

## Blood Money



No, blood money is NOT about ransom. It's about a dramatic shift in medical procedures, predictable from TRIZ, which is affecting the American Red Cross and the medical industry. In a front page article in the NY Times on August 23, an article entitled "Blood Industry Hurt by Surplus" describes a current business issue for the American Red Cross. Though at its highest level, the Red Cross is a non-profit organization providing numerous services in times of emergencies, it relies on donations as well as income from the sale of volunteer donated blood which is sold to hospitals, primarily for blood transfusions.

As the article highlights, the dramatic shift in procedures for coronary bypass and other surgeries (many non-invasive) has dramatically decreased the need for blood supplies. The article states that transfusions now require 4 million less units of blood compared to five years ago with the American Red Cross supplies 40% of the market. Their revenue from these sales has dropped \$1.5 BILLION in the past few years, sparking staff reductions as well as pressures to reduce prices due to oversupply and competition from private sector blood supply companies.

Think about all this from a TRIZ perspective. What do the lines of evolution tell us? Systems progress along a line starting with mechanical fields (tourniquets, brute force amputation, stitching) to thermal fields (use of freezing to reduce pain) to chemical fields (external blood supplies minimizing hazards during surgery) and finally to electronic and electromagnetic fields (lasers, etc.).

As we are aware, these field changes are very discontinuous and can be very disruptive to a business model (as the Red Cross is finding out). The Red Cross has fallen into the same trap as many other businesses who think about products instead of function. Hospitals do not buy blood because they want to...they do it because they have needed to for certain medical procedures. When its FUNCTION is no longer required, they buy what is necessary for the newer (and predictable from a TRIZ perspective) and more efficient, less invasive, and less blood requiring procedure. Lasers, for example.

So what should have the American Red Cross been doing if they had learned about TRIZ? They would have been following the trends in surgical procedures and the functional requirements. They would have known that medical procedures would move from the use of mechanical and chemical fields to electromagnetic and optical fields and the need for blood supplies would decrease.

If they saw their business as providing materials needed to improve surgical efficiency and reduce its risk (NOT supplying blood), they would have been thinking about other sources of revenue (knowing less blood would be purchased) as well as possibly thinking about what other "products" could be supplied to hospitals. This kind of mental exercise is applicable to any business. Have you done it for yours?