

A TEST, AN EXPERIMENT AND TWO KINDS OF TRIAL

Some observations on putting new products in the field...and keeping them there.

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These notes are not directed to any one client or product, they are simply the result of observing a wide range of products being released into the field over a very long period of time. As the manufacturer or distributor of a new product the last thing you want to hear from the customer is:

"You gave me this new product to try out and it keeps on blowing up!....take it away!"

Designing any new product is a rigorous process. There can be a huge number of variables that will affect the behavior of the item in the field. After as many as possible of these issues have been dealt with, you must at some point try it out in the real world. Often this is done by finding a friendly client and say: *"This is new, can you try it out for me?"* This is figuratively (and sometimes literally) where the wheels come off as the word '**Trial**' means different things to different people.

As a manufacturer or distributor you will probably use the word 'trial' to find out if your new product will work, and for how long. You will want to know how environmental factors will affect the item and what changes must be made to improve reliability

Your client, having received this new product will generally assume the item you provided will work reasonably well, first time. Often they will see this trial as an assessment of how *appropriate* the product is for them to use. If there is a failure (for whatever reason) they will conclude that the product concept has failed. Whereas you may see this as another small step in the development cycle. If you take this process to its logical conclusion, the word may get 'out' and no one will want your product at about the time it is ready for launch.

The only way around this dilemma is for all parties to be familiar with the **Process** and the **Terms**. This will apply universally whether the product is a computer, a wheelbarrow or a tin of paint. At every step of the development curve, all parties must understand where you are and what you are trying to achieve.

THE TERMS....

TEST

This is a term that should be reserved for the engineer or the designer responsible for getting the project to go. A design specification is made. The engineer produces something and performs a '**Test**' to show that it conforms to this spec, regardless of how appropriate it is in the field. If it passes '**The Test**', it is not ready for sale, it is ready for '**An Experiment**'.

EXPERIMENT

An **Experiment** is the first real-live introduction to the field to see if the experience in the test lab can be replicated. It may involve attaching the product to a vehicle and driving it around, or introducing the item into a much larger product and see how well the two parts work together. If the experiment fails, its back to the lab for changes, more **Tests** and another **Experiment**. This step is strictly 'Eyes Only' and customers should not get involved.

If the **Experiment** is successful then you can move to the next step, which can be referred to as '**Trial (1)**'

TRIAL (1)

In many respects this Trial step resembles an extended Experiment. The **Experiment** has shown that the product will function, but it is still pretty green and you must seek information about its longer term reliability. Will it overheat? Crack with repeated use? Become susceptible to interference in certain situations? These are questions that must be answered in the **Trial (1)** stage. Often it is difficult to replicate real-world conditions without the involvement of a customer. If this is the case, then take the customer with you (and all the staff who may be involved) and make it plain what the trial is for and what you hope to achieve. Make it known how long you expect the trial to last. At the successful end of the trial you can declare the item '**A Stable Product.**'

It's important that this **Trial (1)** period happens out of sight of top level managers, opposition companies and of course, the 'Press'. It is a **technical** and *not* an **administrative** assessment process. When things go wrong (as they often do) you will need to dip back into **Test** and **Experiment** phases without fear of interference or retribution by others.

TRIAL (2)

This is a customer oriented trial. When you ask one of your friendly customers to help you with a product trial, *this* is what they will visualise. It assumes that the core design of the product is now stable and beyond reproach. Any problems that *do* occur should be traceable to a flaw in the manufacturing process or the installation process. If a design problem appears, then the **Trial (1)** step was not done properly.

Trial (2) is largely an acceptance trial. The customer will say 'Sure it does what you said it will do, but *Is it right for me?* Does it solve my problems? Should it do something extra we had not yet thought of?' Have good documentation and a check list describing all of the functions. If there are changes to specifications as a result of this trial, then that's ok. Document the changes and go back to the engineer. If there are failures and breakdowns during this trial the customer will rapidly lose confidence in the product and the company who made it. *The reputation of your company is on trial here as much as the product itself!*

SUMMARY

Here are the main points to remember

- Familiarise the customer with the above steps so they understand the process.
- Don't refer to the product as a 'stable, saleable item' before it really is.
- Don't treat unsuspecting customers as guinea pigs with new, unproven products.
- Never let customers perform any installation work on any trial. This can trigger a 'blame' spiral where there are no winners. Customer installation issues are mostly training issues and should be dealt with downstream after the product has been accepted.
- Don't rush the process. Customers will often add pressure to go straight from **Test** to **Stable Product** status before it is ready. They will be quick to apportion blame if the product is less than perfect.
- Don't skip any of the above steps

These steps are equally valid whether you are developing a new type of tissue box or a Collins class submarine. Technical difficulties may come and go, but the reputation of your business will be closely tied to how well these procedures are followed.
