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Perception of Public and Private Clients on the Benefits of Partnering with Contractor in Industrialised Building System

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Abstract

Partnering is generally is a commitment by those involved in a project through working closely or cooperatively. It is a concept of the relationship practice between organisations. It usually was based on the reputation of good quality of work done in the industry. Not all Malaysian's construction industry clients exercise the partnering while selecting the contractor in the Industrialised Building System. Failure to exercise partnering will impact the project delay, cost overrun and defect of the product received. The methodology adopted used a qualitative approach. The sampling selected is purposive sampling. The public and private clients revealed the benefits of partnering in the industrialised building system: early completion, cost-saving, quality received, easy to solve a problem and a return on investment in the development projects.

Keywords:Partnering; Benefits; Industrialised building system; Qualitative method

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INTRODUCTION

The Industrialised Building System in Malaysia was introduced in the early sixties. In the beginning, this method was adopted to construct low-cost, high-rise residential buildings to overcome the increasing demand and short supply of housing for the middle and low-income groups. Nowadays, IBS projects have moved away from the typical low-cost, high rise boxed buildings to more upmarket and high-cost prestige projects in Malaysia. This indicates that a paradigm shift from traditional to modern construction occurs in the Malaysian construction scenario; perhaps, the IBS could be the answer. The Malaysian government, involved through its agency, the Construction Industry Development Board (CIDB), has been persistently pushing the construction industry to utilise the IBS method. It is a part of an incorporated endeavour to improve the industry's aptitude, potential, effectiveness, and competitiveness and diminish its dependence on foreign labour (ibs.portal.cidb, 2021). Other than above, it is also an

attempt in the Malaysian construction industry to encourage positive inroads in matters associated with construction-site safety with regards to a working environment that is cleaner, more convenient and more organized.

The CIDB encourages using an Industrialised Building System during pandemic COVID-19 for the public and private clients to avoid large numbers of workers involved in the construction site. The COVID – 19 crisis leads to a reduction in site productivity, has increased compliance cost, delayed projects and increased construction workers exposure to risk and infections (AbdulLateef Olanrewaju, AbdulRashid AbdulAziz, Christopher Nigel Preece, & Kafayat Shobowale, 2021). Therefore, reluctant clients to move to this construction method using an industrialised building system will impact the delay of the construction activities and late return on the investment in the development project. Inviting the contractor to be involved in this type of construction is crucial. In IBS, the selection of contractors through partnering should be considered by the public and private clients Halil et al. (2009). Failure to select a good and competent contractor contributes to the unsuccessful project implementation in the construction industry. The problem occurs such as delay of the project due to unexpert of the contractor in technology. Cost overrun occurs when the selected contractor changing the construction method from IBS to the conventional method due to failure to adapt with the current technology need in IBS.

Partnering is crucial for the clients and the contractor in the IBS project. This is to ensure the success of the project implementation and value for money received. Partnering processes are intended to create a win-win situation between the parties and the benefits received. Successful partnering involves a good relationship between people, trust and project management skills in the organisation (Lazar, 2000). Besides, the implication for the management of owners and contractors related to the informed use of

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strategies of behaviour to improve the likelihood of win-win partnering outcomes includes:

a) Increase investment in preparing and implementing mixed cooperative strategies of behaviour conducive to trust development;
b) Increase investment in project-long monitoring of inter-organizational behaviour;
c) Expand development and the implementation of feedback mechanisms to accompany behaviour monitoring;
d) Enhance training for personnel with an emphasis on dispute resolution and inter- and Intra organizational communication;
e) Increasing the amount of substantial decision making pushed 'down' to the field level; and
f) Improve and upgrade the status of preparation for, and implementation of the initial partnering workshop.

Weston and Gibson (1993) described several vital elements to establishing a successful partnering relationship from the start, including a commitment from top management on both sides, the appointment of a partnering representative on both sides, selecting participants for workshops, selecting facilitators, scheduling and conducting workshops, and a routine follow-up workshop. A good example from the U.S. Army Corps of Engineers was successful. The objectives were apparent and carefully monitored, a problem resolution process was established, and jointly evaluated progress. The clients in the construction industry should have clear goals during the contractor's selection process in IBS projects. The factors of selecting a contractor to participate in the IBS project should be considered on the technology application and an experienced contractor managing IBS projects. Confirmed by Bartłomiej Szewczyk and Elżbieta Radziszewska-Zielina (2020) confirmed the elements such as project completion, cost,

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construction work quality or construction site safety and technology should be considered during the assessment of the contractor in the construction project.

LITERATURE REVIEW

The various researchers highlighted the benefits of the partnering in IBS project are explained in this section.

Benefits of Partnering with Client and Contractor

The benefits of partnering that have been identified by Wong (1997) and Pheng (1999) includes:

a) In long-term partnering, the client can save time doing a tedious tendering procedure;
b) Through long-term partnering, the contractor will suggest better construction methods to the client by using an innovative approach in technology;
c) The contractor managed to get a better rate for its innovativeness;
d) Fewer risks of cost overruns and delays due to better time and cost management;
e) Better-quality products because energies are focused on the ultimate goal and are not misdirected towards adversarial issues;
f) Potential to expedite projects through efficient management of the building contract;
g) Open communication and unfiltered information that allows for more efficient resolution of problems reduced exposure to litigation and lower administrative costs due to the elimination of defensive case-building;
h) Increased opportunities for innovations through open communication and elements of trust, especially in the development value of engineering and buildability improvement;
i) Increased opportunities for financially successful projects due to a non-adversarial win-win attitude.

Compared with Bayramoglu (2001) revealed the benefits of partnering, especially for clients and contractors. The clients are more comfortable working with partners they

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have worked with before, and contractors feel security arising from potential future projects. Since the survival of contractors depends upon obtaining contracts for projects, the unstable nature of the construction market always poses a threat to their existence. Through partnering, contractors are protected from harsh market conditions, even in times of recession. It also becomes easier for them to make strategic plans. Working with the same client helps contractors develop relationships, become more comfortable with each partner, and produce better overall results. Suppose the partners stay together on other projects. In that case, the process becomes more familiar, all parties know what to expect, and both the process and the result can be continuously improved. Emsley (2005) described the benefits of partnering in terms of health and safety, quality, minimum on-site construction period, the certainty of completion date and cost, best whole-life value for money, sustainability and zero defects.

A study by Espling and Olsson (2004) listed the benefits of partnering in the construction industry in terms of improved project quality, reduced claims and litigation, reduced costs by up to 30%, and on-time project completion. Phua (2006) identified benefits received in terms of minimising the overall cost of conducting business, receiving goods in innovation, and their business's profitability. Abudayyeh (1994) segregated the benefits of partnering between the client and contractor. The client receives the benefits in terms of reduced claims due to open communication, decreased cost overruns and delays due to the improved cost and schedule control, improved conflict resolution strategies, lower administration costs and increased communication. Meanwhile, the benefits to the contractors are in terms of reduced costs related to potential claims and litigation, improved productivity due to focus on the project, improved cost and schedule control, lower risk of cost overruns and delays, and increased opportunity for financial success through innovative construction methods. In trust element, Mollaoglu, Sparkling, Garcia, and Polkinghorn (2021) revealed vital components of success in the partnering implementation. Other benefits of partnering have been derived from various researchers, as shown in Table 1.

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Table 1: *Benefits Received by Clients in Partnering with the contractor in IBS Projects*

Authors	Benefits
Shen et al. (2021)	• Received the project outcome in term of *quality*, *cost* and *schedule*.
Hällström and Bosch-Sijtsema (2020)	• *Time-saving* and *resource* use *reduction*
Chan (2008)	• Reduced litigation • Better *cost* control • Better *time* control • Better *quality* product • Efficient problem solving • Closer working relationship • Enhanced communication • Continuous improvement
Barlow et al. (1997)	• A better quality of communication between the administration and contractors
Pheng (1999)	• Team spirit: partnering fosters the teamwork necessary to allow each person to get the assistance required to succeed, both individually and as a team. • Promotes trust among parties who recognise that every company has goals to meet and that the ultimate goal is profit. In construction, a contractor will realise that the owner's completed building will *enhance the latter's profitability*. Similarly, owners also realise that contractors are in the business to make profits and take the necessary steps to ensure the contractors' fee margins. • Develops business relationships based on trust among team members, allowing people to prepare themselves better to work together on a people level and not just at the organisational level.

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Lu & Yan (2007a)	• Technology access • *Finance* securing • Newmarket entry • Core customer service • Competitive position improvement • Meeting special requirements • Better product quality • *Cost* reduction • Better *time* control • Reduced litigation • Efficiency improvement • Long-term relationship establishment • Increased cultural responsiveness
Bushnell & Cross (1995)	• Improved efficiency and cost effectiveness • Increased opportunity for innovation • Continuous improvement of quality products and services
Bayramoglu (2001)	• Reduces redundant and *costly* designs • Offers technologically feasible and innovative solutions during the design stage • Reduces unforeseen risks during implementation • Encourages the sharing of risks and rewards
Black, Akintoye & Fitzgerald (2000)	• Share risk • Increased confidence of success • *Reduced* exposure to project risk • Enhanced transfer of practice and processes to other projects • Improved cooperation • Increased understanding of parties/less adversarial relationships • Increased customer satisfaction
Beach et al. (2005)	• *Lower cost* and increased margins
Tang et al. (2006)	• Improve project outcomes of project *cost and duration*

Therefore, the leader in the construction organisation should be aware of the partnering concept to ensure the success of project implementation. The selection of the right parties to be involved in the project should be appropriately evaluated before the client has made the decision. Today's competitive business context requires leading organisations to advance their business priorities, drive innovation and achieve competitive advantage (Laszlo, 2008). He also suggested that to maintain viability and

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compete in the markets, and leadership should change their mindsets and move from conventional to modern leadership styles. He also emphasised that a leader's perspective should focus on ability, trust and reputation, stemming from the organisation's need to live up to its name and business standards. Kakkonen (2014) highlighted for close collaboration to emerge in a social system, and individuals must have trust between others. Therefore, changing the construction method to IBS and a collaborative approach through partnering will benefit the client and contractor. As shown in Table 1.0 highlighted by the various researcher, partnering will bring benefits in terms of costs, quality and time.

RESEARCH METHODOLOGY

In this research, the method used is a qualitative study. The semi-structured interview was conducted with the public and private clients. The methodology conducted is explained below.

Semi-Structured Interview

The semi-structured interview was conducted to enhance the depth of the study area and obtain input from the professional respondents in both public and private organisations. By using purposive sampling, ten (10) respondents from the public and private clients were identified. The interview involved the top management in the organisations. In the private sector, the suitable respondents were the Contract Manager or Project Manager. In contrast, the public clients mainly involved the Senior Vice President or the Head of Department at the Contract Division. The interview was conducted on a one-on-one basis using a semi-structured interview. A formal letter was sent by post and email to the selected organisations to interview. It was essential to follow this up by telephone to ensure that the letter was received and that the target respondents agreed to be interviewed. The telephone call was an effective method to communicate and confirm a suitable time to conduct the interview with the respondents. Conducting the interview was vital to validate the data received from the literature review.

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Interview Questions

The interview aimed to conduct an in-depth study on partnering in the IBS within the selected organisations. The questions in the interview consisted of open-ended questions. Taylor et al. (2006) described the open-ended questions, the interviewer provides the questions, and the interviewee is free to respond. Taylor et al. (2006) added that open-ended questions might be suitable to ascertain a respondent's level of information. The researcher has identified several steps to ensure that appropriate questions are prepared for the interview:

a) The relevant questions have been selected and are interrelated with the objective of the study.
b) Appropriate respondents have been identified by sending a letter to the organisation containing the interview contents. The organisation will select a representative from their company related to the background of the study, has knowledge in that area and handles the projects related to the topic area. Most respondents were from the Contract Manager's group or the highest post from the contract and project divisions.
c) The questions prepared should be relatively easy to answer and should not unduly burden the interviewee.
d) When the interview is conducted, it should follow the questions set out; personal questions should be avoided.

Recording

The researcher used a digital voice recorder as a tool to record data during the semi-structured interview. The recordings were transferred directly to a computer to be stored and played back for analysis (Flick, 2007). As Flick (2007) described, the advantage of this method is that every meaning from the interview can be defined perfectly without missing critical keywords. After completing the interview session, the researcher transcribed the data from 20 public and private clients. During this stage, the interview protocol was followed by an introduction from the researcher. Before starting the interview session, an explanation was provided to the interviewees:

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a) The purpose of the interview was described.
b) The contents of the questions were described.
c) Start asking the questions to the interviewee and ask them to explain their ideas in more detail.

Creswell (2009) suggested that the researcher follow an interview protocol to ensure the collected data followed the required standard. He also stressed that, even if an interview is recorded, the researcher should take notes. Therefore, during this interview session, both of these methods were utilised to ensure the reliability and value of the collected data. The data were processed following the steps described by Creswell (2009):

a) Organise and prepare the data. This involves transcribing interviews, scanning material and sorting the data according to the sources of information received
b) Read the data to obtain a general sense of the information. For example, most people conversed on the need for good management in a project. The researcher can use this as a baseline in coding this information.
c) A detailed analysis is conducted, including the coding process. Coding is the process of organising the material into segments of text before bringing meaning to the information. The coding is then used to generate a small number of themes or categories. These themes appear as major findings in this study.
d) Interpret the data. During this stage, the themes are derived and supported with the relevant literature in this study area.

Results and Analysis of Semi-Structured Interview

The data received were analysed using percentage frequency distribution. The software used was Microsoft Excel.

i. Current Positions of the Respondents

Figure 1 shows the results of the current post of the interviewee in the public and private clients. The majority of interviewees were from the public clients involved (Head of Assistant Director at 80%, followed by Vice President of Development at 10% and Senior Director at 10%). The highest current posts for the private clients are Contract

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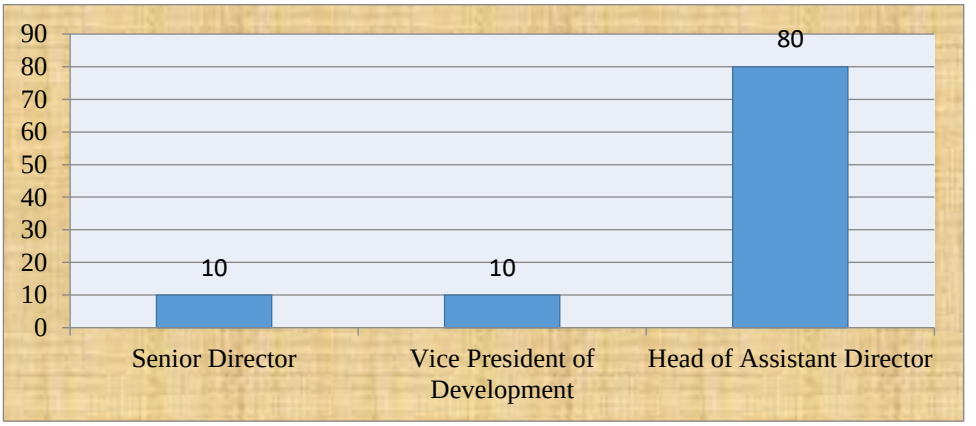
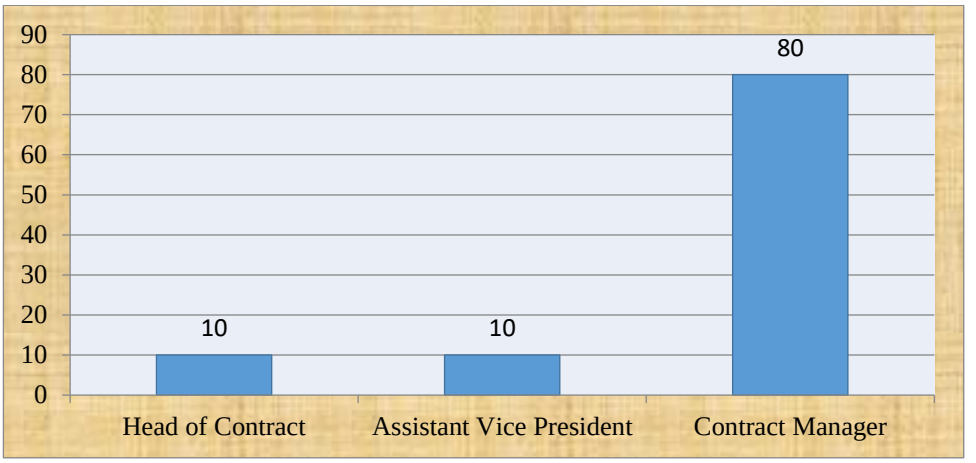
Manager at 80%, followed by the Assistant Vice President at 10% and the Head of Contract at 10%.



Public clients



Private clients

Figure 1: *Current Positions of the Respondents public and private clients*

ii. Years of Experience in the Current Organisation

Figure 2 shows the years of experience of public and private clients in the current organisation. Most respondents had worked longer than 10 years for both public (90%) and private clients (60%). Only 10% of public clients and 40% of private clients have

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experience from five to 10 years. The longer experience is beneficial to the study to gain better knowledge from the respondents on the topic area of study.

Figure 2: *Years of Experience in the Current Organisation*

iii. Number of Employees in the Organisation

Figure 3 shows the number of employees in the organisation. The majority of public and private clients have more than 100 employees in their organisations. Therefore, the result indicates that the data were gathered from a large and well-established

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organisation which is crucial to investigating the partnering practices with contractor in those organisations.

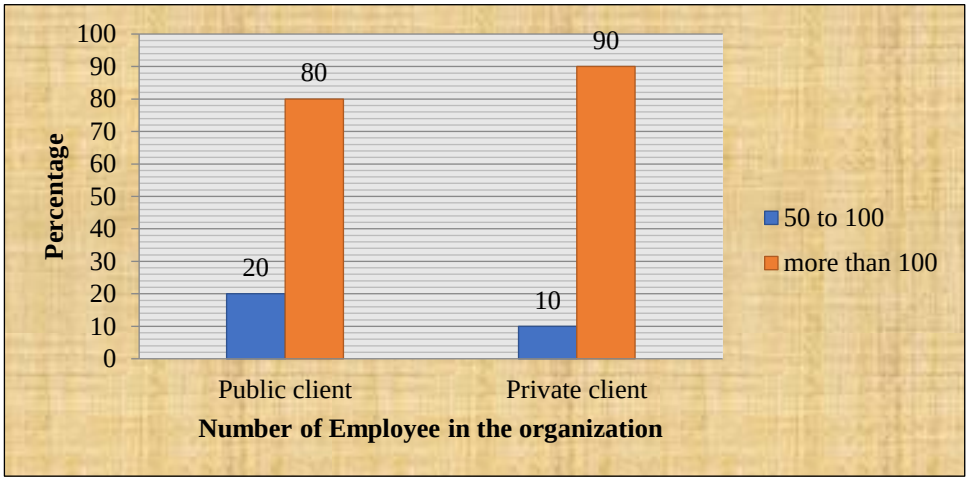

Figure 3: *Number of Employees in the Organisation*

iv. Benefits of Partnering Practice Between Client and Contractor

Table 2 reveals the benefits received from the partnering practice by public and private clients. Public clients stated no delay at 31%, followed by the quality received in the projects and early time completion at 25%, terms of cost saving at 13% and easy to solve problem at 6%. Private clients stated benefits received from cost saving at 30%,

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followed by early time completion and quality received at 23%, return on investment at 17% and no delay in the projects at 7%.

Table 2: *Benefits of Partnering*

Question	Sub-theme	Frequency	Percentage (%)
Can you state the benefits received in your organisation through partnering relationship with the contractor in IBS projects?	**Public clients**		
	a) Time completion early	4	25
	b) Cost saving	2	13
	c) Quality received	4	25
	d) Easy to solve problem	1	6
	e) No delay	5	31
	Private clients		
	a) Time completion early	7	23
	b) Cost saving	9	30
	c) Quality received	7	23
	d) Return on investment	5	17
	e) No delay	2	7

The above result shows that the highest rank of public clients revealed no delay received with the contractor. Follow by quality received and time completion early. The project implementation was completed on time. Supported with the literature review from Lazar (2000), partnering involves a good relationship between people, trust and project management skills in the organisation. Besides, the implication for the management of owners and contractors related to the informed use of behavioural strategies to improve the likelihood of win-win partnering outcomes such as the project completed on time and quality.

Meanwhile, the private clients show the highest rank on cost-saving, time, and quality in partnering with the contractor in the IBS project. In private clients, partnering with the right contractor is crucial to ensure the developer's investment use received an excellent return. Contractors build trust with the clients and have long track records of doing business with clients rather than seeking short-term profits Rahman, Asce & Kumaraswamy (2004).

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v. Purpose of Relationship Practice

Table 3 show the results from public and private clients on their reasons for having a relationship with these types of contractors in the organisation. Public clients revealed that the project could be completed in good quality at 31%, followed by completing the project on time at 26%, comfortable with both working cultures at 21%, and sharing the same value regarding experience in IBS technology and no delays at 11%. Private clients revealed completing the project on time at 29%, followed by value engineering received at 22%, completing the project to a high quality at 19%, comfortable with both working cultures at 11%, guaranteed buyers and no delays at 5%, and experience in IBS technology, fewer defects and less tendering procedures at 3%.

Table 3: *Purpose of Relationship Practice with the Contractors*

Question	Sub-theme	Frequency	Percentage (%)
For what are the purpose do you have a relationship with these types of contractors?	**Public clients**		
	a) Comfortable with both working cultures (easy to communicate and understand to each other)	4	21
	b) Complete the project on time	5	26
	c) Complete the project in good quality	6	31
	d) No delay	2	11
	e) Experience in IBS technology	2	11
	Private clients		
	a) Comfortable with both working cultures (easy to communicate and understand to each other)	4	11
	b) Complete the project on time	11	29
	c) Complete the project in good quality	7	19
	d) Value for money	8	22
	e) No delay	2	5
	f) Experience in IBS technology	1	3
	g) Fewer defects	1	3
	h) Less tendering procedures	1	3
	i) Guarantee buyers	2	5

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Table 3 shows the highest rank of the clients practising a good relationship with the contractor for several reasons. The result indicates that the public clients' quality, time, and comfort with the contractors are the highest input for public clients conducting partnering relationships with similar contractors in IBS projects. Matching information from the private sector agreed on quality and time. The private sector revealed value for money received through partnering relationships with the contractor in IBS projects. Weston & Gibson (1993) described that the benefits of successful partnering relations include avoidance of disputes, improved communication, increased quality and efficiency, on-time performance, enhanced long-term relationships, fair profit, and prompt payment for the contractor. Therefore, this concept of collaboration using partnering should be practised by the clients in the Malaysian Construction Industry.

CONCLUSION

Partnering is crucial for the public and private clients in the industrialised building system. The selection of a good contractor in the IBS should be firm by the clients in the public and private sectors. Not all contractors should be appointed in the IBS project. In the Industrialised Building System, the contractor has capabilities in terms of knowledge in IBS, innovation in the IBS, and the financially strong and good organisation should be considered during the tender evaluation process by the Quantity Surveyor. The Benefits of partnering from the study, the clients received a good return in terms of quality, time and cost for the investment in the industrialised building project. In other words, there is inevitably a level of self-interest in all partners' motivation. Each partner will need to see benefits from their collaboration, measured in their own terms if their involvement in the partnership is to be sustained for a long time.

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