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Strange Attractor

Thoughts on social media, business and journalism from Suw and Kevin Charman-Anderson

Creative Business: Substitutes and complements

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As part of the Creative Business in the Digital Era project, I'm doing some thinking and learning about business models and microeconomics. This post is originally from the CBDE blog.

After my post the other day about business model archetypes, I had a very interesting conversation with friend and ORG Advisory Council member, Kevin Marks, who pointed me in the direction of an article by Joel Spolsky – Strategy Letter V. In this post, Joel talks about the microeconomics he studied at university, stuff like "if you have a competitor who lowers their prices, the demand for your product will go down unless you match them." The main body of his post discusses substitutes and complements, and for someone like me who has learnt about business the hard way (by doing it), it's like a little light bulb illuminating.

Like most creative people, I've never studied business, and for years I fell in to the same trap that I later saw many of the musicians I used to work with fall into: I didn't want to learn about business because I didn't think I needed to. All I wanted to do was write, maybe make a bit of music, but in any case, just do my own thing. Then my career took an unexpected turn, I started my own business, and I was on the lower slopes of the steepest learning curve of my life. Perhaps if I'd known about blogs like Joel's in 2000, I would have had a better time of it! Anyway, I digress.

A substitute is an item that can replace another item, so I can buy a PC from IBM or Dell, it doesn't really matter – PCs are substitutable. A complement is an item that, you guessed it, complements another item, so if I buy an iPod, then there are a range of accessories that act as complements, such as iPod socks or remote controls or armband iPod holders for the keen jogger. Joel talks a lot about complements and focuses mainly on the computer industry.

> *A complement is a product that you usually buy together with another product. Gas and cars are complements. Computer hardware is a classic complement of computer operating systems. And babysitters are a complement of dinner at fine restaurants. In a small town, when the local five star restaurant has a two-for-one Valentine's day special, the local babysitters double their rates. (Actually, the nine-year-olds get roped into early service.)*

How does this apply to, say, the music industry? Well, let's say that you are in a band. Your main product is music, which you sell in the form of a CD. The complements to your CD are things like gig tickets, tour programs, T-shirts, DVDs. People buy these other products together with your CD, and are very unlikely to buy them if they aren't also interested in buying your CD.

Joel then goes on to say:

> *All else being equal, demand for a product increases when the prices of its complements decrease.*
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> *Let me repeat that because you might have dozed off, and it's important. Demand for a product increases when the prices of its complements decrease. For example, if flights to Miami become cheaper, demand for hotel rooms in Miami goes up — because more people are flying to Miami and need a room. When computers become cheaper, more people buy them, and they all need operating systems, so demand for operating systems goes up, which means the price of operating systems can go up.*

OK, let's just swap things about a bit. Your products are CDs, gig tickets, tour programs, T-shirt and DVDs. The complement to that is the music itself. (Note that we're used to thinking the other way round, labelling the music as the product and the merchandise as the complement, because the music comes first and the merch has to come second. But when you view the saleable items as the products and the music as the complement, this all makes much more sense.) Demand for your products increases when the price of its complement – the music – decreases. If the price of your music is zero, i.e. you are giving it away for free online, economic theory has it that the demand for your products increases.

Joel generally talks about companies that are producing complements to someone else's

products, and discusses how important lowering the price of those complements is:

> *Once again: demand for a product increases when the price of its complements decreases. In general, a company's strategic interest is going to be to get the price of their complements as low as possible. The lowest theoretically sustainable price would be the "commodity price" — the price that arises when you have a bunch of competitors offering indistinguishable goods. So:*
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> *Smart companies try to commoditize their products' complements.*
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> *If you can do this, demand for your product will increase and you will be able to charge more and make more.*

In the music industry the separation between product and complement is more perceived than real – whilst the record company controls the complement – music – the rights required to create products is often licensed out to third parties, such as merchandising specialists, who have to conform to the record company's terms. From what Joel's saying, it would be in the interests of the third parties, e.g. the merchandising companies, to lower the price of the music to increase demand for their product – the more people can access the music of MyWonderfulBand, the more fans there are, the more demand for T-shirts. In practice, though, that's impossible as the merchandising companies have no leverage to achieve such a goal.

But if the same people – the band – are in control of both products and complements, they can create an end-to-end business model that sees them giving away the product and earning off its complements. I'd argue that people like Ani DiFranco have been doing this for years, encouraging people to make copies of her music and then selling merchandise and touring frequently. For a musician, this is a self-reinforcing feedback loop. The more you tour, the more merchandise you sell, the more you bring your music to the attention of people who may want to buy tickets for your next gig or buy a T-shirt or CD. By taking the risk of commoditising your music, you can potentially drive up the demand for the complements substantially, if you can get over the icky feeling of commoditising the very thing you feel most passionate about.

This ties in nicely with Tim O'Reilly's view that:

> *Obscurity is a far greater threat to authors and creative artists than piracy.*

So how about the other creative industries? Well, in the publishing industry, the product is the book contents, the complement the book itself, so giving away ebooks should drive demand for paper books. Authors don't seem to do much in the way of merchandising – perhaps that should change, especially with services like Spreadshirt or Cafepress. Films are rather the same – the moving image is the product, the DVD the complement. Photography – the image is the product, the print or the book the complement…

Now, I did warn you that I am thinking out loud here, and I see a problem with all this, and it has to do with substitutes. Remember, a complement is "a product that you usually buy together with another product". But for many of the products that come out of the creative industries, the physical incarnation is not a complement to the digital version of the creative work, but a substitute. Joel defines a substitute like this:

> *A substitute is another product you might buy if the first product is too expensive. Chicken is a substitute for beef. If you're a chicken farmer and the price of beef goes up, the people will want more chicken, and you will sell more.*

If the digital creative work is a substitute for the physical instantiation of the work, the whole complement theory falls over. Computers and operating systems are complements of each other because one without the other is sort of pointless – you want the one if you have the other. But with no CD, my MP3 is still listenable; with no DVD, my MPEG is still watchable; with no print, my JPG is still viewable. This is why the RIAA and its ilk have being getting so much in a tizz about the downloading of unauthorised files – they see the digital as directly substitutable for the physical. And if something is substitutable, it can't be complementary. Can it?

This is, I think, where the lines get a little fuzzy. Technically, an MP3 is a perfect substitute for a CD – you can do pretty much everything with an MP3 that you can do with a CD. (Indeed, the chance are you'll turn your CD into MP3s as soon as you get it). But I'm not sure that its substitutability is so perfect and I wonder if, as more people experience total music data loss when their MP3 player or computer hard drive craps out, its perceived substitutability will actually decline. It took the loss of 40gb of digital music carefully collected over years and years for me to learn that backing up my music is really important. As the MP3 player market matures, we will see more people loose data when their devices perish or when they try to swap between silo'd devices that do not play nicely together, e.g. trying to play proprietary format music on a non-compatible device.

At that point, substitutability will decline slightly and complementariness will increase slightly, although it will be individual context that will define whether a given MP3/CD is a complement or a substitute.

It is an irony that the industry that has been so worried about substitutability also has some of the best complements to it's main creative output. Bands aren't reliant on just CDs for income: gigs and merchandise play a significant part in the successful band's income, and it's possible to imagine that percentage could increase as income from CDs decreases. Other creative industries, though, are going to need to find some complements, and quickly. The digitisation of creative works is neither slowing down nor going away; and the commoditisation of those works is both inevitable and uncontrollable, driven as it is by the consumer rather than the rights owners. The only way to deal with the commoditisation of your past cash cow is to sell complements to it.

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No Responses