Cost–benefit analysis of a staff recreation centre project: build or lease? – A Case Study

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Abstract
This case study aims at comprehensively assessing a decision by XYZ Ltd (name withheld due to confidentiality), New Delhi, on whether to build or to lease a recreation centre for its rank-and-file employees. Based on a cost–benefit analysis, we concluded that the centre should be built since the company would recover its investment within 11 years. Apart from the financial considerations, the recreation centre could be considered a long-term investment in employee morale, as it would lead to a better quality of life for the staff and their families, and is likely to enhance their sense of belonging and improve productivity. To date, what little space there is available for hosting family functions is reserved for the use of the officers, and only officers and their families are invited to most company functions. Thus, the other employees feel neglected by the management. Hiring a community centre external to the organisation for a function would involve spending a lot of money as the company is located in a prime real estate area where the cost of land and rentals is huge, and sometimes even availability is an issue. Most of the staff cannot afford such places and are generally under a lot of stress whenever they have a family function. This, in turn, tends to affect their productivity.

Keywords: cost–benefit analysis, build, lease, employee morale, work–life balance

Introduction
It was a sunny day in December 2011, when I first met Dr Ram Kumar, Estate Manager of XYZ Ltd. (name withheld due to confidentiality) in New Delhi. I soon realised, however, that Dr Kumar was not in a sunny mood. So I quickly briefed him on the purpose of my visit, reminding him that we had discussed the possibility of developing a management case study on XYZ a week earlier on the phone. Dr Kumar then handed me a file with plans for the development of a recreation centre at XYZ, admitting that he was a little troubled by the thought of approving such an expensive project (Exhibit 1) for the recreational activities of the employees.

XYZ Ltd organizational profile
XYZ operates in various areas of cutting-edge weapons technology while, at the same time, providing many spin-off benefits to society at large, thereby contributing to nation building.

XYZ was formed in 1958 as a small organisation with about 10 establishments or laboratories. Over the years, it has grown in many directions in terms of the variety of disciplines, number of laboratories, achievements and stature.

Today, it is a network of more than 50 laboratories that are engaged in developing defence technologies covering various disciplines, like aeronautics, armaments,
electronics, combat vehicles, engineering systems, instrumentation, missiles, advanced computing and simulation, special materials, naval systems, life sciences, training, information systems and agriculture. At present, the organisation employs over 5000 scientists and about 25,000 other technical and support personnel. Several major projects for the development of light combat aircrafts, radar, electronic warfare systems etc are underway and significant achievements have already been made in several such technologies.

**Aligning XYZ’s employees through the community centre**

The XYZ complex extends over 110 acres of land in East Delhi. Many labs are housed in the complex. The complex also comprises residential areas for service officers, scientists, junior staff and other subordinate staff. The residential complex occupies 20 acres of land and includes quarters for officers, non-government organisations, transit facilities, a sports complex and an Officers Mess and Institute, in addition to family housing including service officers’ apartments (Exhibit 2).

However, the residential complex lacks a community hall for hosting functions like weddings and parties. Permission for hosting such functions in the central park area is subject to approval by the Employee Management Committee. The Officers Mess and Institute have a small lawn and building that can be used for weddings but only by members of the Officers Mess and Institute. There is also a need for a building where major religious festivals can be celebrated. Thus, there is a genuine need for a community centre in the XYZ complex.

**Community centre**

The population of the XYZ residential complex is likely to increase by 50 per cent by the end of 2014. Needless to say, requests for hosting weddings, community functions, etc, at the central park and Officers Mess and Institute lawns are also expected to increase substantially (if not by the same proportion). It is estimated that, on average, there will be 400 private functions a year, once the community centre is constructed and made operational.

Since the central park is maintained by XYZ, it is entered in competitions for best institutional garden, best large garden, etc. Hence, there is a general feeling that it should not be used for marriages and other functions. Since no rooms (even for the bride and groom) are available in the park, it cannot be considered a substitute for a community centre. In addition, the scientists and residents use the central park for walking in the mornings and evenings, and the residents also use it for yoga practice.

Moreover, the Officers Mess and Institute only have a very small hall (that can accommodate around 50–60 guests). This is generally is not used for weddings as it regularly used by members at lunch and dinner. Even the lawns are hardly ever used for functions since open areas, irrespective of size and location, are not a feasible option. Inclement weather would inconvenience the guests as well as the hosts. An indoor arrangement with separate rooms for the bride, groom and guests would not only take care of this problem but also facilitate the smooth operation of the function.
At my meeting with Dr Kumar, we discussed providing a community hall within the complex as a welfare measure for the residents. This would facilitate in arranging/hosting different types of functions for all the residents of the complex. The area behind the Officers Mess and Institute was identified as the location for the community hall and this was approved. It is also pertinent to mention that other big XYZ estates, like the ones in Hyderabad and Bangalore, have community halls. Even smaller estates like the ones in Agra, Gwalior and Jodhpur, have a community hall. The charges for booking, electricity and water depend on the individual sites. A community hall would not only improve the amenities provided to the XYZ fraternity but also reduce the impact on the lawns by the debris and human activity involved in hosting functions. In addition, a community centre would ensure revenue to XYZ as, being an indoor facility, it would attract other gatherings, and the charges for using it would be much less than similar facilities outside the organisation. Similarly, a religious building would encourage the celebration of major religious festivals by the XYZ community under one roof, which would not only be a show of solidarity but also improve the camaraderie and sense of belonging. This would result in improving employee morale and productivity. In view of the above facts, it was felt that the provision of the community hall and religious building at the XYZ complex in New Delhi was necessary.

Building the community centre
The estimated cost of building the community centre was INR 463.04 lakhs (Exhibit 1).

Leasing the community centre
The average rent for an external banquet hall was INR50,000 (plus 10% service tax) in 2010. The average number of functions held in XYZ, including the use of the lawn as well as the Officers Mess and Institute hall, was:

1) Big functions with a gathering of 300 + (239)
2) Kitty parties (86)
3) Birthday parties (73)
Which comes to a total of 398 functions in 2010.

Conclusion
Dr. Kumar explained that XYZ only had an officers recreation centre (Officers Mess and Institute) with a small gymnasium, canteen, table tennis table and small party hall, and there was no recreation centre for the general staff. As a consequence, there have been differences in the performance of the officers and the rest of the staff. The latter work less effectively and efficiently as they have the perception that their existence in the organisation is not much of a concern to their superiors, as only officers and their families are invited to most of the functions. Moreover, due to limitations of equipment and space, only officers and their families are given permission to use the recreation facilities as well.

Dr. Kumar seemed worried that the community centre would cost more than INR 4 crores, which is a huge amount for an organisation to be spending on its employees’ recreational needs. He took the proposal from his drawer, looked at it with concern, and
gave it to me to do a cost–benefit analysis for either building or leasing the new centre. He also gave me a further 48 hours to provide him with a solution on how to reduce the budget and use this amount in the best possible way so that it benefitted everyone in XYZ.

**Exhibit 1: Provision of community hall and religious building at XYZ Ltd’s residential complex in New Delhi**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Item of work</th>
<th>Cost (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 a)</td>
<td>Cost of land</td>
<td>Nil</td>
</tr>
<tr>
<td>b)</td>
<td>Site clearance</td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>Consultancy services (Consultancy services for planning, designing, site supervision, detailed engineering including preparation of detailed working drawings of architectural, structural and services/utilities details, etc all complete)</td>
<td>17,00,000</td>
</tr>
<tr>
<td>2)</td>
<td>Building including internal services</td>
<td>4,32,55,475</td>
</tr>
<tr>
<td></td>
<td>Civil works</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Community hall</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Civil works</td>
<td>1,87,17,320</td>
</tr>
<tr>
<td></td>
<td>Plumbing works</td>
<td>18,71,732</td>
</tr>
<tr>
<td></td>
<td>Electrical works</td>
<td>25,26,838</td>
</tr>
<tr>
<td></td>
<td>Rooms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Civil works</td>
<td>88,14,383</td>
</tr>
<tr>
<td></td>
<td>Plumbing works</td>
<td>13,22,157</td>
</tr>
<tr>
<td></td>
<td>Electrical works</td>
<td>11,89,942</td>
</tr>
<tr>
<td></td>
<td>Religious building</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Civil works</td>
<td>71,65,125</td>
</tr>
<tr>
<td></td>
<td>Plumbing works</td>
<td>7,16,513</td>
</tr>
<tr>
<td></td>
<td>Electrical works</td>
<td>9,31,466</td>
</tr>
<tr>
<td></td>
<td><strong>Total (in INR)</strong></td>
<td>4,32,55,475</td>
</tr>
<tr>
<td>3)</td>
<td>Contingencies @ 3%</td>
<td>13,48,664</td>
</tr>
<tr>
<td>4)</td>
<td><strong>Grand total (rounded off to INR 463.04 lakhs)</strong></td>
<td>4,63,04,139</td>
</tr>
<tr>
<td>4)</td>
<td>Period of completion of construction</td>
<td>12 Months</td>
</tr>
</tbody>
</table>

**Exhibit 2: Residential housing at XYZ, New Delhi**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Type of apartments</th>
<th>Existing</th>
<th>Proposed</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Service officer quarters</td>
<td>341</td>
<td>XYZ complex</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Type-1</td>
<td></td>
<td>XYZ complex</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Type II</td>
<td>1</td>
<td>XYZ complex</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Type III</td>
<td>8</td>
<td>XYZ complex</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Type IV</td>
<td>56</td>
<td>For under construction Pudina farm</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Type V</td>
<td>82</td>
<td>Pudina farm</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>JCOs</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>ORs</td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Kaveri Hostel</td>
<td>70</td>
<td>Outside Campus</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Yamuna Hostel</td>
<td>25</td>
<td>Outside Campus</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Saraswati Hostel</td>
<td>19</td>
<td>Outside Campus</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>All types</td>
<td>41</td>
<td>MES colony</td>
<td></td>
</tr>
</tbody>
</table>
Appendix

Interview with employees of XYZ in Bangalore and New Delhi

XYZ Bangalore: Raghavendra Veerabhadaiah (Officer)

Q1. How important is it to have a community hall and recreation centre in the campus?
It is a very important asset for the company, as members will attend formal and informal
get-togethers, which will help everyone to get to know each other and be one big family.
A recreation centre is important for it will make everyone’s life easier by relieving some
of the stress, which is common in life nowadays. Individuals need time for themselves
and it is important that they work out, maintain good health and stay fit. I personally
believe that “health is wealth”.

Q2. What benefits do you associate with the community hall?
As mentioned earlier, it will help everyone to get know each other informally, and this
will enhance us socially. The cost charged by XYZ is nominal compared with the costs
involved in hosting functions in an outside facility, and I feel everyone can easily afford
family functions in the XYZ community hall.

Q3. Will this facility affect your working style?
It will lessen the pain for all of us, as we won’t have to search for a community hall to
have a birthday party, marriage functions, receptions, official conferences, get-togethers,
New Year’s Eve parties and other functions. We can focus on our work for the vendor in
the community hall will do everything in the predetermined time frame. So all of us will
be content that our organisation has given something extra to be happy about.

XYZ Bangalore: Gurpreet Kaur (Officer)

Q1. How important is it to have a community hall and recreation centre in the campus?
I believe that community halls and recreation centres play a very important role in one’s
life. In the case of community halls, we can organise family get-togethers, birthday
parties, etc. at very reasonable rates compared with the ones in the outside market. The
rates of wedding halls outside are very high, and cost is always a big concern in
organising these types of functions.

Moreover, if there are some parties (for residents of the apartments), like New Year’s
Eve, Diwali, etc. we can get to know each other. Otherwise, people usually don’t know
who their neighbours are because of their hectic schedules. Thus, one can become more
socially active.

As far as the recreation centre is concerned, with today’s busy lifestyle, one does not
have time to go out to exercise. So, if the recreational centre is within our premises, then
everyone will use the facilities like the gymnasium, swimming pools, etc. We can take
care of our health and we can also take our children to these places, so that they can enjoy
themselves and learn a variety of games (basketball, swimming, etc).
Q2. What benefits do you associate with the community hall?
In brief:
1. Organising small parties and get-togethers can be planned easily, as they will be not expensive compared with the ones outside.
2. Parties like New Year’s Eve, Diwali, etc. will help us to get to know each other better. Nowadays most families are nuclear in nature. So enlarging your social circle is good for everyone.

Q3. Will this facility affect your working style?
This facility will not affect our working style, but I would say, rather, it will improve our working style. In today’s hectic schedule, nobody is taking care of his or her health. The women especially can use these facilities at times that suit them, as they cannot go to outside facilities at odd timings. And the cost for parties will be less, and a good party can be organised within a limited budget.

XYZ New Delhi: Saurabh Khurana (JCO)
Q1. How important is it to have a community hall and recreation centre in the campus?
Well, for starters, community halls and recreation centres are very important aspects of life nowadays so given a choice I would strongly propose these facilities be added to my campus. Recreation centres like a gymnasium and table tennis rooms are places where a person can go and get stress relief as every sport is a stress buster. Plus they help people to stay fit which, in turn, definitely increases company productivity. As far as the community hall services are concerned, these are also essential but they should not be in company premises, as they can be a distraction.

Q2. What benefits do you associate with the community hall?
The community hall gives you a place where all the indoor events of the organisation can be held. Also, it helps employees personally as it will be a cost-effective place where personal functions can be held. Employees can feel safe about such a place as it owned by the company they work for, so definitely it is a good deal that will provide many benefits. However, I reiterate that community hall services should not be located within the company premises, as they can be a distraction and the noise produced may negatively affect work.

Q3. Will this facility affect your working style?
Yes, this facility will affect my working style in a very positive way. Having a recreation centre and being able to use the facilities definitely gives a stress-buster option which, in turn, helps a person to stay fit and will also be productive for the company. A gymnasium and sports not only make a person fit but also have a feel-good factor that is definitely reflected in staff’s work and output.
XYZ, New Delhi: Ankit Gambhir (Officer)

Q1. How important is it to have a community hall and recreation centre in the campus?
To make the working environment a more congenial place, employees need to interact outside their professional duties. Hence, providing them with such an environment can remove their inhibitions with their superiors.

Q2. What benefits do you associate with the community hall?
The benefits include interpersonal understanding between employees, a home-away-from-home environment, stress-free working and satisfaction from there cognition given by the employer.

Q3. Will this facility affect your working style?
Sure, it will positively affect our working style as with a healthy mind and a healthy body we can deliver better performance. Comprehending each other’s actions and reactions can improve interpersonal ways of working and, in turn, improve staff performance. A fit body and mind, not only improve productivity of an employee physically, it also makes him or her innovative.

Assignment questions
Q.1 Suggest whether the recreation centre should be built or not?
A.1 The recreation centre should be built for the general staff of XYZ, for currently the recreation centre is for the officers’ use only. The other workers feel neglected by management as only officers and their families are invited for most of the functions held in the company premises. Moreover, the space available for the officers’ recreation centre in the Officers Mess and Institute can only accommodate 50–60 guests at a time. It cannot accommodate guests for marriages and other functions with a guest list of 200–300 people. Even though the central lawn in the campus can be used for functions, after the function is over the condition of the park is adversely affected. A lot of effort and expense is then involved in cleaning it for, on average, more than 200 parties a year are held on campus. So maintaining a park within the campus as well as conducting functions in it is a difficult task as the work force is small.

If staff members were to hire an outside community centre for a function, they would need to shell out a large amount of money as XYZ is in a prime location where the cost of land as well as rental is huge and even availability is sometimes an issue. So employees are less enthusiastic and generally feel stressed when they have a big family function. As a result, the quality of their work suffers.

Q.2 Discuss the cost–benefit analysis of investing the amount required to build the recreation centre in a fixed deposit. In such a scenario, XYZ would pay the rent for all functions hosted by employees outside the organisation’s campus. Keep in mind the average return on fixed deposits in banks is 8.33% per annum.
A.2 As a model of how to provide cost-effective recreation facilities inside the Officers Mess and Institute, the benefits offered are simply about building trust with the local community, and creating services that take a patient, holistic approach to individuals’ often complex social needs. The opportunity cost is assessed in monetary or material terms, for assisting in the decision-making process.

Explicit cost

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultancy services</td>
<td>INR 1,700,000</td>
</tr>
<tr>
<td>Building including internal services</td>
<td>INR 43,255,475</td>
</tr>
<tr>
<td>Total</td>
<td>INR 44,955,475</td>
</tr>
<tr>
<td>Contingencies @ 3%</td>
<td>INR 1,348,664</td>
</tr>
<tr>
<td>Grand Total (rounded off INR 463.04)</td>
<td>INR 46,304,139</td>
</tr>
</tbody>
</table>

Non-monetary opportunity cost attached to this course of action, then, ignoring opportunity costs may produce the disillusion that its benefits cost nothing at all. The hidden opportunity cost then become the implicit hidden cost such as, for instance, land cost, furniture cost, special item of work, office bearers cost, etc.

The trade-off for evaluating the other alternatives available to officer’s recreation center of utilising this money and getting returns on fixed debt instruments. In the past 10 years the average return on debt instruments has been 8.33%.

This 8.33% of INR 463.04 lakhs comes to INR 38.71 lakhs

The average rent for a function in an outside banquet hall was INR 50,000 (plus 10% service tax) in 2010. The average function conducted in XYZ included the use of both the lawn as well as the Officers Mess and Institute hall.

1) Big function with a gathering of 300 + (239)
2) Kitty parties (86)
3) Birthday parties (73)
So in all, 239+86+73 = 398

If these functions were to be hosted in an external facility, the cost comes to INR 50,000* 10% service tax = INR 55,000 * 398 = INR 2,18,90,000 per year.

Q.3 If XYZ charges 20% of the current market value, then how much time will it take for it to recover its investment, considering that 400 functions will be held in a year once the recreation centre is completed?

A.3 20% X (55,000) X 400 = INR (44,00,000)
Total cost of the project = INR 463.04 lakhs

Therefore, in (463.04/44) =10.52 = 11 + 1(time period for completion of the project) years approximately. In this case we assume that market value of the rent does not increase for next 12 years.
**Conclusion:** The recreation centre should be built as XYZ will recover its investment within 11 years. Apart from the financial considerations, the recreation centre can be considered a long-term investment in improving the morale of the employees as it will result in a better quality of life for them and their families. This is likely to enhance their sense of belonging to the company, eventually leading to long-term increased efficiency in their work.

**References**
XYZ, worksheet and XYZ website, external source for rent data were Fortune Hotel, Noida, Double Tree Hotel, Mayur Vihar Phase 1 and Kapoor Banquet, Mayur Vihar Phase 1.

Considering the fixed deposit interest rate, by check the rate list of the private and public banks and then taking the average of all the banks for over last 3 months. Banks included ICICI Bank, SBI Bank, IDBI Bank and HDFC Bank.

**About the author**
Monica Singhania, BCom (Hons), MCom, CA, PhD (Delhi), is a Fellow of the Institute of Chartered Accountants of India and Associate Professor, Faculty of Management Studies, University of Delhi. She was placed in the merit list of the examinations conducted by both the university and the institute. Her doctoral research was in corporate finance and taxation. She is the author of seven books on direct tax laws and several research papers in leading journals. She teaches management accounting, management control systems, project management and corporate taxation to MBA students.

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