IBM may be distancing itself from desktop manufacture and limiting the number of ways you can buy its machines in the UK, but it prides itself on its customer support

Support structure
Greenock is also home to IBM's European support facility where 130 agents speaking 14 languages support the PPS products for customers from Norway to South Africa and Ireland to Turkey. It's one of nine such support centres spanning the globe. Calls are routed between them invisibly to the caller, depending on the time of day and the language required.

"It's a help centre, not a call centre," emphasises Watson. "We maintain high levels of skills, training and customer satisfaction." And you won't get told

IBM introduced the first personal computer 21 years ago, leading to the diverse PC market we know today. IBM itself, however, soon moved on. Andrew Charlesworth finds out what the daddy of desktop computing is up to

Supplier profile: IBM

As strange as it may seem, making and selling PC hardware was never a major part of IBM's business. Today, IBM derives about 18 percent of its revenue from its PPS (printers and personal systems) group and a much lower percentage of its profits.

The company manufactures PCs, notebooks and servers in the US, Mexico, China, Japan and at Greenock in Scotland. The Scottish plant supplies the whole of Europe. Its customers are small- to medium-sized businesses – by IBM's definition a small business is anything up to 100 employees, while medium-sized firms employ up to 999 people.

Such customers, says IBM, prefer to buy locally from ABPs (authorised business partners), as IBM calls them – dealers to the rest of us. So, in January, IBM canned its telesales operations in

the UK, France, Germany and Sweden, though customers can still order from the company's website (www.ibm.com).

Shops are dropped
You won't see an IBM PC for sale in a shop. IBM pulled out of the retail market three years ago and has no plans to return, says Ken Batty, UK head of marketing for PPS.

"We got burnt before. Retail is a shambles for us here and it's the same across Europe," he says. "The terms and conditions of Dixons Group are not attractive to us and we don't have the flexibility to fit in with the deals of independents like Micro Anvika [an upmarket computer retailer on London's Tottenham Court Road]."

IBM's business is primarily in supplying computers and computing services to big businesses. The attraction of IBM to such firms that rely heavily on their IT systems can be summed up in one word: stability. If your company orders 1,000 PCs over three years from a small supplier, firstly, you'll be lucky if that small company is still in business at the end of the three years and, secondly, the first machine

delivered will bear no resemblance to the last in terms of the hardware components used and the operating system installed.

That means your poor IT manager has to keep track of all those different configurations if he or she is to stand a chance of supporting the users. And what happens when you want to upgrade to a new accounts system? Which machines can run it and which will have problems? You don't know because all the PCs are different. Then your IT manager has a heart attack and retires to do something less stressful, like rhino wrestling.

In contrast IBM can produce 1,000 desktops and all the accompanying

> "Can the same company sell software to a bank and a laptop to a student? On our current experience I'd say no, but it should be possible"
>
> **Ken Batty, UK head of marketing, PPS**

servers over three years with a specification and upgrade path as predictable as Newtonian physics.

Personality test
Such worthy but dull credentials are a long way from the funky, upbeat image of most PC suppliers. This presents a problem of persona for the PPS, says Batty.

"Can the same company sell software to a bank and a laptop to a student? On our current experience I'd say no, but it should be possible," he says. "You can't be cool and trendy *and* safe. But safe sells mainframes to banks at vast profits, so is it worth being cool and trendy?"

If it isn't worth IBM cultivating the image to sell PCs, then is it worth the company making them at all? Barely. In the UK, IBM makes its servers and notebooks, but contracts out desktop production to Fullarton Computer Industries which operates a sprawling 300,000 square foot high-tech assembly plant in Greenock, Scotland.

IBM designs its desktop NetVista PCs. It used to order the materials, load Fullarton's production lines and manage quality assurance. But in January 2002, IBM handed over management of desktop production worldwide to Sanmina SCI, a contract electronics manufacturer, thus distancing itself further from the low-margin business of making desktop PCs.

Sino-Scottish systems
With two layers of middlemen built into the manufacture of a desktop and, if it's sold through a dealer, probably another two built into the sale, it makes you wonder how much profit margin there is in the price the customer pays if everyone involved is to have a meaningful slice. For this reason alone, IBM will never be the cheapest PC option.

IBM's ThinkPad notebooks are partly assembled in China and then finished at Greenock. The higher the spec, the more is done at Greenock, including hard disk, memory, processor, chipset and keyboard. About 25 different 'shells' are shipped from China and 'Europeanised' into hundreds of different ThinkPad models.

Servers are individually built in Greenock's Customer Solutions Centre. These are mostly refrigerator-sized cabinets, like the office-in-a-box product made with Cisco, containing network server, telecomms switch, router and maybe a wireless network hub. They are sold mostly to thrusting young startups and branch offices.

IBM may be distancing itself from desktop manufacture and limiting the number of ways you can buy its machines in the UK, but it prides itself on its customer support. "IBM views technical support as a key differentiator in this market. Anyone can ship Intel products," sniffs technical support manager Robert Watson.

A guide to TLAs

As well as being the home of the PC, IBM is the home of the TLA: the three-letter acronym. Here's a guide to the ones you'll find in this article.

IBM International Business Machines. It began with mechanical calculators.
PPS Printers and Personal Systems. The division that makes and sells IBM PCs and printers.
FCI Fullarton Computer Industries. The contract computer manufacturer that makes IBM's desktop PCs in Greenock.
SCI Sanmina. The company that manages FCI for IBM.
ABP Authorised business partner. A computer dealer that IBM has authorised to resell its hardware, software and services.
CSC Customer Solutions Centre. The part of IBM's Greenock manufacturing facility that builds servers.
ITS IBM technical support. An onsite engineer employed directly by IBM rather than by an ABP.

We are history

Although personal computers existed before 1981, IBM is the company that arguably started the modern PC business 21 years ago.

On reflection it is amazing that IBM, the company that in 50 years has made, lost and remade billions of dollars selling giant-scale computing systems and services to giant-scale businesses, ever got into PCs in the first place. But somehow, in the vast lattice of IBM's corporate structure, there was enough entrepreneurial headroom for a team to quickly design, build and sell the first PCs.

Unlike the rest of IBM, which prided itself on making just about every last nut and bolt of the products it sold, the computer team bought in technology from outside, including licensing a half-baked operating system rewritten by a geeky college drop-out called Bill Gates. We've all been reaping the fruit of that hurried decision ever since.

But fortunately for the rest of us, IBM was in such a rush to manufacture its personal computer that it didn't bother to patent the technologies used, which meant the PC could be cloned. In a few years smaller, nimbler competitors with names such as Compaq, Dell, AST and Tandon were eating IBM's PC feast. Some grew to be fat and lazy like IBM, while others grew to be successful and aggressive PC manufacturers. And some went out like a firework on a damp misty night – phut.

"that's a Windows issue, talk to Microsoft". When you pay for an IBM support contract you get hardware and software support. "We're providing a lot of the support that Microsoft ought to be," says Watson as an aside.

IBM at a glance

IBM's computing empire spans everything from microchips to mainframes, takes in Lotus Software as well as a myriad of its own software developments and includes a bewildering array of services from leasing to telecomms.

The predecessors of the original IBM company date back to the turn of the 19th century, but the IBM name was first used in 1917.

- Revenue **$88.4bn in 2000**
- Net income **$8.1bn in 2000**
- Total assets **$88.4bn in 2000**
- Number of employees **316,303 in 2000**
- Chief executive **Lou Gerstner, who joined IBM on 1 April 1993. Previous form includes biscuit giant Nabisco and American Express**

Callers are first put through to a level-one agent. According to Watson, 92 percent of calls are fixed at this stage. Level-one agents have a minimum of six weeks introductory training, including product training, telephone manner and help centre procedure, followed by two weeks listening to the calls of an experienced agent. When they get to handle live calls there's an experienced agent listening in for the first week and, even after that, IBM employs 'floorwalkers' who monitor calls and can be flagged down by agents if they get out of their depth.

If level one can't fix the problem, callers are routed to level two where agents have a vast range of equipment at their disposal to recreate the caller's setup. If they can't fix the problem remotely, they'll book an onsite call for a field service agent, who may be on IBM's payroll (known as an ITS or IBM technical support) or that of an ABP.

Field sports

IBM is cagey about how many field support engineers it has on its books because other service providers tend to view its engineers the way a fox views chickens. Its engineers are highly trained, presentable and equipped to inspire confidence in harassed IT managers already eyeing the employment pages for openings in rhino wrestling.

Within level two are three grades of problem severity from annoying to critical. At the critical grade, level two agents will attend onsite themselves and Watson will get involved personally. In any week, Watson says he has four or five level two agents out on onsite visits.

Beyond level two critical, the beard and sandals brigade are called in from Raleigh, North Carolina where the products are designed. How far up level two you go depends on the size of the business to IBM. For example, a bank with a $5m-a-year service contract will get beard-level support and complimentary sandals.

In conclusion, PCs are a small part of IBM's business. If you buy one it certainly won't be the best performer for the price because that's not what IBM sells. Rather you will be buying into a colossal service machine. ■

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