Schumpeter

Keeping it under your hat

Beautiful minds, wasted [nid:21696782]

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APPLE and Tesla are two of the world's most talked-about companies. They are also two of the most vertically integrated. Apple not only writes much of its own software, but designs its own chips and runs its own shops. Tesla makes 80% of its electric cars and sells them directly to its customers. It is also constructing a network of service stations and building the world's biggest battery factory, in the Nevada desert.

Brett Ryder

A century ago this sort of vertical integration was the rule: companies integrated "backwards", by buying sources for raw materials and suppliers, and "forwards", by buying distributors. Standard Oil owned delivery wagons and refineries in addition to oil wells. Carnegie owned iron-ore deposits and rail carriages as well as blast furnaces. In his 1926 book "Today and Tomorrow" Henry Ford wrote that vertical integration was the key to his success: "If you want it done right, do it yourself." He claimed he could extract ore in Minnesota from his own mines, ship it to his River Rouge facility in Detroit and have it sitting as a Model T in a Chicago driveway—in no more than 84 hours.

Today this sort of bundling is rare: for the past 30 years firms have been focusing on their core business and contracting out everything else to specialists. Steelmakers sold their mining operations and carmakers spun off their parts suppliers. Controlling it all made sense, the argument went, when markets were rudimentary: when supplies of vital materials were limited or contractors could cheat you. As markets became more sophisticated these justifications fell away. Thanks to globalisation, companies could always find new resources and better suppliers.

Yet a growing number of companies are having second thoughts. This is most visible in information technology. The industry's leaders were at the heart of the contracting-out revolution. Vertically integrated companies such as IBM outsourced as much as possible in order to lower costs. Upstarts such as Microsoft prospered by focusing on a narrow—but exceptionally valuable—slice of the pie:

the operating system of personal computers. Now many startups in Silicon Valley pride themselves for being "full stack". But re-bundling can be found everywhere, from fashion to manufacturing.

Reasons for the reversal abound, but five stand out. The most important is simplicity. Consumers are willing to pay a premium for well-integrated products that do not force them to deal with different suppliers or land them with components that do not talk to each other. They want to be able simply to press a button and let the machine do the rest. This is largely why Apple opted for integration, as did Nest, a maker of wireless thermostats.

A second reason is that firms operating on the technological frontier often find it more efficient to do things in-house. Companies that are inventing the future frequently have no choice but to pour money into new ventures rather than buy components off the shelf. This explains Tesla's "gigafactory" for batteries: their availability is the biggest constraint on the firm's growth. Boeing tried to cut its production costs by outsourcing 70% of the production of its 787 Dreamliner to hundreds of different suppliers—more than any airliner before. The result was a disaster: parts came in late; bits didn't fit together; deadlines were missed. The firm reversed course, bringing manufacturing back in house and buying a factory.

A third reason is choice: the more the market has to offer, the more important it is to build a relationship with customers. Netflix and Amazon now create their own television shows in order to keep their viewers from buying more generic content elsewhere. Harry's, an American company that sends its subscribers a regular supply of razors and shaving cream, spent $100m to buy a German razor-blade factory.

Choice is reinforced by speed: fashion brands such as Spain's Zara have resisted contracting out everything. Instead, they operate their own clothes factories, employ their own designers and run their own shops. This gives them a big advantage: they can turn the latest trend into new product, often in small batches, and have it in stores in a couple of weeks. Less vertically integrated brands such as Gap and American Apparel find they are stuck with yesterday's creations because they cannot get supply chains to produce new wares quickly.

And then there is a combination of old worries about geopolitical uncertainty and new worries about the environment. In 2014 Ferrero, an Italian confectionary-maker, bought Oltan Gida, which produces one-third of Turkey's hazelnuts, the vital ingredient in Nutella. In 2015 IKEA, a Swedish furniture company, bought nearly 100,000 acres of forests in Romania and the Baltic region. Earlier this year ChemChina, a state-owned company, purchased Syngenta, a Swiss seeds and pesticides group, for $43 billion, driven by the government's quest for food security. Cruise companies such as Costa Cruises and Disney have bought islands in the Caribbean and the Bahamas so that they can guarantee that their passengers will have somewhere empty and unspoiled to visit when they sail past.

Core complexities

The renewed fashion for vertical integration will not sweep all before it. For the most mundane products the logic of contracting out still reigns supreme. And today's bundling is less ambitious than Henry Ford's: Apple, for instance, contracts out a lot of production to contract manufacturers

such as Foxconn (though it keeps them on a tight leash). Integration is also hard to pull off: Tesla lost some of its shine on April 11th when it recalled 2,700 of its sport-utility vehicles because of a glitch. That said, striking the right balance between doing things in-house and contracting things out is clearly much more complicated than it was in the days when Tom Peters and his fellow gurus told companies to focus on what they do best and outsource the rest.

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