To Bundle or Not to Bundle

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Bundling isn’t just a pricing tactic. It’s a strategic way of designing product offerings.

Bundling, the practice of selling goods or services in packages, has always been a powerful yet enigmatic concept in business.

The classic example is a cable TV company with two channels: one for sports and one for movies. The traditional thinking is that sports and movie lovers are willing to pay a lot of money to watch their own preferred type of content. But as it turns out, a firm will always earn more by bundling the two channels as opposed to selling them separately. It’s a paradox.

As with any good paradox, it has inspired debate. In 1995, former Netscape CEO Jim Barksdale famously quipped, “Gentlemen, there’s only two ways I know of to make money: bundling and unbundling.” This remark left listeners in a tizz. His own CFO asked him, “What did you just say?”

A few years ago, Shishir Mehrotra, the CEO of Coda and a former YouTube executive, wrote of how he had long assumed that bundling was a “mistake”. He studied the practice for years before reformulating his views.
In the academic arena, bundling has fuelled extensive research since the 1970s. Most of it has focused on price discrimination (i.e. a firm charging different prices to different people based on their willingness to pay) in a monopoly context. Notably, Janet Yellen, the current United States Secretary of the Treasury, co-authored a paper on bundling in 1976, which continues to be revisited.

However, in our recent research, my co-authors* and I argue that bundling isn’t simply a way to extract more value from customers, but also a strategic approach to designing product offerings.

When products are composed of zeros and ones

What has changed? In an era where digital information reigns supreme and where so many products are composed of bits and bytes, traditional vertical integration, aimed at controlling distribution channels, is no longer the dominant strategy.

Firms today operate within specific segments of the digital chain, with cloud providers focusing on storage, social media companies on distribution and telecom companies on transportation. However, the absence of a medium means that all these firms are now able to operate across various industries and verticals, if they choose to.

For instance, a cloud provider can offer the same storage solution for music, movies, pictures and office documents, while traditionally, these relied on different media (namely, CDs, DVDs, photo albums and binders). Tech companies thus have numerous opportunities to expand laterally and are increasingly using bundling to differentiate themselves.

Take music streaming, where Spotify is competing against Deezer. Both are now trying to distinguish themselves by introducing podcasts and audiobooks in certain regions. Or Apple One, which combines six Apple subscriptions including music, TV, fitness, games, storage and news; their offering is comparable to, yet differs from, Google One. Or Amazon Prime, which provides numerous services related to shipping, shopping, streaming and reading, among others.

Using game theory**, we sought to explore the complex outcomes of bundling in non-monopolistic situations when competing firms actively employ bundling to differentiate themselves. This involves strategic
decisions about what products to include in their offerings and whether to bundle them.

Three distinct scenarios emerged: hyper-competitive bundling, anti-competitive bundling and coexistence in the market.

1. **Hyper-competitive bundling:** In this scenario, all firms offer all products, both separately and as a bundle. They engage in price wars, which ultimately benefit customers. This approach fosters intense competition, leading to increased choices and value for consumers.

2. **Anti-competitive bundling:** In this situation, a single firm offers all products, separately and as a bundle, not only to extract more surplus from customers but also to preempt potential market entrants, thereby stifling competition. By creating an extensive product portfolio, this firm leaves little room for new players to enter the market, raising concerns that may require intervention by antitrust authorities.

3. **Coexistence in the market:** In this case, firms have differentiated offerings. One firm may choose to offer a bundle of all products, without making them available as standalone products; whereas other firms may focus on offering specific products – but not all of them – separately. This equilibrium allows for differentiation without undermining competition.

For policymakers, these insights provide a nuanced understanding of bundling’s impact on competition. Bundling is not inherently bad or anti-competitive. It isn't limited to pricing strategies but extends into the broader realm of differentiation in product offerings. In a digital world, where industries are no longer tied to specific mediums, bundling offers a means to create unique product packages.

**Try to be the first to bundle**

If firms act as local monopolies, customers are charged high prices; but if one firm enters another's market through bundling, it stimulates competition, leading to price reductions. However, another perspective is that if both firms sell similar products without bundling them, having one of them engage in bundling may limit competition by creating differentiation. It all depends on the perspective.

Across all outcomes – whether bundling is hyper-competitive, anti-competitive or leads to a differentiated oligopoly situation – the firm that
bundles always earns more money. So, tech firms, especially when there are thin boundaries across industries, should start bundling as quickly as possible.

It's not just about price; it's about expanding horizontally into new verticals. For example, this is what Amazon does with Amazon Prime, expanding laterally into movies, storage and music. When someone becomes an Amazon Prime customer, that consumer may not see the point in getting a storage plan on iCloud, because (depending on regions) Amazon Prime comes with unlimited photo storage.

**Bundling is a source of product differentiation**

By bundling, firms can create differentiated products that discourage direct price competition and attract a broader customer base. However, there's a caveat. We found that bundlers should not necessarily offer all possible products. The decision to bundle or not should be strategic, with an emphasis on preserving differentiation.

When a firm offers a comprehensive bundle that encompasses various verticals, it can avoid direct competition between individual components, preventing price wars. On the other hand, a specialised firm should be cautious about entering new verticals, as this could lead to competitive clashes and a loss of differentiation.

In summary, bundling is not just a tool for price discrimination; it is a method of designing unique product packages. Firms can benefit significantly from bundling, but it's not a one-size-fits-all solution. The key lies in understanding how bundling can enhance or limit competition, depending on the perspective and market conditions.

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**Mathematical modelling, particularly within the context of game theory. Our results are robust, making minimal assumptions about market conditions.**

Find article at
https://knowledge.insead.edu/operations/bundle-or-not-bundle
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About the research

"Competitive Bundling and Offer Design in a Symmetric Bertrand Duopoly" is published in Service Science.