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NIQ'S STRATEGY FOR DIGITALIZATION OF DATA COLLECTION METHODS IN FACING CHANGES IN MARKET BEHAVIOR, TECHNOLOGICAL CHANGES, AND COMPETITION

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Abstract

Changes in market behavior, technological advancements, and increasingly fierce competition have pushed NIQ as a marketing research company to face challenges in data collection. The ever-evolving needs of clients in various industries, as well as the increasing complexity of survey criteria and data, result in projects with non-BAU methods at NIQ. The main objective of this study is to analyze and implement the digitalization strategy. SWOT and TOWS analysis are used to determine NIQ's corporate strategy, based on current internal and external factors. The application of CEM in this research includes Kotler's 5 A digital customer experience: Awareness, Appeal, Ask, Act, and Advocate. For SCM, references are used from alternative methods that have previously been run by NIQ during the Covid-19 pandemic. Finally, innovation management theory is used as a reference to implement digital survey strategies. From the results of the analysis of these variables, it was revealed that social media is one of the most popular platforms for potential respondents for digital surveys, both in increasing respondent awareness and as a forum for interaction between potential respondents and NIQ to get a good customer experience. In addition, it was concluded that the best and most feasible approach currently carried out by NIQ for digital surveys is through the respondent approach using the Datalake system, which is a database collected by NIQ from all previous studies and new respondents with appropriate criteria.

Keywords: Digital survey strategy, Digital marketing Framework, CEM, SCM, Innovation management, Incidence rate.

Introduction

The market research industry globally, including in Indonesia, is always growing every year to become a vital support in corporate decision-making strategies in various industries. According to Philip Kotler, *"Marketing research is systematic problem analysis, model building and fact-finding for improved decision-making and control in*

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the marketing of goods and services."

The methodologies used in market research consist of quantitative and qualitative data collection done through a survey, group discussion, IDI, observation, etc. In the past, with various limitations to data collection, a company required considerable effort in terms of resources and budgeting, therefore many companies used third parties in the form of market research agencies to conduct market research for their companies' objectives. This becomes the reason to make market research companies grow. Not even a few market research established the international market to meet the needs of their clients. Previously, data collection was done traditionally. For example, running a quantitative survey using a pen and paper, which then inputted the data into data processing software, and then processing the data to be presented to the client needs more than 2 weeks to be complete and present to the client. The following is the flow carried out in conducting a quantitative survey for products with an incidence rate in the market of more than 30%.

However, high technology development has had a significant impact on the flow and methodology of market research whereas currently with the internet and social media, data collection by various parties is easier to do even though the level of accuracy and validity of the data is still a major issue. Clients increasingly want all processes the traditional way to move to digital so they can cut time and costs more but with still good quality data, so they start looking at companies that own and process big data to conduct their market research and this is a threat to current market research agencies for their business sustainability.

There are several reasons why NIQ still uses traditional methods for data collection methods: (1) Methodology of proportional randomization distribution can only be done by using traditional methods. (2) Not all the respondent criteria needed by the client can be searched using big data or searched online. (3) With the limited of online panel users, the quality and validity of the data if the data collection method is done online are not believed to be better.

With the summary background above can be seen that several potential issues can be investigated more deeply to produce a solution and recommendation for NIQ. One of the important issues from the results of the analysis above is how NIQ competes with the emergence of digital data collection companies and technology and NIQ's strategy to continue to survive and increase company profits.

In addition, currently, many companies are reviewing their customers using their internal big data because they are considered to provide more data, at a faster time so they are slowly starting to leave traditional market research activities. One article on Bigbox.co.id states that there are at least 7 companies in Indonesia that are currently successfully implementing big data solutions for their businesses, Netflix, Starbucks, Amazon, Gojek, Traveloka, and OVO. These 7 companies are potential clients for NIQ but NIQ now has to innovate and create new strategies on how to provide services to them with the advantages that NIQ has that these companies may not have and can do.

Based on the research question above, the objective to be answered in the final project are: (1) Identify factors that can reduce the decline rate to participate in digital

surveys. (2) Approach to obtain more accurate incident rate data to determine more precise operational costs. (3) Identify the required digital strategies to minimize or eliminate excessive operational costs and maximize revenue, particularly for high-complexity projects at CI NIQ.

As mentioned above, the final project will only focus on the customized intelligence business in NIQ or previously known as consumer insight (CI). The strategy that will be proposed later is the result of gathering insights in aggregate from internal and external stakeholders who are directly involved with CI NIQ Indonesia's business by considering the company's current condition.

Research Method

This final project entails a thorough exploration of the research methodology utilized to tackle the research questions at hand. The primary objective of this project is to present a strategy proposal to CI NIQ, aiming to digitize the data collection approach as a means of addressing existing business challenges. To delve into this matter comprehensively, the chapter will be subdivided into three sections: Research design, Data collection methods, and Data analysis methods.

1. Research Design

In this research, a mixed methodology will be carried out using quantitative studies and qualitative studies. Quantitative studies will focus on collecting data which will then be analyzed for decision making and Qualitative studies on the other hand (Phrita Bandari, 2019). This research will use a qualitative study to dig deeper into the perspective of internal stakeholders, aiming to identify the underlying causes of current problems and explore potential solutions. Later IDI will be the method used in this qualitative methodology.

2. Data Collection Method

The data collection for this survey will align with the specific requirements of the research questions. An online survey will be employed using a quantitative approach to identify the factors influencing individuals' inclination to participate in digital surveys and mitigate rejection rates. Additionally, a qualitative method will be utilized through In-Depth Interviews (IDIs) to gather extensive insights from relevant stakeholders.

3. Data analysis Method

a. Data Analysis in Quantitative

In the Quantitative survey, data analysis will be carried out using descriptive statistical methods which are methods that help describe, show or summarize data constructively. This method refers to statistical descriptions that help understand detailed data by summarizing and finding patterns from certain data samples. Through samples, you will get absolute numbers that do not necessarily explain the motives or reasons behind the numbers. That's why we need an inferential method for further analysis. The purpose of the descriptive method is to describe a problem clearly, accurately, and systematically based on

the facts in the field. Of the two descriptive statistical methods, this research will later use a comparative method to see which of each variable exists which then becomes important to be used as a reference in finding solutions and making company strategies.

b. Data Analysis in Qualitative

In the qualitative survey, the data that has been obtained after IDI will be analyzed using a narrative analysis method, that is, a method that focuses on conveying ideas to all relevant parties. Discourse analysis techniques focus on the social context in which communication occurs between respondents and researchers. The use of this technique can help in understanding company culture and is commonly used to develop business strategies in companies.

Results and Discussion

In this chapter, the author presents the findings of the analysis, which is organized into several sections. The first section focuses on the analysis results concerning the factors that contribute to a positive customer experience in digital surveys. Additionally, it examines the alternative survey methods employed by CI NIQ, which are considered highly appealing to customers for developing a digital survey.

The subsequent section explores the most effective strategy for determining a valid IR (Incidence Rate) value, which serves as the foundation for assessing survey complexity. Finally, the last part of the chapter delves into identifying suitable digital survey innovations for CI NIQ based on the outcomes of their customer experience management (CEM), supply chain management (SCM), and IR determination strategies. The aim is to assist CI NIQ in reducing or minimizing the operational budget excess that has been experienced thus far.

By integrating the analysis above, the research questions outlined in Chapter 1 will be addressed, serving as the foundation for formulating the strategy in the concluding chapter.

A. Strategies for determining valid incidence rate in CI NIQ

The strategy to obtain valid incidence rate values is carried out by conducting an IDI (In-depth Interview) with relevant stakeholders, namely:

1. Senior end-to-end Project Management (Senior E2E PM). The project management role is responsible for managing all aspects of project activities from costing, set-up, execution, and data quality to end deliverables. Ensuring that projects are completed within established budgets, parameters, schedules, and quality standards. A proactive approach to address potential operational risks with a mitigation plan in place to ensure we deliver on all our project commitments and drive high client satisfaction.
2. Senior end-to-end Project Coordinator. Working alongside Project Managers, this role is responsible for planning and executing project activities to ensure timely, efficient, and high-quality deliverables. Ensuring that project instructions and

standard operating procedures are implemented at every project. Adding value by offering recommendations and suggestions for improved current and future projects execution and delivery.

3. Senior Manager - Client Service. Client Service professionals are responsible for developing and nurturing relationships with clients. This includes understanding their needs, addressing their concerns, and ensuring client satisfaction. They help clients understand market trends, consumer behavior, and competitive landscapes through data analysis and reporting. Supporting clients in utilizing research tools. Collaborate with internal teams; research analysts, data scientists, and project managers to ensure client projects are executed smoothly. Communicate client requirements, provide feedback, and coordinate project timelines.

Each team above is given several questions related to current issues regarding invalid incidence rate figures that lead to project execution not being smooth and significantly impacting actual costs that exceed the budget.

The questions are divided into two parts. Part 1 consists of specific questions related to the role and expertise of each division, while part 2 consists of general questions related to strategies that can be implemented to obtain more valid incidence rate values during the costing stage.

Table 1
List Questions

List of Questions	Stakeholders
PART 1	
How is IR currently determined in the costing process?	Senior E2E PM
What is the costing process for projects with low IR?	Senior E2E PM
Are there any other teams involved by the project manager when doing cost to obtain the appropriate IR values?	Senior E2E PM
Is there any backup plan prepared by the project manager when doing costing for projects with challenging IR criteria to ensure smooth fieldwork without any obstacles?	Senior E2E PM
How does the field team support the project manager in achieving the desired IR values based on the actual field conditions?	Senior Project Coordinator
How is the contact sheet recorded to obtain the IR value for a project in the current fieldwork?	Senior Project Coordinator
What are the challenges faced by the field team in implementing the contact sheet recording to ensure valid IR values?	Senior Project Coordinator
If there is a significant difference between the IR value initially estimated during costing and the one observed in the field, what is the current biggest impact?	Senior Project Coordinator

Do clients usually provide an incidence rate value in the project brief for costing purposes?	Client service
Is there a standard procedure followed by the client service team when requesting costing from the project management team to obtain valid IR information during costing?	Client service
If there is no valid incidence rate available as a reference, what does the client service team do to ensure that the price provided to the client is valid and feasible for the operations team to implement?	Client service
PART 2	
Is IR a significant factor in determining the budget?	ALL
Is IR also a significant factor in the actual project expenditures?	ALL
What is the best/most effective strategy that NIQ needs to implement in determining the IR?	ALL

B. Strategy Incidence Rate by Senior E2E PM

Here is the answer from the in-depth interview with the Project Management team, which has a role in determining the budget and timeline to be given to the client service team.

1. Proses Costing.

   The PM team does several things when initially receiving a brief from the client service team to determine the incidence rate as a reference. Here are some of the process steps that are undertaken:

   a. Desk research
   b. Check previous projects that have been done before.
   c. Quick incidence check with the field team.
   d. Searching for data sources through data.

   If we cannot obtain the appropriate numbers thus far, the project management team will make predictions for the incidence rate using assumptions.

2. Effectiveness of IR values for budgeting determination.

   Incidence rate is used by the costing team to determine the ease or difficulty of finding the desired respondents during fieldwork. As a result, the project management team uses it as a determinant for budgeting operational costs.

3. Involvement of other stakeholders in determining IR during costing.

   As previously mentioned, when PM is creating costing and needs to know the IR values, PM involves other stakeholders in CI NIQ such as the commercial team, data science team, and field team. Additionally, outside of CI, it is not uncommon for the PM team to connect with other business units such as Retail Management and Consumer Panel Service Management to obtain data references for determining IR.

4. Backup plan prepared by the project manager in costing.

   As a standard practice, for certain cost components in operations, a 5%-10%

increase is allocated as backup costs in case of significant changes in criteria, specifications, or survey methods that highly affect the IR. However, according to the PM team, it is often observed that the actual budget overruns for operation can exceed 10% for certain cases.

C. Strategy Incidence Rate by Senior Project Coordinator

Here are the results of the analysis from the in-depth interview process with the Senior Project Coordinator, who is heavily involved with the field team.

1. Determination of IR data through field data checking.

   According to current global regulations, the field team is required to always fill out contact sheets, which will serve as a reference for the actual IR values in each ongoing project in NIQ. However, to obtain an ideal contact sheet, if the team conducts traditional survey methods, an additional budget is needed for interviewers to fill out the contact sheets.

   In practice, when interviewers are in the field, they already have productivity targets to meet, so adding the task of filling out contact sheets can slightly decrease survey productivity and is often not performed by interviewers.

   Therefore, according to the Project Coordinator, valid data from the field cannot always be used to provide PM with valid IR references. When supporting PM in determining IR, once again the Project Coordinator relies on previous project experience for estimation.

2. Recording Contact Sheets in current fieldwork.

   As mentioned earlier, under the current global regulations, the field team has an obligation to record contact sheets for each ongoing project, with the aim of using them as a more valid reference for IR values. The reality, according to the Project Coordinator, is that interviewers cannot focus on doing this task without additional costs for recording contact sheets.

   The standard practice in projects that already have contact sheet recording from the beginning is to increase the cost by 20% for interviewer fees and respondent gifts. However, according to the Project Coordinator, a 20% increase is still not significant enough to motivate the interviewer team. Based on research and previous experience, the Project Coordinator suggests that an ideal figure to motivate them to record contact sheets more compliantly and validly is a 50% increase in interviewer fees and a 20% increase in respondent gifts.

3. Challenges faced by the field team in recording contact sheets to obtain valid IR values.

   The biggest challenges for the field team, aside from decreased productivity impacting interviewer costs, are:

   a. Ease of recording and lack of standardization. Currently, CI NIQ utilizes an external platform called Survey to Go (STG), where each survey recorded incurs a cost of $2.5. If all contact sheets need to be recorded within STG, the licensing cost would increase and be unlimited, as contact sheets need to record all respondent data that does not meet the criteria in each PSU. This

would significantly increase operational costs. To avoid such high costs, the actual recording is currently done using paper and pencil (PAPI), and then inputted by the interviewers into MS Form (Microsoft Form). However, this approach is not ideal as compliance among interviewers may vary.

b. Lack of standardized recording across projects. As mentioned earlier, according to the Project Coordinator, the lack of standardization in recording and the use of MS Form in each project creates difficulties in analyzing the IR values at the end. This lack of standardization is further supported by the differences in each project. The Project Coordinator finds this quite challenging and hopes for better and easily adaptable tools for the CI NIQ operation team, enabling interviewers to make easier contact sheet notes and provide more valid IR values as support to the PM team.

4. Impact of significant changes in IR values in costing vs actual.

When the IR values change significantly according to the Project Coordinator, between what was initially costed and the actual values, the biggest impact is on the timeline due to the change in field productivity. This in turn affects the daily payments made to the interviewers, which can increase and ultimately have a major impact on operational costs. As mentioned above, the OPE (operational expenditure) value will inflate beyond the budgeted amount.

In such situations, the Project Coordinator typically first tries to modify the strategies in the field by maximizing the existing costs. If it is deemed extremely difficult and the project's deliverables are at greater risk, which could result in cost penalties or risks for other clients, the Project Coordinator will still request an over-budget approval.

D. Strategy Incidence Rate by Senior Manager Client Service (CS)

The last IDI to validate the strategy of determining valid IR values is with the senior manager from the client service team. Here are the answers to the questions asked:

1. Support for IR values in the client's project brief.

According to the Senior Manager from the CS team, clients never provide specific IR values that can be used as references to calculate valid IR values, even for research-savvy clients. The CS team usually tries to gain an understanding of the difficulty in finding the target respondents by requesting sales data or other relevant data that the client may be able to provide. However, beyond that, there is not much information provided by the client to assist in determining the IR values.

2. Standardization of determining IR values in the client service team during costing requests.

There is currently no standardization in place within the client service team, even though the costing template on the platform requests such data as a reference. According to the Senior Manager of CI, when the CS team is asked to input IR data, their approach is like that of the PM team and the Project Coordinator. They

look at similar projects and, if they feel there is no suitable reference, the CS team relies more on intuition or fully relies on the justifications provided by the PM team in the costing.

3. Steps taken by CS to assure clients that costing aligns with the correct IR values.

   According to the Senior Manager at CI, there will always be a negotiation process with the client once the pricing is provided to them, and this negotiation process is not standardized in every proposal. The negotiation is typically conducted for the price that has already included a margin from the cost of operations.

   To convince the client that the given price is the best and aligns with the criteria to be targeted in the survey, the CS team usually performs an initial check on the costs provided by the operations team and verifies the logic with the survey method, respondent criteria, and survey area. If necessary, negotiation processes have already been conducted with the operations team before it is finally presented to the client service.

   Negotiations with each client are also treated differently based on the client type. For government-owned enterprise (BUMN) clients, during the negotiation process, they often request a detailed breakdown of the cost components included in the given price. Therefore, the CS team needs to carefully consider each component to ensure that there are no costs that seem unreasonable. However, non-BUMN clients, they do not require such detailed breakdowns and tend to have more general negotiations.

E. Incidence Rate as an Important Factor Determining Budget Cost Vs. The Actual Cost in CI NIQ Operations

Of the three divisions that were asked, they all answered "Important" with several considerations that have been summarized as follows:

1. Incidence rate reflects the productivity value of interviewers in each project. This productivity figure serves as a reference for PM when creating costing.
2. Incidence rate also serves as a reference for the timeline of each project. This timeline becomes a reference for the PM to calculate the required resource costs.
3. Incidence rate can also indicate the difficulty in finding and approaching respondents, which can provide a reference for determining the GIFT/Incentives value for respondents in each project.

F. The Best Strategy for Determining IR values According To Relevant Stakeholders.

From the IDIs conducted with the three relevant stakeholders, several points have been summarized as follows:

1. Compliance of each team that supports the PM team in providing valid IR value references should be standardized.
2. Create a more standardized database to serve as a data bank when in need of good IR values.
3. Collaborate with internal and external stakeholders to provide data references as

IR value references.

4. Develop standardized tools for recording contact sheets to facilitate the field team.
5. Increase the operation cost in terms of interviewer fees to incentivize interviewers to actively record IR values.
6. Make IR values the primary reference in the costing process but combine them with other variables to obtain more valid costs, enabling the provision of the most competitive pricing to clients.

G. Innovation Strategy in Digital Data Collection Method CI NIQ

The next analysis conducted is related to the digital innovation strategy in data collection methods at CI NIQ. To gain insights in this area, IDI interviews were conducted with 2 key individuals from the Operation and Commercial teams.

1. Project Management COE (Center of Excellence) Leader: Plan, schedule, and establish workflow in accordance with established global standards to meet delivery schedules with ongoing emphasis to improve efficiency, accuracy, timeliness, and cost-effectiveness. Introduce new methods as necessary, with the end goal of maximizing resources and delivery commitments. Responsible for the overall management and coordination of the Center of Excellence unit to effectively utilize and develop the appropriate resources to meet both short and long-term needs of the overall business strategy, project deliverables, and quality assurances.
2. Associate Director – Client Service: Besides To design, selling, and executing research studies, acting as a consultant to clients and internal staff on study and research, and design issues, and managing a group of account management, project management, and support staff. Currently, every associate director at CI NIQ has specific Key Performance Indicators (KPIs) to explore and expand NIQ Global's business related to new, more efficient methods and emerging industries.

In this section, the Operation and Client Service teams will be asked the same questions regarding potential innovation strategies that CI NIQ could undertake. Here are the results of the analysis for each question.

H. Issues and Challenges in Digital Innovation CI NIQ

Table 2
Background Issues in Innovation

Are there any ongoing issues at CI NIQ related to the innovation of digitalization methodologies?
How does CI NIQ embrace digital technology currently, both in terms of data collection methods and survey processes?
What do you consider to be the main challenges that NIQ faces in implementing digital surveys?

1. Current Issues.
   a. Operation: According to the leader in the Operation team, the current issue with digital innovation at CI NIQ is the lack of a platform. One example is the online survey platform currently used by CI NIQ, which is 100% supported by a vendor. However, the vendor's capability in Indonesia to capture all respondents across the country is still insufficient. In addition to the platform issue, there hasn't been strong encouragement from the Client Service team, despite clear directions from the global team. The Commercial team, represented by the Client Service team, has not been aggressive enough in driving the digital innovation. As a result, the efforts made by the CI NIQ Operation team in setting up the necessary infrastructure cannot be fully utilized.
   b. CS: According to the CS Director, the challenge with the digitization of surveys at CI NIQ is that online surveys, for example, do not provide representative data that accurately reflects the population. The overall positioning of CI NIQ with clients is focused on how CI NIQ's data can be used as a reference for clients in building their KPIs, such as market share data for brand health projects.

      The lack of representativeness is due to CI NIQ's current reliance on vendors for conducting digital surveys. As mentioned earlier, the panel data provided by vendors does not cover all areas in Indonesia, especially rural areas.
2. CI NIQ embraces digital technology currently, both in terms of data collection methods and survey processes.
   a. Operation: According to the leader in the Operation team, the signs of CI NIQ embracing digitization are evident through strong directives from the global team to digitize surveys as soon as possible. Several global initiatives in CI Ops have been implemented to develop a digital survey strategy and explore possibilities. These initiatives include collecting IR values for all ongoing projects, which will serve as a data bank for IR references. Digital recording of Length of Interview (LOI) for each project has been implemented to standardize projects and achieve the ideal LOI for survey innovation. There is also a strong collaboration with online vendors to obtain competitive prices and expand the panel size across all CI NIQ markets.
   b. CS: According to the CS Director, this aligns with what was previously expressed by the operation team, as the support for digitization is evident through the seriousness of the global team in setting high KPIs for each CI NIQ market to undergo digital survey transformation. Although the sales target for the new initiatives has only reached 20% of the target, progress is being made in Indonesia.
3. Main Challenges in Digitalization Innovation
   a. Operation: According to the leader in the operation team, the current challenge lies with the Client Service team at CI NIQ, as they are not yet

accustomed to conducting online survey analysis. They still maintain an offline survey mindset that is being shifted online. This limits their ability to fully leverage the capabilities of the current surveys and transition to online surveys. From the Operation team's perspective, there are no significant challenges, as they are 100% ready to support this digital transformation if needed.

b. CS: According to the Client Service Director, the challenge lies in meeting the client's need for data representativeness, which is typically achieved through CI NIQ's standard random sampling methods. If digital surveys are conducted using vendors, it becomes challenging for the Client Service team to convince their clients, as it may compromise the representativeness of the data.

I. Type of Innovation

Type of Innovation, According to you, what digital survey innovation do you think is most suitable for CI NIQ to address the issues in CI OPS?

The proposed types of innovation for the digitalization strategy at CI NIQ by both teams are as follows:

1. Operation: The leader in the operation team suggests utilizing tools for online respondent recruitment as an innovation for digitalizing surveys at CI NIQ. One example is using robocalls with the assistance of CI NIQ's datalake. The process involves using the datalake to search for respondents with high difficulty levels, such as banking or automotive projects, by inputting their numbers into the robocall system. The robocall is an automated dialing tool with a robot's assistance, where respondents are asked standard screening questions. If a respondent is willing to be called, they can proceed to the main interview.
2. CS: The CS Director acknowledges that bringing digital surveys from CI NIQ to clients is not an easy task because the current client expectations of NIQ are market research that provides representative data in the market. However, during previous pandemics when face-to-face surveys were not possible, one successful method for respondent recruitment was utilizing CI NIQ's datalake. This method was accepted by clients, although there were some who declined. Most of the tracking in CI NIQ was able to continue using the datalake method.

The CS Director considers this idea to be the most feasible innovation currently for CI NIQ, as it is believed to greatly assist in respondent recruitment and provide better results for clients.

J. Innovation Process

Table 3
Innovation Process in Digital

What is the most appropriate process for implementing the digitalization methodology at CI NIQ?

Does the team at CI NIQ have the capability to accomplish that?
Is there a need for a dedicated team to handle this at CI NIQ?

1. The most appropriate process for implementing the digitalization survey method.
2. Operation: According to the leader in the operation team, the most appropriate approach for the current innovation process is to have strong support from the CS or Commercial team. The operation team has already prepared everything needed for this digital transformation.
   This includes transitioning from offline surveys to online surveys, where the operation team has made numerous contacts and efforts to meet the needs of the CS team. They have also set up new tools and adapted technologies to capture surveys with more complex criteria or methods than before.
3. CS: According to the CS Director, the most appropriate process at present is to explore various alternative methods in data collection. As mentioned earlier, as respondent behavior evolves in the future, their difficulties in approach will become more apparent. Additionally, during pandemics that drastically change respondent behavior, it significantly impacts CI NIQ's business operations, particularly surveys. The process of digitization should be gradual and well-prepared to assist the CS team in convincing clients that CI NIQ can provide something different from other research companies while maintaining data quality as a competitive advantage.
4. Capability in CI NIQ for these Innovation.
   a. Operation: As previously mentioned by the PM leader, the operation team at CI NIQ is fully prepared to support any digital changes, including collaborating with various vendors that can support this innovation.
   b. CS: According to the CS Director, currently, such capabilities may not be feasible, considering several aspects that need further examination by all teams. For example, the use of datalake, which is considered the most representative in depicting the population, is still struggling with suboptimal success rates and the reliability of respondent data is not yet fully reliable.
5. Dedicated team for Innovation strategy
   a. Operation: The Operation leader believes that a dedicated team should be established and professionally appointed by leaders at both the global and regional levels. This is because achieving smooth-running innovation and meeting expectations requires a high level of dedication. In the Operation team, it is not uncommon to hire a dedicated team to prepare for an innovation, and they may also act as the main point of contact with relevant vendors if needed.
   b. CS: The CS Director states that a dedicated team for innovation is necessary, considering the need for individuals with specialized skills to make it happen. However, from a business strategy perspective, it can be

challenging for a company as once the innovation is completed and implemented, the dedicated team may no longer be 100% useful. Therefore, the suggestion from the CS Director is to appoint a champion from within the existing team who has the desire, passion, and capabilities to lead the initiative.

K. Business Solution

Based on the above analysis, there is business solutions that can be implemented, aligning with the objectives of the final project. The most feasible method of digitalization that can be implemented at CI NIQ is the use of digital surveys for recruiting respondents for surveys with challenging criteria. Recruitment can be done using social media, which is believed to be the most popular platform where 50% of respondents are likely to engage with CI NIQ.

Furthermore, to encourage respondents to participate in surveys at CI NIQ, there is a need to strengthen the CI NIQ brand on social media. This is supported by the fact that 32% of respondents express their interest in interacting with CI NIQ through social media to learn more about the company, followed by 31% who prefer to inquire through social media platforms for clearer information about the surveys they will participate in. The digital surveys should be clear, engaging, and easy to complete, as 30% of respondents stated that the ease of completing the survey is their main decision factor.

Moreover, after respondents have had a positive experience, a referral system can be implemented as an alternative to traditional snowball sampling. A significant portion, 90% of respondents, are interested in a referral system, with 77% expressing willingness to provide referrals if they can receive direct incentives in the form of e-wallet credits aligned with the level of difficulty of the criteria.

35% of respondents expressed interest in providing referrals through a referral code on the survey platform, while 33% prefer direct distribution of survey links through broadcasts from respondents themselves.

Regarding the respondents' interest in digital methodologies, 66% of them are interested in the datalake system. This aligns with the IDI results regarding the strategy of creating a data bank at CI NIQ to obtain more valid IR values. Currently, there is no standardized system for storing the data owned by CI NIQ. By creating and maximizing the datalake system, project managers can utilize it to retrieve IR values when conducting costing.

Therefore, the datalake will consist of a combination of the existing NIQ database and respondents who have completed the digital recruitment surveys. The IR value can then be calculated using a modified formula, which was originally as follows:

IR = *Contact / (Contact + **Full respondent)

**Contact = respondents who were met but did not match the criteria sought in the survey.*

***Full respondent = respondents who met the survey criteria.*

The modified formula, when using the datalake to calculate it, would be as follows:
IR = ***All respondent datalake / (All respondent datalake + ****potential respondent)
*** *All respondent datalake = the total number of respondents recorded in the datalake, serving as a reference for the population of CI NIQ.*
**** *Potential respondents = respondents who meet the similar criteria required.*

This can also be done at the level of specific areas/cities, which was previously complained about by stakeholders when relying solely on external data or their insistence regarding IR values. This is because the IR values in each city and area can vary.

The IR values that can be calculated through the datalake can also provide a solution to the investment needs in data collection, which previously required a budget of over 50% for interviewer fees and 20% for respondent gifts. With the existence of the datalake, in cases where it is difficult to find respondents based on certain criteria, interviewers do not need to perform actual data collection and can rely on the datalake instead.

Furthermore, the business solution using the datalake is in line with the in-depth analysis conducted with the operations and client service teams. Currently, with the readiness of the operations team to implement digital innovation in survey recruitment methods and leverage the datalake, it is considered the innovation that comes closest to meeting client expectations at CI NIQ. By utilizing the datalake, randomization can be performed, which demonstrates the representativeness of data in CI NIQ.

If the above business solution is implemented, the following is an estimation of the costs that need to be prepared by CI NIQ.

Table 4
Plan cost for Datalake implementation

Social Media maintenance by Admin	IDR 2,500,000	Fix cost/month
Datalake maintanance	IDR 10,000,000	Fix cost/month
Robocall	IDR 3500/call	Variable cost/project
Platform survey STG	IDR 2,500/survey	Variable cost/project
Time cost executives	IDR 15,000,000	Fix cost/month

However, based on the estimated funding mentioned above, the operational costs in the three key elements of operation can be reduced with the following estimated increases:

Table 5
Efficiency operation cost estimation

Items	Budget Cost (IDR)	% Average Increase	Current Impacted Cost (IDR)	% Average Increase after Datalake	Expected Impacted Cost (IDR)
Fee Questionnaire for Interviewer	14,867,600,850	30%	**4,460,280,255**	**15%**	**2,230,140,127.50**
Gift to Respondent	3,378,822,725	20%	**675,764,545**	**5%**	**168,941,136.25**
Transport Interviewer	246,596,800	25%	**61,649,200**	**0%**	**-**

1. With the implementation of datalake, there is no need to increase the respondent fee to boost interviewer productivity. Instead, data collection and approach will be done through Robocall using the datalake.
2. The incentive (GIFT) that was previously used as an appeal for respondents to participate in surveys, especially for surveys with high criteria, can be eliminated during the fieldwork phase to boost productivity. Instead, a GIFT can be provided upfront when respondents complete the survey and enter the CI NIQ database for the datalake. The value of the GIFT should be around 5% of the project's gift budget, considering the quick length of interview (LOI), easier survey method, and flexibility for respondents to complete it at any time rather than within a specific timeframe.
3. Transportation costs can be considered as 0% or no increase since the previous transportation cost was used to pay for the daily fee of the interviewers during intercepts. With the use of datalake and robocall, interviewers no longer need to do intercepts, and instead, they are provided with a list of potential respondents generated through the datalake. This is an effective way to reduce transportation costs, which would otherwise exceed the increase in respondent GIFTs.

L. Implementation Plan & Justification

The implementation that can be done initially is to use datalake as one of the alternative digitalization methodologies for the strategy of reducing operational costs in CI NIQ. However, eliminating all the excessive costs currently may not be fully achievable. In the future, with the existence of datalake and a more stable implementation, datalake can gradually be budgeted into the operational costs of each costing project.

The implementation for datalake can be planned to start in Quarter 3 of this year. Why? Because the revenue target in the commercial team will certainly increase in the following year, and the implementation of datalake cannot be completed within

just one quarter. Here is a proposed timeline plan that can be used.

Conclusion

Based on the analysis conducted in the previous chapter, the following are the conclusions that refer to the list of objectives related to the issues addressed in this final project: (1) The identification of factors that can create a positive customer experience to reduce the rejection rate of potential respondents when conducting a digital survey has been obtained through quantitative analysis referring to Kotler's 5 A's analysis. (2) The determination of the incidence rate, which was previously challenging for the NIQ team, including both the client service providing briefs or requesting quotations and the field team as supporters to provide references to the project management team for costing purposes, can now be facilitated by using Datalake. Currently, NIQ lacks a proper database that can be used to determine the incidence rate, even though according to the results of the IDI with all stakeholders, the easiest way to determine the IR is by looking at previous studies conducted. Therefore, if the Datalake strategy can be implemented effectively, it can serve as a database that assists the project management team in accessing IR data by calculating the number of respondents available in the Datalake and the number of respondents that fit the criteria.

This approach is also commonly used for online studies where they calculate the IR based on the number of available panels and the number of respondents that meet the criteria. Innovation, After a lengthy discussion with the two major stakeholders, the operation team, and the commercial team, it can be concluded that the most feasible digital innovation strategy to be implemented currently is using digital surveys as a method for recruiting respondents for surveys with challenging criteria, such as finance, automotive, and high-end project-related surveys. Typically, finding respondents with such specific criteria is not easy and can be time-consuming if approached directly. Moreover, the incidence rate for these target groups is lower compared to respondents from mass products or the general population. By collecting their data as extensively as possible through digital platforms, it will assist NIQ in obtaining better IR data and facilitate the approach when surveys begin.

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