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Menopause, Andropause And Other Hormone Imbalances
Impair Healthy Healing In People Over The Age Of 30!**

Transducers – The Remarkable Changers

By Thomas Yoon

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Complex control systems all make use of signals that can be easily measured and altered remotely. Automatically operated machines or actuators need to be powered either by electrical motors, pneumatic or hydraulic cylinders.

The most common signals sent out from a transducer are electrical current or voltage and pneumatic pressure. These signals are easily translated by controllers. Visual measuring devices like liquid bulb thermometers are not able to be used in automatic control systems because there are no electrical or pneumatic signals.

However, when some other component is added to it to enable it to give a corresponding signal, then the measuring unit becomes a transducer.

A transducer is a device to convert a signal (representing a physical quantity) of one form into a corresponding signal of another form, retaining the amplitude variations of energy being converted.

Just as an example, a microphone is a sound transducer (acoustic to electrical) and a loudspeaker is an electrical transducer (electrical to acoustic). A transducer may be an integral part of the measuring unit, for example pressure to displacement in a Bourdon pressure gauge. It may also be a separate unit converter especially suitable to change the signal to a better form for remote transmission, e.g. displacement to electrical in a differential transformer.

How do these transducers work?

To convert physical movement to electrical signals, some devices make use of variable resistors. Any movement will cause a slider contact to change position against a resistance wire causing a change in electrical current or voltage. Other devices may make use of the movement to alter the position of an induction coil relative to the magnetic core, causing a change in the induced current in the circuit. Others may make use of the movement to change the air gap between two capacitance plates, causing a change in the current in the circuit.

In the case of the loudspeaker, the opposite effect takes place. Electrical signals are converted to movement.

Some pneumatic transducers make use of changing air signals to cause a corresponding mechanical movement in the flapper and linkages. This movement is then converted to electrical signals by the methods above. So it takes 3 steps of conversion before we can get the electrical signal.

Once the electrical signal is obtained, it can be used to compare to the set value in the controller, and a whole control system can be designed from it.

Well folks, get your signals and be in control!

"LEARN LANGUAGES EASILY!"
Amazing method produces results fast.

Many years of working experience in Marine, Facilities, Construction has given the author material for writing e-books and articles related to engineering, and management.

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Ten Tall Tales of Traditional Marketing #2

By Jimmy Vee

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"Ten Tall Tales of Traditional Marketing That Cost You Tons"
Tall Tale #2 "Advertising is Expensive"
By Jimmy Vee & Travis Miller

Let's face it. Advertising isn't exactly a bargain. But it doesn't have to be as costly an endeavor as many people believe it to be.

As we talked about yesterday, advertising is usually used as a surface treatment. Asking advertising to do the lion's share of marketing your product or service is a yeoman's task. That's when things start to get expensive. For example, a relatively unremarkable store selling relatively unremarkable products in a relatively unremarkable fashion will often times expect an advertising campaign to yield leads and sales. It's possible, but it will take a hefty cash commitment from the unremarkable player. The advertising message will need to be geared toward the masses and communicated to as many people as possible. That's not cheap - and it's not smart either.

A remarkable business, on the other hand, is playing by an entirely different set of rules. A company with a remarkable product, service or method can deploy a remarkable advertising message to a small, targeted group of individuals who are most likely to appreciate the company's uniqueness and act upon it. They, in turn, will spread the word about that company.

Another tremendous benefit enjoyed by companies that are remarkable is the concept of permission. A company with a unique size, flavor, or look has a better than average chance of requesting and receiving permission

from their would-be and current customers to market directly to them with specific and relevant information. It's a concept we'll talk more about in a

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few days, but the concept is simple. When someone permits you to market to them, the task is easier, the cost is lower, and the results are better.

Advertising is only expensive when you ask it to do a remarkable task for an unremarkable company. So dig deep and find out what's remarkable about your product or service or method or whatever and start telling the people who care.

Tomorrow we'll tell you the truth behind the tall tale that says if you get your message in front of enough people it will be successful.

Get the full ebook "Ten Tall Tales Of Traditional Marketing That Cost You Tons" and others at our website: http://www.scend.net/small_resources.htm

Jimmy Vee & Travis Miller are the partners of scend, a nontraditional advertising agency and authors of the revolutionary "Gravitational Marketing System" which helps businesses harness the power of word-of-mouth advertising. They believe that if you are remarkable, you can be famous, people will know your name, and the world will beat a path to your door. For questions, comments, or to shoot the bull, email them directly: <mailto:talk@scend.net>



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