'It was so good that my brother, Hash, can type faster than most people using both hands,' said the managing director and founder of KeyPoint Technologies, based in the Innovation Centre, Hillington, Glasgow. 'It helped him use his left hand effectively – and it gave him the confidence to paint again with that hand.'

Hash's accident, which left him disabled, was also the genesis of the software application, written and devised by Sanjay Patel, now 38, that is set to change the way we punch information into our mobile phones and computer keyboards.

Patel and his associates, John Locker, a former games developer, and Dr Mark Dunlop of Strathclyde University and a leading authority on user interface systems, have created AdapTex, a language processing system that cuts down keystroking by around 80%. The software analyses the user's writing patterns and predicts words, cutting down on the number of keystrokes required. It has seen some of the technology industry's biggest players knocking at Patel's door.

'Originally it was an ergonomic idea targeting people with disabilities, but the more research I did, I thought this applies to more than disabled people. The driving force was to reduce the actual physical activity. So in 1997 I started working on creating a piece of software for the mass market that would learn your language traits. It made me realise how inefficient we were when it comes to writing information with e-mail, text messaging, and word-processing on a keyboard. Everybody wants to go faster, so they build the technologies to move faster; what hasn't changed is the human ability to use that technology more effectively,' he said.

'We don't want to change people's practices, we have to complement or improve them. But you can't expect people to change unless you make things better, simpler to use and non-intrusive. I think that's why AdapTex intelligence systems are creating such interest.'

Over the past 15 years, Patel has worked within systems architecture in telecoms and finance. He worked for Nucleus Consulting and project-managed the setting-up of a system for the Merchants' Exchange of St Louis, under the guidance of the Chicago Board of Trade. He completed the two-year contract in a little over a year.

Today Sanjay Patel lives in Partick in Glasgow. Previously from Croydon, he was encouraged to move to Scotland by the prospect of support from Scottish Enterprise, Scottish Development International and by the availability of specialist facilities at the Innovation Centre.

Patel's software takes the predictive text used on mobile phones to the next level: 'A mobile phone is predictive, which uses guesswork, it isn't natural. What we have created is pre-emptive because it is relevant and uses the context. It learns and reshapes itself dynamically. It is about recognition of the patterns you use and is therefore unique to the user. It remodels itself from any document to reflect the author's natural vocabulary, language traits and topics,' he said.

Patel's family arrived in the UK in the 1970s after fleeing from Idi Amin's regime in Uganda. He was brought up in London and, even before his brother's accident, he was fascinated with the science of language patterns. The great selling point is that this pre-empts text in any language because it recognises the patterns,' he said.

Patel is now in discussions with several large international companies interested in incorporating AdapTex into their next-generation computers. 'Some are more cautious than others, but we are on the verge of signing with one of the big PC makers, and hopefully this will mean that they all follow suit,' said Patel.

He is delighted with the support he has been given in Scotland. 'I came because people understood what I was talking about. The business network here, through Global Scot, has given me introductions to the highest levels in the USA. This has been imperative.'

Patel's advisers include John Falconer, a former director of Xerox, who said: 'The market is worth millions and Sanjay could become a very rich man. It could become a significant success story for Scotland.'

1 What is innovative about the predictive texting system that has been developed by Sanjay Patel?
   - **a** It can help his disabled brother.
   - **b** It uses guesswork.
   - **c** It processes language very fast.
   - **d** It works in a way that is unique to each writer.

2 What types of hardware and software could work differently in the future because of this invention?
   - **a** mobile phones, PCs, e-mail, text messaging, word-processing
   - **b** Adaptex intelligence systems
   - **c** mobile phones and computers
   - **d** telecoms and finance

3 What characteristics of the new systems make them so fascinating for the general public?
   - **a** It completely changes the way people do things.
   - **b** It works with what people already do and makes it better.
   - **c** It can help disabled people.
   - **d** It reduces physical activity.

4 This invention is not just important for Sanjay, his family and the computer business but also for Scotland because
   - **a** the country has made him feel welcome.
   - **b** it has given him financial support.
   - **c** of the business network links with the USA.
   - **d** the country has helped him become successful.