

# **CASE STUDY OF BUILDING HOME: A MAJOR HURDLE PROBLEM FACED WHILE CONSTRUCTING A HOUSE IN OPERATIONS**

**Areeb Mustafa, Superior University, Lahore**  
**Muhammad Rafiq, Superior University, Lahore**

## **ABSTARCT**

*In August 2022 Haji Amanullah was facing issue regarding operation on his business to construct a house. He was facing problems regarding constructing the house regarding with the mainly starting and ending on its operation. He was having problem with labour shortage as well with entirely conducting operations for the house. He was about to start constructing a 5 Marla house without proper equipment. Later he found out that the financial shortage has fall as well as he started to face problem to negotiate to buy the land to start constructing the house.*

## **THE BACKGROUND**

Then Haji Amanullah had appointed Abubakr his head of management to fix these problems that he is facing. The first step that Aboubakar did was he started to re see the lands with the marketing team so they can purchase the land as soon as possible upon on the budget that the company had. He then purchased the land upon the best locating he could find for his customer and had started the process of constructing the house. Then the very first step he took was he made the company architect design the house mapping. This had to be done and had to make sure that the customer is satisfied with it and they can go ahead with their next operation. After all the documentation were done then they had to start constructing the house. The next issue they were facing was to start it. He then merged with the human resource team and ad started to hire labour so the company doesn't fall down and they can commence with their work. Then he had started to hire and after few weeks the company had started its first face of constructing operation. Even after starting the operations, the company had started to have less manpower even after hiring the exact man power they need. Then Aboubakar started to look into this manner.

When he looked into it, he saw that the labour he hired only twenty percent were showing in for work but the rest were not even showing for their work. After checking thoroughly, the majority of the labour had left before they even started to work. This had led to a great number of issues for the company. After recessing then they were facing issue with the machinery to hold steel, brick, and boar. Their operation had started to stop again due to they were not able to arrange these items that the company needed to complete their first phase. The company requested the supply chain to arrange these items but these items were not available on the market for the next two weeks due to high demand. Then Aboubakar had made the operations and work slow so they could finish according to that time so they can start their second phase as soon as supply chain will provide them those items. Upon within one week somehow supply chain team were able to provide those items. They had ordered a lot of them that so their work will not stop if they somehow are less with these items. But it was draining the company budget by a lot due to majority of the payments were still not provided by the client.

## Strategic Level

Aboubakar wanted to work with an ecofriendly green environment so it doesn't damage the environment and the construction of the house also doesn't stop with this. He gave his best and was working everyday hard for it. Then Haji Amanullah looks that they are having another problem with the company. Is that their team for the second phase of their work are no available due to second site work on progress. Then Aboubakar looked into this matter and he started to hire more labour as temporary on daily base wage. This led to the company to save up money by a lot and they had to finish their task within a day they were given as well the operation was going smoothly with it.

Then Aboubakar saw that they were facing a major problem them even Haji Amanullah didn't even see it coming. It is the client has to pay his dues so that the work will not stop. He forgets to make the client sign a contract before starting construction the house. Then the next day Aboubakar made contact with the client, he had meeting with them and had made them sign the contract and they had made their first dues paid after long time. This had given them a little bit relieve that the company has started to go on track little bit and they can finally keep their operations alive and keep on working. Throughout this whole process and journey the operations had started smoothly but then the client contacted Aboubakar and wanted to discuss with the redesign of house.

After the boar Aboubakar had made sure that the first commence of brick has started. This was for this house to start to make the ground level clear. This was lead so the operation between those two wouldn't stop. This was easily done after the boar so the whole process of constructing would not stop. This had made Aboubakar little bit off the track because now he cannot change the ground level design and had already started with the construction of the house of the ground floor.

However, after meeting with the client Aboubakar managed to change little bit of design which was possible to do because at the first meeting with the client, they had already discussed on it but the client wanted little bit change but not all the change was possible for it. Then it was time for their first lantern to commence in the next step of phase. This had also become a little bit of problem due to no available for machinery. Without it They couldn't do it and had needed it.

The machinery was available only after one week. Then had no other option but to wait for it. Then Aboubakar had an idea to take one of the machineries on rent on the market because he had skill labour that could have operated on it. So, he rent it out and had made the use of it very efficiently buy it cost the company money which was an unidentified expense for the company.

## The progress of the level

At this level Haji Amanullah company is progressing a lot because of when he hired Aboubakar to help him out of his problem. He has helped him and the company to progress with the construction. The company is following his lead and the objectives this has led the environment and a physical structure in to a whole lot success. The first problem they faced was while they were trying to acquire a plot for their client. Due to this Aboubakar was then hired to solve many company problems of their whole operations financially (Refer to Exhibit 1, Table 1).

He then came up with a plan to save the company to face the problem and then solved it with according to the client and company budget to acquire a land for the company. This had led issues with the marketing problem for the company but they were at great success of acquiring it. Then after securing the land, they had to save and fix the money so their strategic would work for later on with the company.

But later on, they started to face operations problem such as with the supply chain department. Because they couldn't arrange the material on time and the company had to face delays which resulted on more expenses for the company. This involved huge tough decisions with the strategic financial planning with the company because there was a lot of risk going on with the company and with the client.

Then Aboubakar had a meeting with the management to increase the budget of the construction due to high stage of client demand as well client had also agreed to increase the budget so they can construct the house more in dept and in well with the strategic process. Before the hiring of Aboubakar, Haji Amanullah was searching for the land by himself in the market but due to the client budget and the company budget he wasn't able to do it with his marketing team in which at that time wasn't properly there.

When Aboubakar came, he then set him up a marketing team that helped the company acquire the land and helped him finish the documentation. They wanted to acquire it while looking at the environment. Then Aboubakar was able to keep financial reserve with the client so in future they won't have to face any financial problem. This would lead them to a better operation level then rather a huge some other problems with it. Then Aboubakar had to make sure with the architectural team that the design of the house has to state according to the client demands on how well he wants the structure with the 3D design of the house. This will help the client a lot and will make sure that later on with the progress the company will not face any issue and this will save enormous time for the company.

### **The benefits and the progression of the work**

This will lead to a huge cost benefit for both the parties and the analyzation would be better for both of them. Then the strategic level of the supply chain is very important for the operations. Without them the company cannot operate properly. This will lead to huge problem. While constructing the company faced getting bricks, boar, and, cement. This had made the company work slowly and had made it harder for the company to progress.

Then the company was facing shortage of labour. This had also made their operations go down and the level of human resource was less. Then Aboubakar had hired labour with the HR department and had made sure by hiring with the team he has hired skilled labour to help him with the progress of the construction.

While this process was going on Haji Amanullah had to make sure that the stakeholders of the project were satisfied that their money, the company money, and the client money are being used properly and had to explain them in the meeting that this project is going on properly and what and where they are standing now with the construction. As well Aboubakar had to make sure that the materials they are using are in good condition and are good material provides for this project.

Then at this level agile has been seen and used for this strategic level Without this approach the construction wouldn't have increased a lot and would have face a huge problem. He has provided a framework for this project this helped him to fix the problems Haji Amanullah was facing and it helped him to make decisions properly. This has led into with unexpected obstacle so later on the would not face this problem in the future.

With this strategy Aboubakar had to solve each issue. It was easily done with this strategy level. The main issue was the financial barriers with the client because they didn't pay their dues accordingly on time. This had made the project go slowly and the construction was taking on slowly pace most of the time.

Overall, this whole strategic has involved al the plans and risk that they will take and implement it so this strategy can work. Because the company has planned with Aboubakar and the management. To go with this plan so the company is able to register it properly. However, Aboubakar is leading with this operation so no other operation goes disturb with this level.

Because the slower they will go the slower they will have problems and the flow will break with the construction. This can lead to huge problem if the company cannot follow this strategic plan. That's why Haji Amanullah had hired Aboubakar so this doesn't go in flame and with each phase this process can go smoothly and the management can easily understand the risk they are taking with this strategy.

### **Operation Level**

At this level Aboubakar tackled with each new challenges day to day he faced. The first challenged he faced and overcome is the whole design and structure of architectural during before commencing the operation. He and his team were monitoring the budget that had left to finish this operation so even though there supply chain wouldn't have come with a problem. They had to ensure and monitor the project to make sure that their project was going up to the mark and the whole construction is taking place properly.

Because these are essential part of the operations. If they had huge problem with the operation that it would have collapsed and then the whole operation would have become problem for them. They had coordinated with the team to make sure that they are going with the flow and the operations are going smoothly with the passage of time.

During this process they had first made sure that their legal problems are all solved with the purchasing of the land so in future this problem wouldn't have come and it would have made them go into big problem in future so they had solved it at the beginning. They had obtained the necessary permit to start with the operation when they had selected the land to start the construction on.

Then they had started their operation with the architectural design this was the first phase commence in the operation. With it the client and Aboubakar made sure that they like the design of it and had to make sure that this had to go with the operation on the next stage of it. Then they had regularly shown the design and were able to satisfy the client that their design is good and had started with their next operation on.

During the operation of supply chain, they have to make sure that the company has all the materials on site so the operation doesn't stop. Since the materials are very crucial for the work it has to be make sure that everything is going according to the time. This needs to be in a great impact rather than the project gets delayed. This will make the client and Haji Amanullah more problem and it will be hard for Aboubakar more problems. The operation team will keep on working closely with the supply chain team effectively so most of them doesn't goes in vain. Because they have to negotiate and make sure to keep on monitoring the inventory so they don't fall short otherwise the operation will become more slowly this will lead to a huge distortion.

### **The supplier and their problems**

They need to keep on gaining with the suppliers to make the material keep on going to reach on time. Because during the starting of the phase they had this problem at the beginning that they didn't have the materials on time which had delayed with the construction of the house. This is the solution to keep these problems away otherwise it can easily become huge major problems in the future.

The they had to make sure that the project was going on schedule. Otherwise, it will delay with the operation. It can make a huge hurdle. Because each phase has its own timing to finish and they cannot make it further delay. If they do it then this will cost the company more money and loss for the company. Then they have to make sure that the quality stays good otherwise the supply chain department are not monitoring properly with the material financially (Refer to Exhibit 2, Table 2 & Table 3).

This can cause huge problem as each material needs to be revised and check properly before using it. However, this is accordingly set around the budget of the client that they are willingly to spent. But still the materials are needed to be good to keep the standard high according to the company use.

Then during the commence and inspection it is being check properly through that they are constructing the according to the client needs as well as depends on the society that they are meeting with the requirement. Because they need to follow with the regulatory bodies it will help them a lot to prevent any future problems with the construction problems. Then during this operation, the environment has been sustained properly and has not made any issue while sustaining with the environment and it has kept in clean during the construction and operation period financially (Refer to Exhibit 3, Table 4).

They need to make sure that they are working with the kept of eco-friendly environment. Then they need to make sure that during the operation they do not meet with any crisis. This will keep on preventing on the future planning that has been already mentioned above. Then they need to make sure that the communication between their client is going on smoothly. Because if it isn't then it will be hard for Aboubakar to manage the operation and will keep on delaying with the work. This will not make the client happy about it and it will cause huge problem with the client. That is why Aboubakar needs to make sure that all this work and operation with the client engaged smoothly. So, his team can keep on working and no other hurdles come in between (Refer to Exhibit 3, Table 5 & Table 6).

This can keep on having issue that's why the communication with the employees and the client is necessary so there won't be any issue in the future. The operation will go smoothly if they follow this step kept by Aboubakar and the company will progress a lot then. It will keep on keeping the company to commence their operation and there won't be any problem with it.

While with keeping the relationship with the stakeholders for the company are also meant priority with the operations. Because they won't like it if the construction stops and another problem will emerge. That's why Aboubakar was hired to keep the company going and fix these problems. That's why he has settled his team to deal with the problem to report him and he will fix these problems while he can then report it up front and will keep on going with the operation successfully.

### **Reflexive Level**

At this level that there will be a lot of approach and it will engage a lot with the learning and adaption on how it will extinct with the project. The operation is going on with the whole process. Aboubakar is managing well with the team and the strategies that the project is going on with a proper good way. The environment aspect is also doing good. Aboubakar has managed well with the team. His way of work is doing good and all the problems at this level has been solved. The finances of the company are not being spent that much they have succeeded on keeping the construction of this project well on the finances.

Their reflexive adaptability is going on the mark and has well been progressed with it. His team has learned a lot with the help of Aboubakar. Haji Amanullah has hired correct person for this job. He has proven the company and has enhanced his labour skill that has helped them to complete the project on time. He had also engaged with the team he kept on getting feedback with the work so he can keep the progress on time.

This helped the company to grow a lot. Then he had went with a reflexive point within the company. This had allowed to go through the project. This helped him with the decision making with each of the overall of the phase as well as it had helped him with the overall making key decision making. These reflexive points had saved them a lot and was helping Aboubakar to solve each of the problem. Then he had made a flexible with the design making

progress. He knew while the time would go by the client will change their design and it would be hard for him to manager later on. So, that's why he had made it flexible so it wouldn't be problem for him and his team to keep the client happy will the construction is going on and the operation wouldn't be disturbed then.

The architectural design wasn't an issue later on and the project had kept on going without disturbing the operations within the project. Then they had a better environment impact made. The company was very carefully working on and they were working with a green environment. This had later on made the company even more worth in the grey structure (Eefer to Exhibit 4, Figure 1).

They were very careful with the waste management systems well they had to ensure that they were responsible with the core objectives of it. The all the unexpected issues that they were kept on arriving were solved. Not only one problem kept on coming later on a lot of problems had kept on coming. This was a huge problem for the company and Haji Amanullah couldn't handle it that's why Aboubakar was hired to solve all this issue and problem.

Aboubakar kept a session on for this problem and had discussed with the management so the problem didn't keep on increasing more on. This had made them handle the matter as fast as possible and had kept the issue more insight and he had handled it more better way then the had expected it for them.

### **The process and results**

Then the whole agile process was kept on. This had made the impact on way greater of the project. That this project was one of a unique project that took place and a lot of problems showed in a way that could have resulted in a worst way then it was expected. Because the evaluation of this project was good and a lot of area of improvements were there. Because this construction process became a lot of efficient later on then it had become a lot of problem at the beginning and at the mid structure.

This project was well handled by Aboubakar that had resulted on a good way. A lot of latest technology was used during this project. In order to keep the client happy and make this project work a lot it was on a whole another level that this had become of it. This was very on a high level that latest machinery and equipment was used in this integration.

Well Aboubakar had easily managed a lot of short- and long-term problems and challenges. Well before starting this project the company wasn't even able to buy a land and now, they are constructing it properly. This was a very good achievement with the team and the operation kept on going well and this had kept the operation to solve it immediately if any single problems had occurred during in its time. They had learned a lot from this problem. This problem was new for the company and it has helped them and understand them that this level of problem if it will occur anytime again in the future then it will be easily dealt with.

The company will easily manage it. Since the joining of the Aboubakar the company has progressed a lot and he has helped the solve their all the problems. This has made the company more mature enough to deal with any problems they will face in the company and the company has grown a lot during this problem period.

While this mindset has changed a lot for the company employees as well. The operations didn't have any problems later on and this was easily done with it. This has made a learning point for Haji Amanullah, Aboubakar, and the employees during this period. Because it has made a huge impact and this impact has resulted a lot for them. With this then Aboubakar has made a team of his own. On whatever next project they will be given. Then they can easily overcome these challenges and his team is trained with them to keep this work on going with the final design (Refer to Exhibit 5, Figure 2).

### **Way Forward**

Overall, Haji Amanullah was facing operation problem for his project. The problem was the Marketing, Finances, and, Operation of this project. His company wanted to construct a 5 Marla house project. But they were facing these operations problem that had led into more problems going in depth while his company was suffering, he then decided to hire Aboubakar was an expert in dealing with this problem.

Because these problems were not easy and t had problem for Haji Amanullah to solve it. His marketing team couldn't even buy a land for their client and the problem was keep on going. Then Aboubakar had first engaged with the marketing team and had bought land with the company and client budget.

Because since then it was time for constructing the client hadn't pay its next due the company had started commencing the operation without it and they were a lot of hurdles in it. A lot of labour shortage was there. Then Aboubakar had engaged with the hr department and had hired labour to start the construction properly. He then later on fixed this problem while the operation was going. He didn't want the operation to stop so he had to take it slowly. These were the problems kept on ongoing during the operations and he had fixed the problem on coming with the management and he had then established his own team during this process so they wouldn't have to deal with this problem later on.

Them more problems came in to the operations this had led in to a major and minor problems throughout the journey. This had kept on ongoing with the whole process. Aboubakar was engaged with the whole team to fix all the problems the operations. He then faced a hurdle of machinery problems that had made him slow progress in his task but they were able to catch on buying renting those machines and had been fixed during that period.

At the strategic level he had made strategies to solve those problems the Haji Amanullah and the company was facing. These problems were a huge problem for the company to progress in the future and this would have made a huge issue for the client. Then Aboubakar went with these strategies that helped the company to tackle those problems and it had saved them a lot by solving these problems.

These problems were a huge issue for the company if Aboubakar hadn't used any of this strategy, then they would have been an issue for them to keep on going with the operation and this had led them. That is why the strategies were implemented by Aboubakar to solve those problems.

Then at the operation level Aboubakar had to make sure that all the operations are progressing up to time. If they are not, then it's a huge problem with the company if they do not meet the time. It is an essential part of the operations and they need to go with it. Aboubakar had not kept with it. For each and every phase he had meetings with the management to solve these problems. This had kept to its phase and kept on commencing with the operation while the problems were fixing.

Then the reflexive level Aboubakar had kept with on challenging by fixing all the problems. This had led him into complete with all problems he was facing. What he should have done. He should have done with the commencing to fix the marketing problem first which he did. Then he had focused on the finances he saw that the company had and was able to raise their funds and with the operation he was able to complete the project the constructing of the house given to its client which had made both of the parties happy with each other and Aboubakar had done a great job with it.

**EXHIBIT 1**

<b>Table 1 ANNUAL FINANCIAL REPORT</b>					
S-NO	DATE	DESCRIPTION	QUANTITY	RATE	AMOUNT
1	22-8-2022	Plot digging	1		14,000
2	23-8-2022	Water bouring	1		10,000
3	24-8-2022	Big crush	800 foot	95 per foot	76,000
4	25-8-2022	Bricks	15200	13 per brick	1,95,000
5	26-8-2022	Cement	25	1040 per bag with carriage	26,380
6	26-8-2022	Plastic Paper	30 foot		480
7	27-8-2022	Sand Trolley	3 Cubic meter		14,000
8	30-8-2022	Methai	1.5 kg		1,500
9	30-8-2022	Cement	25	1030 per bag with carriage	25,750
10	30-8-2022	Crush/Bajri	40 foot	125 per foot	5,980
11	31-8-2022	Damp roll plastic	200 foot		1,050
12	1-9-2022	Bricks	1000	14.5 per brick	14,500
13	1-9-2022	Advance to v latchman	Total salary 14,000		5,000
14	6-9-2022	Plastic paper and Steel nails	60 foot	50 nails	1,720
15	6-9-2022	Kassu and labour	5 trolley	16400 per trolley	82,000
16	6-9-2022	Cement	25	1025 per bag v lith carriage	26,000
17	6-9-2022	Jharu	1		120
18	7-9-2022	Bricks	5960	14 per brick	83,440
19	7-9-2022	Sand Trolley	3 Cubic meter		14,000
20	8-9-2022	Bricks	6000	14.3 per brick	85,800
21	8-9-2022	Crush/Bajri	900 foot	133 per foot	1,19,700
22	8-9-2022	Bricks	6000	14.3 per brick	85,800
23	8-9-2022	Petrol of car			6,500
24	9-9-2022	191 bahria tree khudai			5,500
25	9-9-2022	Steel and Steel wire	1ton and 5 kg wire		2,19,600
26	9-9-2022	Bricks	5500	15.3 per brick	84,150
27	10-9-2022	Exzost box wooden	2		400
28	13-9-2022	Petrol of car			6,000
29	13-9-2022	Cement	10	1030 per bag v lith carriage	10,450
30	13-9-2022	2 pipe 5 light box 1 bend 1 aari blade			400
31	15-9-2022	Lantter plastic	100 foot	220 per foot	2,210
32	16-9-2022	Cement	80	1030 per bag v lith carriage	83,600
33	16-9-2022	Steel wire	1.5kg		525

Source: Annual report of financial provided by company, At the end of the project the company had generated a profit of 18 Million Rupees.



**EXHIBIT 2**

S-no	Description	Amount
1	Plot price	63,50,000
2	Transfer Taxes and Comission	2,50,000
3	Possession	5,16,000
4	Map and Design	19,850
5	Meter	20,000
<b>Total</b>		<b>71,55,850</b>

Sl. No	Date	Quantity	Amount
1	26-8-2022	25	26,380
2	30-8-2022	25	25,750
3	6-9-2022	25	26,000
4	13-9-2022	10	10,450
5	16-9-2022	80	83,600
6	18-9-2022	20	20,900
7	26-9-2022	30	31,200
8	1-10-2022	30	31,200
9	3-10-2022	100	1,00,400
10	7-10-2022	40+20 chips	44,000
11	13-10-2022	30	31,200
12	16-10-2022	70	74,550
13	18-10-2022	30	31,200
14	23-10-2022	30	31,200
15	30-10-2022	30	31,200
16	9-11-2022	30	31,200
17	21-2-2023	4	4,400
<b>Total</b>			<b>6,34,830</b>

Source: Annual report of financial provided by company.

**EXHIBIT 3**

<b>Table 4 TOTAL BRICKS</b>			
S-no	Date	Quantity	Amount
1	25/8/ 2022	15,200	1,95,000
2	1/ 9/2022	1,000	14,500
3	7/9/2022	5,960	83,440
4	8/ 9/2022	12,000	1,71,600
5	9/9/2022	5,500	84,150
6	18/9/ 2022	6,000	94,800
7	22/9/ 2022	6,000	1,00,800
8	14/11/2022	1000	16,000
Total Bricks			760.290

<b>Table 5 TOTAL SAND TROLLY</b>			
S-no	Date	Quantity	Amount
1	27-8-2022	3 cubic meter	14,000
2	7-9-2022	3 cubic meter	14,000
3	23-9-2022	3 cubic meter	12,000
4	27-9-2022	3 cubic meter	12,000
5	30-9-2022	3 cubic meter	12,500
6	2-10-2022	3 cubic meter	12,000
7	9-10-2022	3 cubic meter	12,000
8	26-10-2022	3 cubic meter	10,000
Total			98,500

<b>Table 6 BIG CRUSH AND BAJRI</b>			
S-no	Date	Quantity	Amount
1	24-8-2022	800 foot	76 000
2	30-8-2022	40 foot	5,980
3	8-9-2022	900 foot	1,19,700
Total			2,01,680

Source: Annual report of financial provided by company, At the end of the project the company had generated a profit of 18 Million Rupees.

## EXHIBIT 4



**Figure 1**  
**ARCHITECTURAL DESIGN**

Source: Provided by company information.

## EXHIBIT 5



**Figure 2**  
**FINAL PRODUCT**

Source: Provided by company information, Final product.

**Received:** 19-Jan-2024, Manuscript No. JIACS-24-14378; **Editor assigned:** 22-Jan-2024, Pre QC No. JIACS-24-14378 (PQ); **Reviewed:** 06-Feb-2024, QC No. JIACS-24-14378; **Revised:** 13-Feb-2024, Manuscript No. JIACS-24-14378 (R); **Published:** 05-Mar-2024