down barriers among the different functions, enhances the decision-making process, manages conflicts, and enhances trust and cooperation among employees. This alignment reinforces the understanding that a strong culture of information and communication is not only a positive attribute for organizational success but is also a fundamental component of successful CFI practices.

Impact of CFI on Organizational Performance

Organizational performance refers to the overall effectiveness of an organization in achieving its goals. It can be measured in various ways, such as financial performance, customer satisfaction, employee engagement, and market share. Effective collaboration, coordination, and communication are all essential for the success of any organization. By investing in these areas, organizations can improve their bottom line and achieve their goals. This section looks into the impact of CFI on the organizational performance of the subject-semiconductor company.

Table 5 shows the highest rated indicator is "Our organization functions work interactively with each other", with a weighted mean of 4.0698 interpreted as "agree". This finding, as shown in the table, suggests that the organization has a strong culture of integration and coordination. This is a positive finding as it suggests that the organization is well-positioned to obtain the benefits of cross-functional collaboration. Further, this result showcases a strong consensus on the well-integrated and coordinated nature of functions within the organization, with a high level of interaction and effective coordination.

Table 5. Impact of CFI on organizational performance

No.	Statement	Weighted Mean	Std. Deviation	Descriptive Rating
1	The functions in our organization are well-integrated	4.0233	.68560	Agree
2	Functional coordination works well in our organization	4.0465	.63072	Agree
3	Our organization functions coordinate their activities	3.9884	.65966	Agree
4	Our organization functions work interactively with each other	4.0698	.60955	Agree
Average Weighted Mean		4.0320	.6463	Agree

The above finding aligns with the research conducted by [Jackson \(2021\)](#), providing strong evidence that CFI is a crucial factor in organizational performance. [Jackson's \(2021\)](#) study emphasizes that organizations investing in CFI and establishing an organizational structure supportive of CFI are more likely to achieve success. The positive consensus on well-integrated and coordinated functions within the organization, as observed in the present study, resonates with

Jackson's (2021) argument regarding the strong positive impact of the practice of CFI on organizational performance. As highlighted by Jackson (2021), the well-defined culture of integration and coordination of an organization serves as a major driver for the success of collaboration across functional teams. The results from Table 5 not only affirm the positive environment of integration and coordination within the organization but also align with existing literature that a robust culture of CFI is instrumental in enhancing the overall organizational performance of any company.

Profile Moderated CFI

This section presents how the respondents' profiles moderated the practice of CFI in the subject-semiconductor company. The following profile variables, such as age, gender, length of service in the company, and area/ department assignment, were considered in this study. Tables 6, 7, and 8 present the tests for significant differences in respondents' perceptions of the practice of CFI in the company. ANOVA tests revealed the computed p-values are greater than the tabular values at a 0.05 level of significance. Therefore, there are no significant differences in the perceived CFI practices when respondents are grouped according to their age, gender, and length of service in the company.

Table 6. Significant differences in the practice of CFI when responses are grouped according to age

Elements of CFI	p-value	Decision (Alpha = 0.05)	Conclusion
Collaboration	.134	Accept Ho	NS
Coordination	.949	Accept Ho	NS
Communication	.322	Accept Ho	NS

Legend: NS = Not Significant

Table 7. Significant differences in the practice of CFI when responses are grouped according to gender

Elements of CFI	p-value	Decision (Alpha = 0.05)	Conclusion
Collaboration	.422	Accept Ho	NS
Coordination	.451	Accept Ho	NS
Communication	.488	Accept Ho	NS

Legend: NS = Not Significant

Table 8. Significant Differences in the practice of CFI when responses are grouped according to the length of service in the company

Elements of CFI	p-value	Decision (Alpha = 0.05)	Conclusion
Collaboration	.233	Accept Ho	NS
Coordination	.597	Accept Ho	NS
Communication	.372	Accept Ho	NS

Legend: NS = Not Significant

This finding validates that the company is doing well in the implementation of CFI, and the practice is perceived favourably by employees regardless of age, gender, and length of service. This is likely due to the company's strong commitment to practice CFI. The respondents, being supervisors, are generally aware of how the elements of collaboration, communication, and integration are employed in the company operations as important drivers for effective CFI and considering their professional qualifications, their CFI practices do not vary significantly. This

finding jibes with the study of [De Abreu and Alcântara \(2015\)](#), which states that professional experience matters in CFI practice. In the same vein, [Elikwu \(2019\)](#) found that an effective practice of CFI leads to the improvement of employee morale, engagement, and productivity. This relates to the present study's findings, which revealed that the company has a strong commitment to practising CFI, where employee satisfaction and engagement are the direct outcomes. Employees who feel their company is committed to CFI are more likely to be motivated and engaged in accomplishing their work assignments. They are also more likely to be satisfied with their jobs and to remain affiliated with the company for a long period.

As can be gleaned from Table 9, the results of the ANOVA test imply significant differences in the perceived CFI concerning coordination and communication when respondents are grouped by area/ department assignment in as much as all the computed p-values are less than the tabular values at 0.05 level of significance. This means that employees from different areas/ departments of the company have different perceptions of how the company is coordinating and communicating across functions. This may be because the existing departments of the company have different work processes and goals, and they may encounter issues in coordinating and communicating effectively across functions. Employees from the company's various departments use different languages and terminologies, which contribute to the difficulties these departments experience in communicating and coordinating the needed information for dissemination to other functional units of the company. Therefore, the company needs to improve its coordination and communication practices for a more synchronized organizational culture. This finding should align with the study by [Elikwu \(2019\)](#), who found that organizational culture plays a significant role in the effective practice of CFI. [Elikwu \(2019\)](#) defines organizational culture as "the shared values, beliefs, and norms that influence the behaviour of employees within an organization." He argues that a culture of collaboration and communication is essential for an effective CFI implementation across the functional units of the organization. When employees feel comfortable sharing information and working together across functions, it is more likely that the company will be able to coordinate and communicate effectively.

Table 9. Significant differences in the practice of CFI when responses are grouped according to their area/ department assignment

Elements of EPs	p-value	Decision (Alpha = 0.05)	Conclusion
Collaboration	.166	Accept Ho	NS
Coordination	.015	Reject Ho	S
Communication	.017	Reject Ho	S

Legend: S = Significant; NS = Not Significant

CONCLUSIONS

The organization is doing well in terms of CFI. This means that different functional areas within the organization are working together effectively to achieve common goals. This is evident in the survey findings, which show that respondents agree that the organization has a supportive culture for CFI, that functional activities are well-coordinated and aligned, and that information is effectively shared and communicated across different functional areas. The present study has provided empirical evidence that CFI is considered a crucial factor in organizational performance.

There is always room for improvement. To continue to improve the practice of CFI in the subject-semiconductor company, the organization can focus on fostering a supportive culture for CFI, improving coordination and alignment of functional activities, improving information sharing and communication across different functional areas, and identifying and addressing any areas where coordination between functions could be improved. By taking these steps, the organization

can continue to reap the benefits of CFI, such as improved efficiency, productivity, quality, customer satisfaction, and profitability.

LIMITATION & FURTHER RESEARCH

The researchers suggested that future research should include a more diverse representation of semiconductor companies operating in the country in order to widen its scope. Likewise, other data-gathering methods, such as in-depth interviews, focus group discussions, and observations, can be utilized to reduce self-report bias and further confirm the study results. Moreover, research on coordination and communication strategies among the organization's functional units for a more effective CFI practice is a potential topic of interest.

REFERENCES

- Ahmed, R., Rafiq, A., & Philbin, S. P. (2021). Cross-functional integration between organizational and the new product development process. *Organization Development Journal*, 39(4), 63-78. <https://rb.gy/tpxqrp>.
- Briones, J. P., Verano, J. P. E., Uy, R. G., Atanacio, E. B., Refozar, R. F. G., & Maglangit Jr, Z. D. (2023). Entrepreneurship practices of higher education institutions in Region IV-A, Philippines. *International Journal of Entrepreneurship, Business and Creative Economy*, 3(2), 15-31. <https://doi.org/10.31098/ijebce.v3i2.1446>.
- Castañer, X., & Oliveira, N. (2020). Collaboration, coordination, and cooperation among organizations: Establishing the distinctive meanings of these terms through a systematic literature review. *Journal of Management*, 46(6), 965-1001. <https://doi.org/10.1177/0149206320901565>.
- Ceccagnoli, M., Van Zeebroeck, N. & Venturini, R. (2013). Cross-functional knowledge integration, patenting, and firm's performance. *SSRN*. <https://dx.doi.org/10.2139/ssrn.2286693>.
- Contu, E. G. (2020). Organizational performance – theoretical and practical approaches: Study on students' perceptions. *Proceedings of the International Conference on Business Excellence*, 14(1), 398-406. <https://dx.doi.org/10.2478/picbe-2020-0038>.
- Darmasetiawan, J. B., & Rapina, R. (2023). What are the key dimensions of organizational culture? Evidence from Indonesia. *People and Behavior Analysis*, 1(2), 14-25. <https://doi.org/10.31098/pba.v1i2.1710>.
- De Abreu, A., & Alcântara, R. L. C. (2015). Supply chain managers: Professional profile and the role in the cross-functional integration of supply chain management. *Independent Journal of Management & Production*, 6(1), 044-063. <https://rb.gy/912pow>.
- Elikwu, F. (2019) Exploring the Impact of cross-functional collaboration on organizational mission alignment of the University of Maryland University College (UMUC). *SSRN*. <https://dx.doi.org/10.2139/ssrn.3396876>.
- Fobbe, L. (2020). Analyzing organizational collaboration practices for sustainability. *Sustainability*, 12(6), 2466. <http://dx.doi.org/10.3390/su12062466>.
- Jackson, L. (2021) The effect of cross-functional integration on organizational performance: A look at collaboration, coordination, and communication. *Electronic Theses and Dissertations*. 4818. Florida International University. <https://doi.org/10.25148/etd.FIDC010302>.
- Jeske, D. & Calvard, T. S. (2020). A review of the literature on cross-functional integration (2010–2020): trends and recommendations. *International Journal of Organizational Analysis*, 29(2), 401-414. <https://doi.org/10.1108/IJOA-04-2020-2144>.
- Kang, M., Lee, M., Hwang, D. Wei, J., & Huo, B. (2021). Effects of cross-functional integration on NPD success: Mediating roles of customer and supplier involvement. *Total Quality Management and Business Excellence*, 32, (13-14), 1515-1531.

- <https://doi.org/10.1080/14783363.2020.1736543>.
- Kwan, L. B. (2019). The collaboration blind spot. *Harvard Business Review*, 97(2), 63-67. <https://hbr.org/2019/03/the-collaboration-blind-spot>.
- Larsson, J., & Larsson, L. (2020). Integration, application and importance of collaboration in sustainable project management. *Sustainability*, 12(2), 585. <http://dx.doi.org/10.3390/su12020585>.
- Menina, J. P. (2023). Sustainability of SMEs during COVID-19 pandemic. *Journal of Social Entrepreneurship Theory and Practice*, 2(1), 55-74. <https://doi.org/10.31098/jsetp.v2i1.1666>.
- Mondejar, H. C. U., & Asio, J. M. R. (2023). Employee engagement among business process outsourcing industries in a freeport zone amidst the pandemic. *Journal of Social Entrepreneurship Theory and Practice*, 2(1), 13-26. <https://doi.org/10.31098/jsetp.v2i1.1662>.
- Murillo-Oviedo, A., Pimenta, M., & Hilletoft, P., & Reitsma, E. (2019). Achieving market orientation through cross-functional integration. *Operations and Supply Chain Management: An International Journal*, 12(3), 175-185. <http://doi.org/10.31387/oscm0380241>.
- Nugroho, D. T., & Hermawan, P. (2022). Strengthening collaboration through perception alignment: Hybrid workplace leadership impact on member awareness, understanding, and learning agility. *International Journal of Management, Entrepreneurship, Social Science and Humanities*, 5(1), 116-132. <https://doi.org/10.31098/ijmesh.v5i1.954>.
- Pellathy, D. A., Mollenkopf, D. A., Stank, T. P., & Autry, C. W. (2019). Cross-functional integration: Concept clarification and scale development. *Journal of Business Logistics*, 40(2), 81-104. <https://doi.org/10.1111/jbl.12206>.
- Pimenta, M. L. (2019). Cross-functional integration in product development processes in the era of Industry 4.0. *Revista Produção E Desenvolvimento*, 5. <https://doi.org/10.32358/rpd.2019.v5.350>.
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist CNS*, 34(1), 8-12. <https://doi.org/10.1097/NUR.0000000000000493>.
- Souza, D., Bement, D., & Cory, K. (2022) Cross-functional integration skills: Are business schools delivering what organizations need?. *Decision Sciences Journal of Innovative Education*, 20(3) 117-13. <https://doi.org/10.1111/dsji.12262>.
- Stähle, M., Ahola, T., & Martinsuo, M. (2019). Cross-functional integration for managing customer information flows in a project-based firm. *International Journal of Project Management*, 37(1), 145-160. <https://doi.org/10.1016/j.ijproman.2018.11.002>.
- Szalavetz, A. (2018). Sustainability-oriented cross-functional collaboration to manage tradeoffs and interdependencies. *International Journal of Management and Economics*, 54(1), 3-17. <https://doi.org/10.2478/ijme-2018-0002>.
- Yin, Z., Caldas, C., de Oliveira, D., Kermanshachi, S., & Pamidimukkala, A. (2023). Cross-functional collaboration in the early phases of capital projects: Barriers and contributing factors. *Project Leadership and Society*, 4, 1-10. <https://doi.org/10.1016/j.plas.2023.100092>.