

Enabling quick entry into competitive consumer-tech markets

Case Study: eBook Reader (2009)



Introduction

Hanwang Technology, better known under its global Hanvon trademark, is a leading Chinese developer of intelligent human interaction software solutions, such as pattern recognition systems and OCR technology. They also develop and manufacture the devices that operate this software, with biometric scanners, graphics tablets and eBooks just some of their products.

Hanvon has its own in-house design team, but for their new eBook reader product they wanted to get some fresh design inspiration from external consultancies strong in this field. We took part in their free pitch (not something we consider lightly) and, whilst the design department liked our design best, no-one ended up winning the pitch! We learnt that the project manager decided to take the project back in-house to everyone's surprise, and maybe he didn't want to pay the fees quoted by the consultancies involved. So we never got paid for this work, which was a great pity and one of the key reasons why we don't often do free creative pitches.

Coincidentally, one of our best customers came to us a few months later, asking us to design an eBook reader for them. LinkTronix is an established developer of embedded electronic systems widely used in PDA's, mobile phones, transaction terminals and countless other IT based products. They work as technology partners to many leading brands, and we've done lots of work with them before. But in 2008/9 they diversified into developing, producing and selling their own original products under their new ThinkStick brand, and we've been deeply involved with them on this. As we owned the IP to the Hanvon designs, we were keen to show these to ThinkStick and explain what happened. ThinkStick very much liked our concepts, and agreed to start the project.

Brief

Similar to the Hanvon brief, ThinkStick sought to develop a thin, lightweight, wireless electronic reading device that can store over 1000 books, magazines and newspapers. It needed to provide for a large touch sensitive screen, and convenient to read in all lighting conditions. With recent launches of the high profile Amazon Kindle and Sony eReader products, the brief was very much to match or exceed their function, usability, appearance and cost. They were the benchmark, and who the client saw as their direct competitors. Thinkstick's engineers had already developed and prototyped the internal electronic hardware and operating software, but expressed total willingness to alter any part of their system to better fit with our eventual design.

Activity

For this project we assigned a team of 3 industrial designers, 1 mechanical engineer and 1 project manager. Taking a step back from the concepts we did for Hanvon, we decided to review our analysis of competitor products and question ThinkStick about the merits of different components with regard to cost, usability and reliability. Together we determined that a 7 inch mono E-ink screen sourced from the USA was the best option, and to increase the battery

capacity to differentiate it from rival products. We spent a lot of time thinking about the user interface design in terms of on-screen controls, mechanical inputs and user handling features. It was decided to use a combination of on-screen controls in software, and large buttons around the screen for users to press whilst holding the device. We designed the structure to be a very sleek profile, less than 12mm thick, and with a very high quality satin white/grey colour palette to meet with current trends. Our engineers then developed this design into full production specification, verifying structure, fit and assembly and optimising every detail whilst keeping true to the original concept approved by the client. We made 4 production quality prototypes for the client to test, and these performed well. During this time, we were asked to develop some retail packaging for the product - something premium that really adds value to the product on the shelf. Our idea for a re-usable tin held within a beautiful display box was well received and taken forward.

Results

ThinkStick was very happy with our contribution to the project, and delighted with the final product and pack designs. In fact they even asked us to start designing the next generation eBook - an advanced device more akin to a multi-media terminal with a full colour touchscreen, 3 megapix camera, WiFi and GPS. Users can watch video and make 3G telephone calls, and the function is far superior than Amazon's Kindle offer. And we're also working on a docking station, and a version housed within a very stylish and durable alloy casing.

With no established channels to sell direct to end users like Hanvon enjoys, ThinkStick had to find another way to enter this fiercely competitive market. Their parent, LinkTronix Technology, has very strong ties with China Mobile, and all parties have been discussing a cooperation deal concerning this new range of eBook readers. Forming part of China Mobile's recently launched 3G services, we believe these eBooks will be marketed to their huge customer base under their own brand. The devices may even be given away free to contract customers. This plan, if concluded as expected, will certainly rival any sales seen by Amazon in the Chinese market, simply because China Mobile is so dominant in this space.

Finally, in November 2009 our design for the first eBook won us a Red Star Design Award - one of the most highly prized accolades in the Chinese design calendar. The judging committee comprised 10 experts from 6 countries, including heavyweights like David Kester (Chief Executive of the UK Design Council), and Max Burton (Executive Creative Director of Frog Design). In fact we had a fantastic haul at this event, with 9 Red Star wins all classed as "excellent", plus we won the top award - a Gold Star, given to just 1 consultancy every year to mark "outstanding" work. No consultancy has ever won so many awards in 1 year at this influential event!

Here's what our customer had to say about working with PER Design:

"With PER Design's professional support, we finished the R&D and production phase of our first eBook reader in only three months. Thanks to its good design and functionality, our product has attracted much sales interest, and organisers of the 2010 Shanghai World Expo have even chosen to include it in the gift package for important visitors to the event. PER Design has brought us a brand new market opportunity and competitive power. Next will challenge Amazon, who now has the largest market share in the world, and surpass them in the Chinese market within two years"

Charles Xu
CEO of ThinkStick



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