



Extreme Functionality: sending messages from the summit of the Americas

FACTS

Customer: Anoto Extreme Functionality, Team Anoto led by Johan Ernst Nilson.

Challenge: Record reports, save route plans and sketches while climbing Aconcagua, the world's highest peak outside the Himalayas.

Solution: A standard Digital Pen and Paper solution developed by Anoto incorporating a digital pen from Logitech.

Benefits: Reduced weight while climbing, all data saved at once, and the possibility of instant transmission of notes, photos and sketches round the world direct from the peak using Bluetooth-equipped mobile phone.

Don't get weighed down

If you're climbing one of the world's highest mountains, or are on an expedition across the Antarctic or the Sahara, the last thing you need is unnecessarily heavy equipment slowing you down.

When Swedish adventurer Johan Ernst Nilson decided to climb Aconcagua in Argentina – the highest mountain in the world outside the Himalayas – he was able to leave his laptop at base camp, and still communicate from the top using Anoto Extreme Functionality.

One of the main concerns of any adventurer is to keep weight down. Yet at the same time many modern adventurers want to take computer equipment up with them in order to send photos and reports back to sponsors, and save sketches and route maps that they draw on the way.

Anoto digital pen and paper (DP&P) allowed Nilson and his fellow climbers to do all this.

Leave the laptop at base camp

Using his Logitech pen with Anoto functionality, Nilson was able to write his reports as he was climbing Aconcagua, and send them down to his colleagues using his mobile phone.

"We didn't need to take the computer higher than our base camp at 4,800 metres," he said.

That's a big advantage when climbing the peak of Aconcagua's peak at 6,962 metres. More people die every year on this mountain than on any other peak on earth, due to the extreme altitude and the strong winds.

When Nilson and his companions in Team Anoto were climbing, the temperature inside their tent was minus 13 centigrade and winds were blowing at up to 35 metres per second.

Moreover, Nilson was not climbing the most popular 'Normal Route' up the mountain. He and the team were taking the Polish Glacier, a route that only a

select group of experienced mountaineers dare to take, and one that usually takes between 18 and 25 days to complete.

Send pics to your partners

The Logitech digital pen Nilson was using looks, feels and writes like a normal pen. It even has a normal ink cartridge. The difference is that it also contains a tiny infrared camera which records what is being written. Nilson was writing on a special notebook printed with the Anoto grid pattern, which makes it possible for the pen to pick up his writing.

"When you've written or drawn with the pen, all data is saved, once and for all," says Nilsson.

"When we're at the summit of the mountain, our partners and the media often want us to send reports and pictures down. This enables us to do that."

Mountaineers can send their notes and sketches down either directly using Bluetooth enabled GSM, satellite phones

or by transferring the writing to their laptops when they reach base camp.

The functionality also enabled Nilson to sketch his route, and then calculate times and distances on his laptop before climbing to the summit. He could then transfer the sketches to his mobile phone, which he could take with him to the mountaintop.

Another thing that Nilson did when he was up on the mountain was to sketch the mountain – sketches that were already digitally saved when he came down.

"It's perfect to have all data saved," he says – "Anoto functionality saves me the extra effort of having to scan it in and there is a picture ready when I come down."

As for the extreme conditions on the mountain, Nilson claims that the Anoto pen coped admirably.

"It works really well at high altitudes," he says.

Anoto Extreme Functionality:

Johan Ernst Nilson is one of Europe's most experienced adventurers. Very few people can match Johan's experience, having done twenty expeditions on seven continents.

"We have decided to put Anoto functionality to the ultimate test, where the digital pen and paper (DP&P) will be exposed to extreme conditions that represent a challenge to our technical equipment. We call this 'Anoto Extreme Functionality'."

During 2006 and 2007 Johan will represent our ambition to put the Anoto functionality to the ultimate test as he is going to use the DP&P solutions, collecting data, calculating routes and writing a diary, while climbing several of the highest mountains in the world, exposed to extreme conditions.

*Ebba Åsly Fåhræus,
EVP, Sales & Marketing, Anoto Group AB*

Anoto Digital Pen and Paper technology

An Anoto Digital Pen looks and feels like a normal ballpoint pen. However, it contains an integrated digital camera, an advanced image microprocessor and a Bluetooth® transmitter. Any paper can be used with a digital pen, if the Anoto dot pattern is added to the layout before printing the paper. The Anoto dot pattern consists of numerous black dots that can be read by the digital pen, but are almost invisible to the naked eye. The pen reads the pattern and registers what and where the user writes.