

How Customer Empathy Helped PTA Plastics Create 4Support



The image shows a close-up of a white plastic component, likely a part of the 4Support device. The PTA Plastics logo is visible in the upper right, featuring a red curved arrow pointing upwards and to the right, followed by the text 'pta plastics' in blue. Below the logo, the word '4Support' is printed in a large, blue, sans-serif font. The background is a dark blue gradient.

4Support Explained

Empathy and the ability to understand or relate to the feelings and perception of another is an important skill for customer-centric businesses.

Fostering customer empathy across an entire organization is very important when conducting business, as it allows customers to feel a sense of trust with the company they're working with. Broadly defined, customer empathy entails understanding the motivations, emotions, and frustrations of your customer(s) and viewing them as unique individuals rather than just another part of the business operation.

PTA Plastics created 4Support as a design aid which supports a customer's device, community, design efforts, and injection molding needs, along with the intention to understand the product design process from a customer's perspective. Customer empathy played a large role in the development of 4Support as it brought our organization closer to our customers by understanding their needs and delivery requirements for efficiency. This then led to a successful collaboration towards a better customer experience.

4Support was also created to build the competency around product design and to provide an outlet for creativity for our Employee-Owners. In addition to being a creative outlet, 4Support will recycle plastic waste towards a functional product that provides a multitude of uses.

Although this component is a one-of-its-kind promotional marketing giveaway, it also provides emphasis on supporting community efforts for end-users by registering the device to select a charitable donation through PTA Plastics on their behalf. The creation of 4Support has also led to the exploration of whether or not PTA should create its own product for revenue growth and to identify talent for such a business line.

The Development Process

There were many steps involved from the very beginning regarding the creation of 4Support - such as the name of the product, logo design, charity selection, and the overall message. During these beginning stages, the entire concept was mapped out starting with the early origination processes all the way to packaging and shipping the product.

To confirm general functionality, 3D printed prototypes were created to ensure specific design adjustments were made to prevent making costly investments with the injection molds going forward. Tool design, internal Design for Manufacturability (DFM), and tool build (steel safe) were then completed. It was important to leave the tool build as steel safe in order to fine-tune the dimensions more cost effectively and efficiently. Finally, the injection molding, 3D scanning, FAI, and packaging were finalized.

There were quite a few experiences and outcomes when creating this 4Support design aid. Learning the design process and going through multiple options was challenging while trying to resolve conflicting requirements. We need to remember that not all assumptions are true, especially when it comes down to scheduling, pricing, and any technical difficulties that arise.

Projects that are low on a priority list can lead to multiple delays and unnecessary mistakes, even during times when the drive for perfection is at the forefront. Going forward as a result of these challenges, it's apparent that clear and diligent communication with the customer should remain a top priority. Communication should be followed through from the very beginning stages, and throughout each stage thereafter. Truly committing to acting as a partner and empathizing with our customers during each critical stage will enable a drive for operational excellence towards successful project completion.

Lessons Learned

Strategic and forward-thinking recommendations remain ongoing as a result of creating 4Support. Is there an ability to explore the creation of a product for profit while exercising sustainability by using regrind waste? Could we help our customers with injection mold marketing tools, such as parts, for a profit made from the customer's regrind material? Is there an option to enter the world of retail marketing, which would be completely new to PTA Plastics, or to begin offering design development as an exclusive service to our customers? During this exercise, it was apparent that adjustments would need to be made going forward. For example, if PTA were to develop a product, Tooling would need to have the same emphasis and customer empathy towards that product parallel to other outside customers' products.

During 4Support development, feedback was not timely with DFM and too many assumptions were made that lead to the design aid not being taken seriously. 4Support has the potential capability to become an essential sales tool, and Business Development will need to learn how to use the device not only as a design aid, but also as another part of the successful sales process.

Final Thoughts

There is no industry standard when it comes to the customer experience as a whole. However, there are many ways we



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can adjust to meet our customers' needs and empathize with their expectations. The creation of 4Support started out with multiple purposes, which provided insight in regards to how we work together internally (as a company) and what our customers go through while working with PTA Plastics.

Building and deepening customer empathy is an essential skill for being able to anticipate, respond to, and meet our customers' requirements going forward. There's always room for improvement, whether it's an external or an internal customer, and it's never too late to be better.

Why Choose PTA Plastics?
**Reliable, Effective &
Technically Advanced Products**

Quality Control System

PTA Plastics offers a full process validation protocol including Smart controls, virtual simulation, and mold filling analysis to fit our customers' specific needs and requirements.

Infinite Potential

PTA Plastics is an employee-owned company, meaning our team not only owns the company, but we invest in the training, growth, and collaboration of new team members to make us a true extension of our customers.

Engineering Support

We perform a full DFM review on all projects awarded, and our trained engineers analyze every part prior to mold design to ensure you end up with the best product possible.

Value Added Services

We provide our customers cost-effective solutions while offering a wide array of secondary and value-added services such as ultrasonic welding, installation of inserts, assembly, pad printing, and heat transfer.



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