

Distinguishing between normative and positive statements to help people answer your question

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Often, we get questions from a customer that use the word *should* in an ambiguous way:

Our program creates a widget whose flux capacitor should have reverse polarity. Attached is a sample program that shows how we create the widget with `CreateWidget`. However, the resulting widget still has a flux capacitor with standard polarity. Can you help us?

The phrase *should have reverse polarity* is ambiguous. The question could be

We would like to create a widget whose flux capacitor has reverse polarity. Attached is a sample program that shows how to create a widget whose flux capacitor has standard polarity. How should we modify it in order to get reverse polarity?

Or the question might be

We would like to create a widget whose flux capacitor has reverse polarity. Attached is a sample program that attempts to do so, but the resulting widget has a flux capacitor with standard polarity. The polarity flag appears to be ignored. Are we doing something wrong, or is this a bug in Windows?

The first is a normative statement: “This is what we would like to happen.” The second is a positive statement: “This is what is happening.” The distinction is important because the two types of statements require very different types of responses. If you have a program that does X, and you want to change it to do Y, then you’re asking for help working through the Y feature, clarifying the documentation, informing you which flags you need to pass, and so on. But if you have a program that tries to do Y and fails, then you’re asking for help debugging your code and possibly identifying a bug in the operating system. Being clear with your request means that you can avoid wasting a lot of time when the wrong set of people are called in to help you out. Here’s another example of vague use of the word *should*:

We’re trying to do XYZ. We’ve been told that it is blocked for security reasons, but there should be a way to do this.

In this case, it is not clear what the customer means by the phrase *should be a way to do this*. It could be

We're trying to do XYZ. We've been told that it is blocked for security reasons, but we think that Windows should be changed to allow our scenario. How can we file a change request with the Windows security team to make an exception for us?

Or the customer might be trying to say

We're trying to do XYZ. We've been told that it is blocked for security reasons, but we think that there is a way to get the effect of XYZ without triggering the security issue. Can you help us find it?

Note that in both cases, the customer either failed to asked a question or made some statements and asked for nonspecific advice, which is effectly the same as not asking a question. If they had remembered to ask a question, then that question would have clarified what they intended by the word *should*. **Bonus chatter:** A physicist classmate of mine got a chuckle out of the phrase *flux capacitor* because it combines two physics terms in an impressive-sounding but mostly nonsensical way. A *capacitor* is a device which stores electric potential. In the hydraulic analogy of electricity, a capacitor is a rubber diaphragm that separates two parts of a pipe, but which “stores” water flow by stretching and “discharges” the water flow by returning to its rest position. *Flux* is cross-sectional flow per unit time. Water flux is volumetric flow rate (liters per second per square meter): it measures how vigorously the water flows across a boundary. Magnetic flux measures the strength of a magnetic field. The combination is nonsensical because the units don't match. A capacitor stores potential, whereas flux is measured in current or magnetic field strength. But if you generalize the term *capacitor* to mean “a thing that stores stuff”, then a *flux capacitor* is a device which stores a magnetic field.

Such devices already exist today. They are called *magnets*.

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