As well as cutting costs by replacing many separate networks with a single, converged one, telecoms operators will also increase their agility, suggests BT's Mr Verwaayen. Offering low-priced bundles of services will attract a certain number of customers, he says, but the real benefit of convergence is its potential to make entirely new services possible. "In the past, you could make a map of what your customers wanted going forward. But nowadays it's like the fashion business: moods change, and it's hard to predict," he says. Convergence, he adds, is "the only way I know to be flexible and agile, so it doesn't matter if customers change their minds." Inevitably, operators will continue to launch some services for which demand turns out to be low, but convergence should make it easier and cheaper to experiment, and thus to find new services that people actually want.

Bundle of joy

And, of course, offering bundles of converged services makes customers less likely to defect and saves money on marketing and customer acquisition, because many services can be advertised and sold together. Bundling services together also makes sense on basic economic grounds, observes Mr Odlyzko of the University of Minnesota: "It means you can exploit uneven preferences for different goods." Demand for bundles is more predictable than demand for individual services, and customers who might not find individual services attractive may be prepared to buy the whole bundle. Bundling hides the prices of individual services, and a single bundle appeals to different customers for different reasons. This also makes bundles more profitable, because people may end up paying for services they do not want.

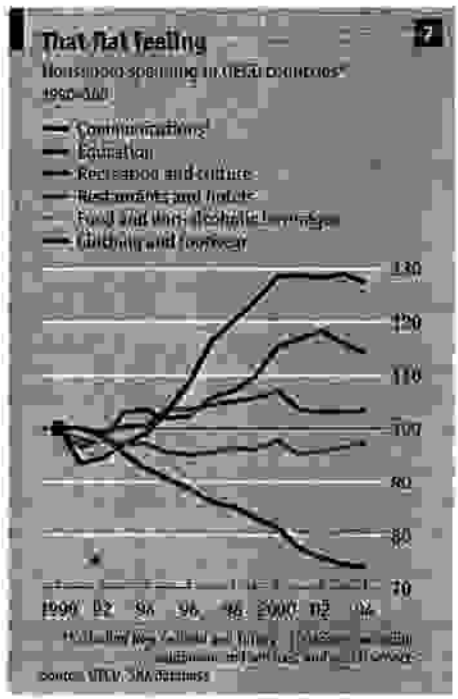
But everyone is doing it, and, by definition, not everyone can be more competitive, more agile and better able to attract new customers and retain existing ones. Figures from the OECD show that household spending on communications, having risen during the 1990s as people signed up for internet access and mobile phones, has been flat since 2000. The same is true of spending on recreation, which includes television, DVD sales and rentals, and cinema-ticket sales (see chart 7).

As VoIP has driven down the cost of fixed-line telephony, consumers have spent more on mobile phone calls instead, says Rupert Wood of Analysys; but their overall spending on voice calls has stayed roughly constant. So the coming fight between converged operators of various kinds will be over the allocation of existing spending. Nobody seems to be offering anything new that will increase the overall size of the pie.

Despite the evidence to the contrary, everyone seems to think they can win. "At the moment, the stockmarket valuations of both telcos and the cable companies seem to assume that each side is going to win close to 100% of the market," says Mr Odlyzko. Something similar happened during the telecoms boom of the late 1990s: dozens of companies built identical long-haul fibre networks, each assuming that they would win 20% of the market. As a result, most of them went bust.

This time around, convergence will have the effect of intensifying competition, dividing the industry into winners and losers and leading to a round of further consolidation. So who will do best? Not simply those who embrace convergence most quickly to benefit from reduced costs and greater agility; there are other factors, too.

The first is flexibility. Not everyone wants to buy a bundle of services, so operators must allow customers to pick and choose the services they want. "We looked at many carriers across the globe, and generally speaking there is a category of customers that want a triple-play, but overall most customers preferred single-play and double-play, mixing offers from different players," says Mr Zibi of Pyramid Research. The most successful operators, he says, are those that have the technology to offer multi-play service bundles, "but offer those services in such a way that the consumer is the one making the choice—they don't push a specific bundle, or force services on consumers that they don't necessarily want."



Mr Barrett at Parks Associates has come to a similar conclusion. In a survey of American households with broadband, 43% said they had not subscribed to a multi-service bundle because they wanted to make specific choices for different services. Intriguingly, this suggests that there will continue to be a role for companies that specialise in particular services, such as satellite television or mobile telephony, and do not offer the entire triple-play or quadruple-play package. "The triple-play hasn't been an overwhelming success so far," says Mr Wood. "It's driven by operators' desire for it to work, rather than real demand. So there will still be demand for single-service suppliers, and for single services from suppliers who also offer the triple-play."

The customer is king

Crucially, to get customers to sign up for three or four services, each of those services must be competitive and attractive in its own right, says Mr Zibi. "The beauty of convergence as we see it isn't so much that you can sell multiple services to a customer, but that you can allow them to mix and match whatever services they want," he says. Sol Trujillo, the boss of Telstra, draws an analogy with shopping. Some people want simplicity, he says, and prefer to have everything in one place, as in a mall or a department store. But others prefer to do some shopping in the mall and to seek out specialist shops for specific products. "So you have to allow both à la carte and integrated capability," he says.

Secondly, for convergence to work it has to be simple for the consumer. This is something that every technology firm insists is a top priority. But their products, and their users, suggest otherwise. "I'm sure if you go to some laboratories somewhere, they can show you caller ID on the TV screen. The challenge is to take the technology and make it really simple, so our mothers and fathers can use it," says Skype's Mr Zennström. Making free phone calls over the internet has been technically feasible for years, but it only really took off with the arrival of Skype, which made it easy. "We try to make things really simple, so you don't need to be an engineer to set