

Product Development Innovations
Bethany Pollack, Draper Knitting Company
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When it comes to innovation, it is important to consider the end users' requirements/restrictions. Having those set in place gives one boundaries which can influence what you can do and how you do it. Influences on innovation come in many forms including cost, need for protection, efficiency, environmental concerns, personal experience, technology, user feedback, and necessity.

One of the main influences on innovation is cost. Having a budget can influence how much you're going to spend which will influence how advanced your product can get. In the army, for example, the battle field is always changing, so they're always looking for the next, most cost-effective way to create a new, needed product. The Berry Amendment places some restrictions regarding on what the military can buy, which then influences cost; it states that the U.S. Department of Defense is required by law to buy everything they use DOD dollars with to be made in the U.S. There are some exceptions that can be made to this, but it is very difficult to obtain a waiver. One must prove that there isn't a product comparable. One is allowed to bring in the chemistry from another country and then have it be processed into the product needed, as long as it's made in the U.S. One example of an exception is a rayon the military uses for an army combat uniform, which is made in another country. There was an urgent need for a material that would protect soldiers from flames and it just so happened that this fiber in another country could be obtained fast and produced rapidly.

Another innovation influencer is a need for protection. Almost every athlete needs protection, whether it be shin guards for a soccer player or a helmet and pads for a football player; the increase in concussions created a need for protection for players. Another example would be the fire-retardant gear for firefighters.

There is always room for improvement when it comes to efficiency and this can influence one's innovation. Machinery has come a long way and made production faster and more effective with new dye machines, knitting machines, weaving machines, digital printing, garment construction machines, etc. There is also the idea of environmental concerns that influence how people go about innovation. One might consider their carbon footprint or how they can create a more sustainable fiber, for example, using recycled plastic bottles to create a textile.

Using personal experience is a way people come up with new, innovative ideas. The invention of the hard hat is good example: an army soldier used his experiences in the military along with the hat he had to wear to construct the hard hat. Another example of personal experience and technology are night vision goggles. The goggles make it easier to see the enemy in the dark, so it is important to find the right camouflage printing methods so that you are unable to be seen with the night vision goggles on.

User feedback is important to know if the product is actually user friendly. Once the company knows what's good and/or bad about the product, they can decide to fix it or not; sometimes feedback can't be implemented, especially if it's only one person's opinion that doesn't apply to a mass amount of people.

With all of the influences mentioned above, one broader influence is just trying to survive in this ever-changing textile industry. Tweaking the business, product, equipment, etc. might be the one small way you keep your business afloat. When deciding on your next, innovative action, it is important to take into account what your end user is looking for and what is going to influence them to buy your product. The way a firm goes about innovation is dependent on the circumstances of what the project is, company is, end goal is, requirement is, etc.