

For the timing's been a-changing

Roy van Dalm notes the revolutionary impact that ChampionChip has had on finish line operations

In the beginning, the timing of marathons was done by hand. Even when PCs and bar-code readers made their entrance, timing was still unreliable and time-consuming. Then the ChampionChip, a Dutch innovation, changed the face of timing forever. But the basis for the CC-technology had been developed to identify cows...

Finish line registration before the ChampionChip came to market in 1994 meant entering your race number on the PC and pressing "Enter". When bar codes were introduced, they were

printed next to the race number. If runners finished in small groups, you could scan the numbers. With bigger groups this was impossible. In that case someone operating the PC had to press the Enter-button again to stop the timing, and the runners had to tear a detachable part of their number bib off and hand them in – or someone had to do it for them. The paper slips had to be collected in the correct order before the time-consuming activity of matching times with numbers could start.

"This was unreliable, laborious and logistically very complex,

involving many volunteers", says Peter Bruinink, co founder and Board Member of ChampionChip. "It often went wrong and you had a finish line full of runners stuck in the chutes." The basis for the ChampionChip technology was a transponder sending a radio signal to an antenna, embedded in a mat on the ground. "The chip had been developed by Texas Instruments originally to identify cows and pigs", said Bruinink. "After that it was used to identify personnel entering and leaving buildings. We turned identification into time registration."

In 1995, Rotterdam Marathon was the first international marathon to fully use the ChampionChip-system. Managing Director Mario Kadiks remembers: "ChampionChip met the runners' needs. The service level for our participants increased, they could finish freely without having to queue up in the chutes, and they could have a net time [the time they personally took between crossing the start line and the finish line] and every 5km split time. Besides, we could get the results ready a lot quicker. I remember the BBC asking us at the time whether we had any cheaters in the race. We didn't, because with CC we have a zero-time and we can time every 5km."

Mary Wittenberg, Race Director of the ING New York City Marathon, confirms the benefits: "CC has made a dramatic difference. It has greatly improved runners', media and TV-experience. Especially since it has made the start and finish so much calmer – there is no more pushing and shoving. New York Marathon has used CC-technology since 1999."

Dave McGillivray, race director of the Boston Marathon remembers his introduction to ChampionChip: "I was the first in the US to have the system. I met the CC-guys at a New York Marathon exhibition, but they weren't timing New York yet. So I invited them on the spot to come to Boston for a demonstration. I was immediately convinced this was it. It was a risk. It was 1996 and I was organizing the 100th Boston Marathon. We were going from 25,000 to 40,000 participants. I knew that with that many people manual timing was out of the question. Our hand was forced. We just had to use the chip, and we did."

ChampionChip has grown to become the world's leading race timing technology, but that doesn't mean the end of innovation. "We can time in tenths of seconds now", says Peter Bruinink, "but we'd like to improve the reliability towards hundredths or even thousandths of seconds."

Top: Finish line registration before ChampionChip timing during the Rotterdam Marathon; runners stuck at the chutes

Bottom: Finish line registration with ChampionChip timing during the Rotterdam Marathon; all runners get personal "net" times and finish freely without having to queue up in the chutes.

