



STUDENT: SIAN WALKEY

*ASSIGNMENT: LEVEL 5 ASSESSMENT: QUALITY MANAGEMENT.
PROCEDURE*

TUTOR: JUAN FERRIZ-PAPI

MODULE: PROJECT PLANNING FOR CONSTRUCTION

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Level 5 Assessment. Project planning for construction.

Critical analysis of case study. Option 3. Quality Management. Procedure.

The use of a quality management procedure is to provide a focus on client satisfaction and continuous improvement.

Introduction

Project: G.Chaplin & Son's Refurbishment project. Conversion of commercial shop to 4 domestic flats.

This is a refurbishment project I am involved with. The premises' has been in my family since the 1950's and was used as a commercial shop through 3 family generations, My Mum and Uncle were the last to Manage the shops. G.Chaplin was my Great Grandfather. The shop ceased trading in 2011 and we submitted plans to convert it into residential dwellings. (4no flats).

In 2013 my Mum sadly passed away from an unexpected illness and she left her half of the building to me, my Brother and my Father in equal shares. My Uncle owns the other half with his Wife (5 owners in total). The planning application was declined the day after my Mother's funeral. It was declined on the basis of insufficient parking. I had to appeal to the tribunal in Cardiff and had 6 months to do it in, I won the appeal and planning was granted.

There is split within my family, My Father and Uncle have historic issues so an agreement had to be sought on a way of moving forward with the project. Legal advice was sought and an agreement drawn up confirming that My Uncle would pay for materials and my Father would do/organise the labour and work process. There was no timescale agreed.

The property had major structural defects. Initially my Great Grandfather bought 1 house on the street and used the ground floor as a shop. The 1st floor was their living space. In the 1960's my Grandfather and his Brother bought the property next door to convert the ground floor into a bigger shop area. During these conversion works an RSJ was inserted to span the two houses to open up the space. This RSJ was not adequately supported and the result 60 years later is a bowing of the side and back walls caused by the pressure.

The plan was for my Father and Brother to carry out the works in between general working; earning and keeping a business going (they work together as gas engineers) we all work full time. I wasn't convinced it was possible for the two of them to carry out the works required due to the sheer volume in relation to the major structural remedial works required. For example:

- Strengthening the structure by building supporting walls internally
- Replacing all the timber beams, all floors due to most of them failing completely
- Sound proofing
- Use of acrow supports to enable section of the side wall to be taken out and re-built
- New roof/downpipes etc (Appendix 1. Plans and costing's/works required)

We had general discussions around the start of the process about organisation of works and the importance of communication between owners.

We have had various meetings with regards to progress; works have started and stopped for 6 years. Something needs to change; something needs to happen to bring some order back to the situation. Relationships need to change, or separate.

So with reference to this assignment, my angle of this project is not focusing on a fictitious Construction company but more so, taking an opportunity to make sense of a failing project run by a lack of organisation and efficiency (and family feud).

Definition of a Quality Management System

A Quality Management System (QMS) is a set of policies, procedures and processes required for planning and execution (production/development/service) in the core business area of the organisation (i.e., areas that can impact the organisations ability to meet customer requirements).

www.the9000store.com/iso-9001-2015-requirements

Steps in the procedure of quality

1. Desire it
2. Define it
3. Obtain it
4. Check it
5. Demonstrate it
6. Document it

Source: Juan Ferriz-Papi notes on Quality

Quality Management is looking at processes and procedures to make a raw product into a successful end product. There are many external influences that can affect the outcome of a project.

For this assignment I will use **Deming's 14 principles** of Quality Management to assess the current, stagnant situation of the project.

W Edwards Deming is widely acknowledged as the leading management thinker in the field of quality. He was a statistician and business consultant. His Philosophy is one of cooperation and continual improvement; it avoids blame and redefines mistakes as opportunities for improvement.

Source: <https://www.bl.uk>

1. Create consistency of purpose

Long term consideration of the project and me taking over control of the administration and planning of works. Also creating appropriate communication between all parties involved but introducing clarity in relation to who makes an overall decision

2. Adopt new philosophy of quality

Look at the impact the problems/delays are having on all members involved and consider what can be done to move the project forward. Create more of a consistent/methodical approach to completing works – even if this involves using external contractors. Make a big change to how the project is managed and discuss expectations with family members. Make a clear plan and work towards it.

3. Cease dependency on final inspection

Take Building Control into consideration at this early stage to avoid major issues in the future. Instead of being overwhelmed by the size of the project – break it down into smaller elements which can be perceived as easier to achieve; work this into a timescale/planner

4. Consider total cost, not just initial price

Look at any relevant Welsh Government grants for empty properties – consider if some people can be bought out of the project to minimize number involved and give it a better chance for success. Carry out cost analysis of time and money spent so far. How will the future of the project be funded if one

person pulls out (cost to buy them out etc.)? If external contractors to be used then limit the amount to control costs.

5. Find problems, Improve constantly

Resolve the family issues within this project. See if buying Uncle out is an option. Father always creates obstacles instead of finding solutions. This needs to be addressed to be able to move forward or going round in circles.

6. Institute on-the-job training

Look at works required and see if family members are suitably qualified to address the problems. Organise other contractors to manage specific works if this is not an option.

7. Leadership

Consider my own leadership qualities and think of a way of motivation family members to commit to the project. Make a clear path with transparent objectives and look at the potential outcome. Look at ways of alleviating stress, consider long term financial benefits – communicate this with other participants and lead the way in an organised manner.

8. Drive out fear

Provide a comprehensive plan. Looks at all costs and ensure it is achievable. Speak to Brother and see if we can jointly buy my Uncle out and get my Father to fund the project. Try to eliminate doubts by looking at all the facts and consider feasible options.

9. Break down barriers

By decreasing the amount of people in ownership it will eliminate communication problems. It's very difficult to resolve a family feud – sometimes the best option is to draw a line and move on from it. Make a timeline of what is possible and at what time, how long will it actually take – is it an option to change the plans from flats to houses – this would be cheaper – less bathrooms, kitchens, sound proofing. Make a drastic change – even live in one of them whilst doing it up. Rent my house out?

10. Eliminate targets

At present there are no targets. I think it would be more relevant here to eliminate the pressure everyone is feeling – and find a way to move forward in a productive manner.

11. No numerical goals

Spread the responsibility of the work out and change focus from considering the possible rental income to actually thinking about rent we are losing by just plodding along with things.

12. Remove merit system

This is more to do with my Father's and Uncle's relationship. If my Uncle was out of the mix then it would take the constant battle of wits away.

13. Education and Self Improvement

This element can be focused on using a clear thinking method. Looking at the facts, evaluating costs, considering feasibility of project and trying to let go of old habits that have hindered the project and focus on a new, more organised, methodical approach

14. Involve all workers in the transformation

Make a plan – get everyone on board working towards completion – consider the importance of the building – the emotional attachment

Quality Management Documents

There are a number of documents that will be created to form a Quality Management System, as follows:

- Policy
- Quality manual
- Process maps
- Process flow charts
- Standard operating procedures/records/forms

This is a diagram showing the hierarchy in a Quality Management system:



<https://advisera.com/9001academy/knowledgebase/how-to-structure-quality-management-system-documentation/#:~:targetText=The%20QMS%20documentation%20can%20consist,%2C%20quality%20plans%2C%20and%20records.>

Quality Procedures

These can be in different formats as long as they are user friendly. They need to include the following information:

- Title
- Purpose
- Scope
- Responsibilities
- Records
- Document control
- Objectives/Workload – what actually needs doing to achieve completion of task

Quality Assurance

QA is the process of tracking the quality of a product throughout the manufacturing and supply process (start to finish). This is useful to avoid major errors at the end of a project/process. The correct products for the project are chosen based on suitability and quality/endurance. The quality of a product can be measured by using rigorous testing methods to ensure products reach the sufficient recognisable certification. Materials are checked when they arrive on site and stored correctly to avoid damage.

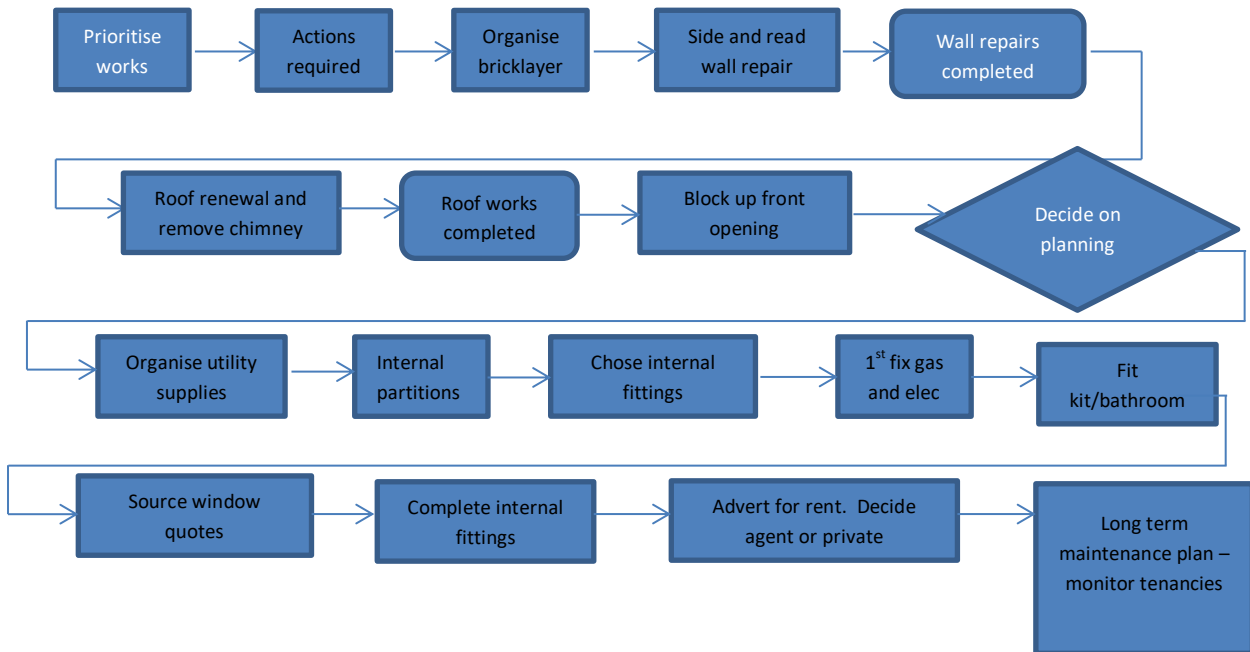
Quality Assurance for the shop conversion project:

- Making sure correct products are used that comply with Building Regulations
- Ensure products are of good standard on delivery
- Keeping records of activities on-site and being proactive in checking all products are utilised, checking stock levels etc.
- Ensure documents are up to date on site for consistent records

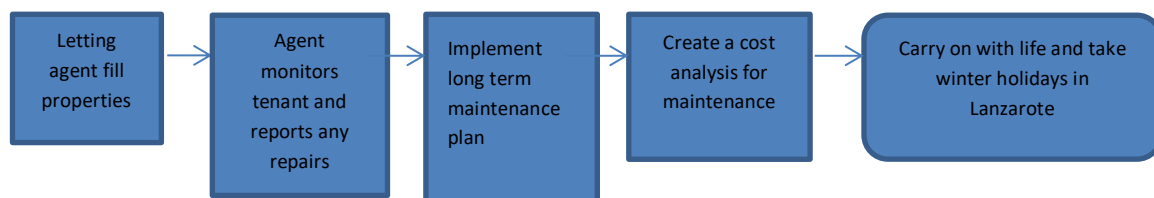
Process mapping.

A process map will show the works required in a project/company, laid out in an easy to read diagram. Different shapes represent different things. For example, a rectangle is an activity; a diamond shape is a decision. There are many more.

Here follows a process map for the project discussed, the list is not comprehensive but juts an example to show the process mapping layout.



Flow chart to show after sales procedure



Conclusion

This exercise has proved quite helpful. The Demming's 14 points are a good way of breaking a situation into smaller fragments to make them manageable again rather than overwhelming. I have attached photos, costing's and the planning appeal in the appendix for your information and for you to obtain a deeper understanding of the project. Hopefully this assignment will help me move things forward because they have been stuck for a long time.

The Quality Management process is invaluable in organisations. It helps to keep standards consistent, avoid complaints and refunds.

Flow and process maps are useful visual tools.

If you consider the following points, you will realise that these can be applied to every situation in life, Quality makes the process smooth, it lessens the opportunity for error - there will always be mistakes, damages, breakages etc. but having a plan, always trying to stick close to that plan will make the process more consistent and therefore, more smooth running.

Steps in the procedure of quality

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REFERENCES:

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- Source: <https://www.bl.uk>