



## Developing A Provisional Explanation For A Collection Of Symptoms

Let's assume that the current situation is less than ideal and from talking and listening to various people you have a collection of seemingly unrelated complaints or symptoms such as the following:

- Customer complaints about the quality of service have increased by {...}%.
- Customers are complaining that staff don't know them.
- Customers are complaining that staff can't handle large or complex orders.
- The company is less profitable.
- Operating expenses have risen to £{...}.
- Sales have fallen by {...}%.
- Overtime costs have increased by {...}%.
- The rate of errors/mistakes has risen to {...} per day/week/month.
- Staff turnover is 38% per year and this is the highest it has ever been.

You will need to knit this collection of symptoms into a larger coherent pattern that connects them and indicates which overall cause is at work.

The technique used below is the *Current Reality Tree* which is part of Dr. Goldratt's *Theory of Constraints – Thinking Processes*. It is used to help uncover the core problem underlying a collection of unsatisfactory circumstances.

### First Step:

Check the list to see if the items are sufficiently specific and unambiguous to use. For example, if you had "Low morale" this would be too vague and you would need to specify what you are seeing that indicates "low morale". In the list above, the items are sufficiently specific for you to begin working with them. If necessary, you can make them more specific later.

### Second Step:

Consider the items in the list in terms of:

- similarity or relatedness;
- scope or scale; and
- chronology or sequence.

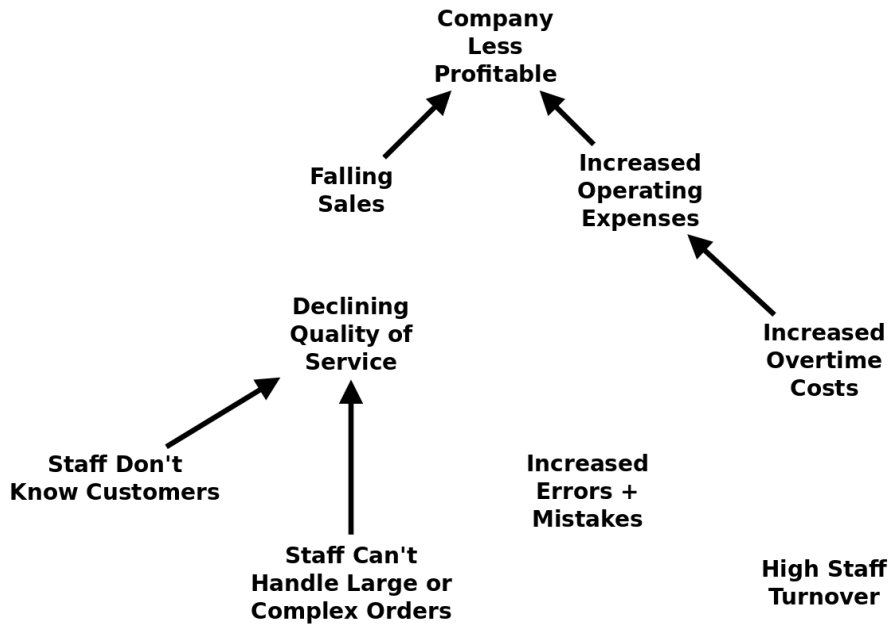
We can see that:

- There are four financially related items. Also, *(Company Less Profitable)*, *(Falling Sales)* and *(Increased Operating Expenses)* are all larger scale, namely the overall financial health of the company. *(Increased Overtime Costs)* is a smaller item that contributes to *(Increased Operating Expenses)*.

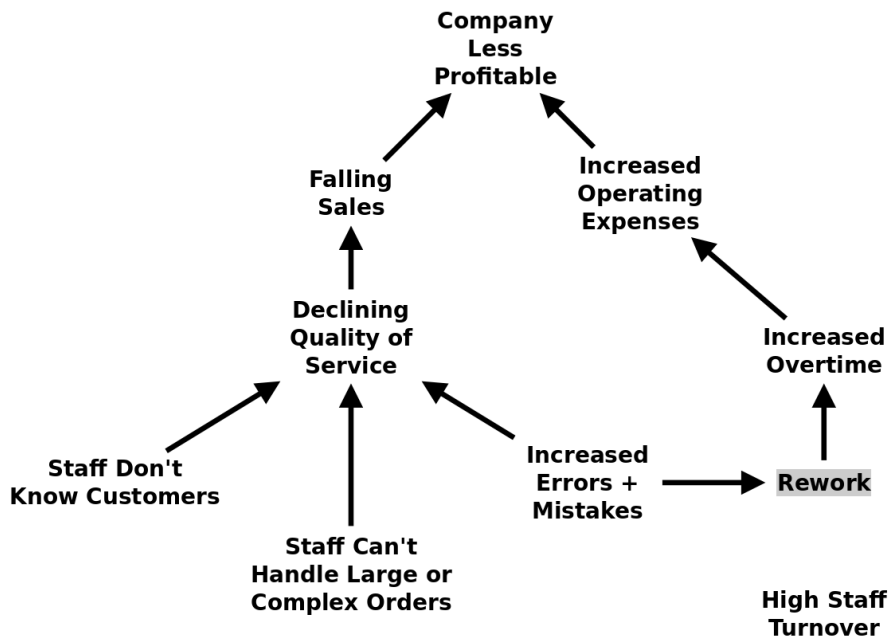
- There are three customer complaints. The first in the list is more general than the other two and might be considered as the combination of the two more specific complaints.
- *(Increased Errors + Mistakes)* and *(High Staff Turnover)* are symptoms whose connections will need to be considered.

**Third Step:**

Draw an initial map laying out what you have and indicating possible connections. You might end up with something like the following:

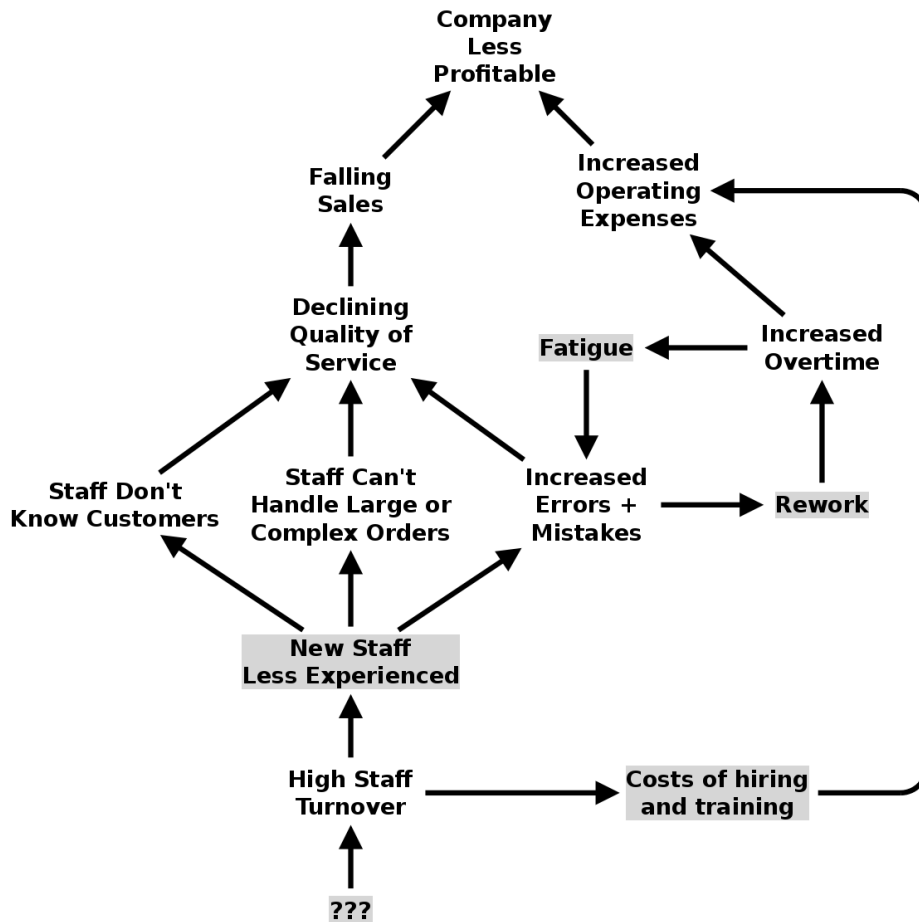


Now you need to consider how the various symptoms might be connected. After some more thinking, you might progress to the following diagram. There has been a new factor introduced (*Rework*) which has been highlighted in grey.



This is a process of considering what would be necessary and/or sufficient to cause the symptoms you are seeing. After further thinking, you might end up with a more complete

version that looks like the following diagram. Additional factors have been highlighted in grey.



At this point, your provisional explanation (or hypothesis) is that *High Staff Turnover* is responsible for causing your list of symptoms. *High Staff Turnover* means that staff will be less experienced, which would explain the customer complaints. There would also be increased operating expenses from the hiring and training of the replacement staff. The inexperienced staff would make more errors which would need to be rectified, which in turn would increase the overtime charges. The increased overtime may also lead to fatigue which will further increase the number of mistakes.

The next question concerns what is causing the *High Staff Turnover*. You will need to continue backtracking to discover why staff turnover has risen to this unacceptable level, but I won't go that far in this example. Possible explanations to be explored and confirmed/eliminated would be:

- dangerous or unpleasant work or working conditions;
- changes in the way work is handled/done;
- IT systems which are buggy and/or poorly integrated and these are driving the staff crazy;
- location of company facilities poses commuting difficulties for staff;
- salaries or benefits are low or have been cut;
- management has changed (for the worse);
- new policies have been instituted; and so on.

It is important to notice that what initially looked like a financial and customer service problem was actually a staff turnover problem. When you have discovered the key factor(s)

that have caused (*High Staff Turnover*), you will be in a better position to think creatively concerning how and where matters could be improved.

In this article, our example began with a situation where there was a collection of symptoms. Now that you have identified the single issue of (*High Staff Turnover*), the procedure from the article entitled *Developing A Provisional Explanation For A Single Event Or Symptom* can be used.

This material has been adapted from the:

*Reading Your Own Watch*

by Ted VanderNoot

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