trade. The markets that took the first hit were: ready-

made garments, textiles, silk, carpets, electronic

goods, transport vehicles, processed foods, agri-prod-

ucts, wine and liquors, meat and poultry, stationery,

metal products, paints, as well as rubber and plas-

tic products. In this scenario, industry after industry

struggled to deal with the onslaught of high-qual-

ity, reasonably priced products from Japan, China,

Looking back. Looking forward

Historic quality in India

In the days when historians assumed that history began with Greece, the Greek historian Herodotus recorded the first known reference to cotton grown in India. He wrote: "Certain wild trees bear wool instead of fruit, which in beauty and quality excels that of sheep; and the Indians make their clothing from these trees."

Arab travellers in ninth century India reported: "In this country they make garments of such extraordinary perfection that nowhere else is their like to be seen ... sewed and woven to such a degree of fineness, they may be drawn through a ring of moderate size."

But weaving was only one of the many handicrafts of India. Europe looked up to Indian expertise in almost every line of manufacture: wood-work, metal-work, bleaching, dyeing, tanning, soap-making, glass-blowing, gun powder, fireworks, and cement. Much of the gold used in the fifth century BC came from India.

Ashoka's famous many-pillared hall in his palace at Pataliputra was partly dug out by archaeologists about a century ago. Dr W.A. Spooner of the Archaeological Department of India in his official report stated that this hall was: "In an almost incredible state of preservation; the logs which formed it being as smooth and perfect as the day they were laid, more than two thousand years ago." He further added that the "marvellous preservation of the ancient wood, whose edges were so perfect that the very lines of jointure were indistinguishable, evoked admiration of all of those who witnessed the experiment. The whole palace was built with a precision and reasoned care that could not possibly be excelled today ... In short, the construction was an absolute perfection of such work."

The art of tempering and casting iron was developed in India long before its known appearance in Europe. Vikramaditya, for example, erected at Delhi (circa 380 AD) an iron pillar that stands untarnished even after sixteen centuries. The quality of metal, or manner of treatment which has preserved the pillar from rust or decay, is still a mystery to modern science.

Centuries later, the industrial revolution taught Europe to scale up the manufacturing operations more economically, and the Indian industry faded into obscurity – being unable to stave off the competition.

Post liberalisation In India, the Quota Raj ended in 1991. Internationalism started replacing isolationism. India opened up its market to international



SURESH LULLA

Southeast Asia, the US, and Europe. Visionary leaders were born. The new mantra was: Better, Faster, Cheaper, Different.

Dr J.J. Irani transformed Tata Steel to the lowest cost steel producer in the world. He led from the front crashing the mountain of COPQ (cost of poor quality).

Anand Mahindra and Pawan Goenka gave birth to the Scorpio. A benchmark SUV. Together, they demonstrated the power of building quality into design. Further, Mahindra is the largest tractor manufacturer in the world.

Harsh Mariwala led Marico from a family run hair oil company to a professional organisation manufacturing a rainbow of consumer goods in India, Bangladesh and the Middle East. He nurtures creative thinking.

There are many more Indian Quality Giants: TCS, Titan, Sundram Fastners, ISRO, etc. All 'Made in India'.

2020 But the business world is in a disruptive mode. It is changing. Businesses are converging. Geographic boundaries no longer exist. Think Amazon.

In addition, market segmentation is giving way to customer segmentation. Demographics are less relevant than buying behaviour.

The core competencies of world-class organisations will be: proactively understanding customer needs; translating those needs into product and process features; purchasing the process capabilities of suppliers.

Sampling will be dead. Hundred per cent inspection will be the requirement. Robotic Process Automation will make this happen in value creation processes as well as support processes. In business, healthcare, and education.

Our planet will demand preventive actions. Or else....?

The COPQ of public sector organisations and institutions will not find favour with taxpayers. These wasteful costs are almost 50 per cent of total costs; and they get budgeted!

The author is founder, Qimpro Consultants, and has written Quality Fables

If we have the will, we can survive 2020. That will serve as an invitation to *Make in India*.