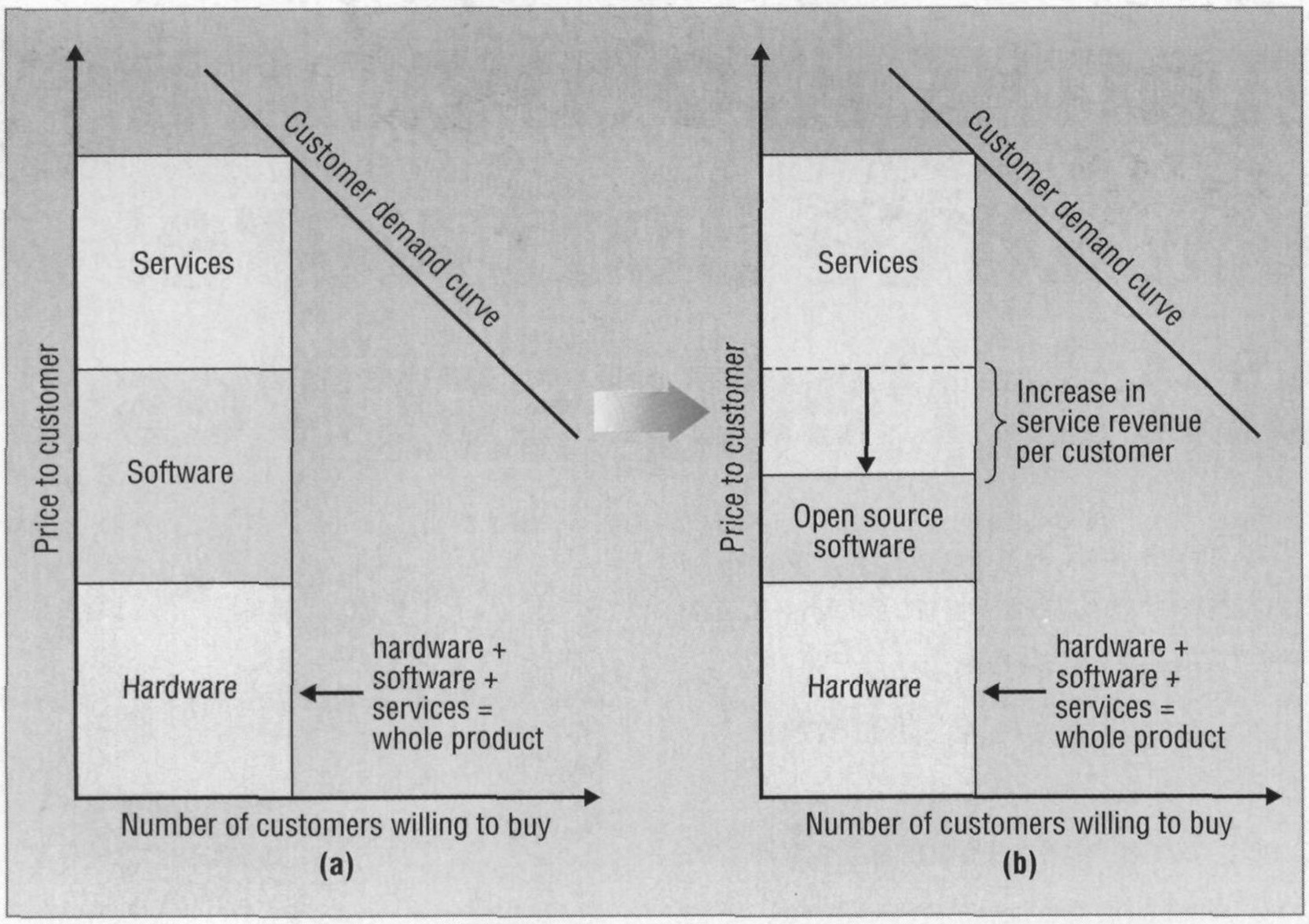

Figure 1. IT solutions demand curve. (a) System integrators sell a stack of hardware, software, and services. (b) Integrators can charge customers similar prices even if they use open source software.

source projects, although survey respondents also revealed that financial incentives are important.[5]

While this explains some of the volunteer work, it doesn't explain why companies today employ people who contribute to open source projects on company time. Il-Horn Hann and colleagues found that the salaries of Apache Software Foundation project contributors correlated positively with the contributor's rank in the Apache organization.[6] They therefore concluded that employers use a developer's rank within the foundation as a measure of productive capabilities.

SYSTEM INTEGRATOR PERSPECTIVE

Large system integrators, or solution providers, stand to gain the most from open source software because they increase profits through direct cost savings and the ability to reach more customers through improved pricing flexibility. Every dollar a system integrator saves on license costs paid to a software firm is a dollar gained that the customer might spend on services.

IT solutions demand curve

Customers typically want information technology providers to deliver "solutions." A solution solves a customer's IT problem, freeing the customer to focus on business rather than IT. A comprehensive solution comprises hardware, software, and services. Indeed, the IT industry earns its living by removing or reducing customers' IT worries.

System integrators deliver solutions by selling a stack of hardware, software, and services as one product. That allows the customer to talk to one company, rather than many. Figure 1a illustrates this stack together with the customer demand curve.

The demand curve shows how many customers are willing to buy the system integrator's solution at a given price. On the *y*-axis is the customer's cost to purchase a solution, and on the *x*-axis is the number of customers who are willing to pay for that solution at the given price. The form of the demand curve varies depending on what is being sold. However, in general, the demand curve is downward sloping: The lower the price, the more customers are willing to buy.

A system integrator's profits depend on which of the stack's components it owns and which it must buy. Usually, a system integrator's stronghold is services, which puts together the hardware and software pieces to meet the customer's need. However, if the system integrator owns only the services component, it will have to pay other companies for the software and the hardware and thereby share revenue, leaving less profit for itself.

It's therefore in a system integrator's interest to acquire hardware and software as cheaply as possible. Open source software, if an option, is typically much cheaper than closed source software, hence its use increases profits for the system integrator.

Figure 1b illustrates how with stable supply and demand, more money is made in the services part of the value stack if software cost goes down.

Software cost savings aren't easily passed on to customers for two reasons: First, customers tend to care about the whole product rather than individual components; second, large system-integration projects are complex and new competition doesn't spring up easily. Thus, system integrators can maintain their prices.

While this is one good reason for system integrators to support open source software, there's another equally compelling reason for them to support and contribute to open source software.

Business growth

The simple value stack that Figure 1 illustrates suggests that system integrators charge customers only one price. In reality, the system integrator can charge varying prices for a total solution to a prospective