How to shock management into rethinking the business model – *prove they can be blindsided by a Fingerprint.*

by Tony Singarayar April 22, 2013

This is an in-depth version of a shorter introduction published in April 2013. It presents a topic that is fundamental to commercial success, but is frequently ignored by senior managers, and results in seriously flawed strategies and decisions …and often, in catastrophic and highly visible business failure. Please use this link to find the original article http://www.innovationmanagement.se/analogy-learning-program/

Introduction

Business Model Failure happens slowly; like hearing loss, it is hard to recognize and easy to deny. This is dangerous for a problem that frequently causes catastrophic business loss. Understanding your Industry Fingerprint does more than reveal a failing business model – it makes the problem hard to avoid. Fingerprints are prescriptions to avoid being blindsided[1]

The trail of missteps and missed opportunities that led to a commercial failure is usually easy to see in hindsight. Often, it makes you wonder how management could possibly have made the bad decisions that obviously hurt their product or brand.

Even a bad manager does not intend making bad decisions - so how it is that very smart, very experienced managers make terrible decisions? There are, of course, many reasons. The day-to-day tyranny of trivial things eats time reserved for important things. This drives decisions based on shallow analysis and lots of judgment. In the short term, this desire for "quick decisions based on experience" is promoted as a feature of how smart managers who disdain over-analysis operate. And, this could well be true in a stable industry with low threat of new competitors and little other change happening, where a strong business model delivers excellent revenue and profit growth. In these industries, it *is* possible to boil everything down to a one- page summary and explain yourself during an elevator ride. But how many industries are like this?

Today, most industries have turbulence. Massive industry fault lines and sinkholes that have not appeared before are obvious and because they are new or difficult, no one has figured out how to deal with them. New competitors with threatening new thinking and new business models have entered. New digitized value chain steps have turned valuable old assets into new liabilities. Revenues and profits are not growing fast enough and so the "growth gap" is getting bigger. In these cases, making "quick decisions based on experience" is a flaw, not a feature. The shock is that even in these industries, many managers operate for years on the false assumption that an "elevator pitch" that can allow them only a shallow analysis, is all they need to make good decisions.

[1] "Blindside - catch unawares, especially with harmful consequences; The economic downturn blindsided many investors" *http://www.thefreedictionary.com/blindside*[1]

So, for many reasons, management makes many small mistakes, and a few occasional big ones. Big or small, there is little ability to learn from the mistakes, because managers are skilled in sweeping them under the rug of other successes. So, many of these valuable learning opportunities remain unexplored because the managers who understand them best do not want to discuss them. Little good comes to your career from exposing your mistakes to educate someone else.

Consultants and journalists fill this role and analyze the most visible failures – the too-big-to-fail things that actually do fail – and explain them to the rest of us. There is much to learn from such reporting, but these outsiders may not have the whole truth and show us how and why things happened through their preferred lenses. In some cases, they describe these mistakes as the consequence of a failed business model. Despite seeming to neatly explain things, this does not clarify what actually happened or why, because "Business Model" is a term that everybody understands until they try to explain it.

The real shame is that managers who make mistakes immunize themselves from learning because it is easier and more satisfying to believe that the failure was due to factors beyond their control. Whether it is an ocean that has been devastated by an oil company, or a highly visible quality problem inside a pharmaceutical company, the senior managers who should be accountable – and who internally present an image of impressive prescience and in being control – look like they are just overpaid stewards of the inevitable. Predicting the future is difficult, but "Fingerprints" help prepare for it. Ignoring them is an abdication of a fundamental management responsibility that happens routinely in many companies.

The Industry Fingerprints described in this article can compel business leaders to seriously assess the strength and staying power of their Business Model. Understanding your "Industry "Fingerprint" is an inoculation against the disease that convinces you your management experience and judgment will allow you to make the right decisions in unfamiliar situations. Fingerprints are to business models what diners' preferences are to recipes. A diner who cannot tolerate spicy food will hate an extremely spicy dish, no matter how well it is prepared. If an Industry Fingerprint (a diner's preference) does not work well with a Business Model (a recipe), the business model will not succeed. Because a business model is the engine that drives a company's economic growth, refining and future-proofing it is an essential part of "managing". Refining and retuning a business model should be done regularly, and at least during the annual planning process. However, this does not happen (never happens, in most companies) because senior managers spend too much time worrying about commoditized products that don't succeed in the

market and too little time worrying about commoditized business models that could make the business fail.

Why does this happen? Senior managers ignore the warning lights that tell them to retune their business model because they have had no formal training in, and no practice with, using business model innovation to win sustainable competitive advantage. Senior managers vigorously deny this – they would, of course – because to accept this is to accept that they have abdicated responsibility for a core responsibility. But the evidence is quite clear – to test this, just ask several managers in your company to define your own company's business model and it will become obvious that they have not shared thoughts with each other about what the business model is, leave alone agree on how to retune it. In addition to such "experiments" you can conduct, C. K. Prahalad, the exceptional management thinker who passed away three years ago, collected evidence that senior management teams spend less than 3% of the time they work together, developing a *shared* view of the future of their industry and how to prepare for it. So there cannot be much time invested in deliberately re-crafting the current business model.

So in summary: there is no a formal process such as an annual business model tune up – which means it does not *have* to ever get done. Management has had little practice with business model innovation – which means they are not very good at it. In addition, they spend little time working on it together – so there is not much chance they can get better at it as a team. It is no surprise that most businesses compete with very similar business models and therefore get little *competitive differentiation* with them, despite Mr. Prahalad's guidance that "the first step in getting competitive advantage is to be different". If business models used by the top players in an industry were buildings, architects would be out of work because so much of one is just a copy of all the others. When an industry Fingerprint changes in a way that makes the current business model ineffective, all companies using the same business model suffer serious losses.

PART I

Fingerprints – what are they and why are they important?

A Fingerprint is a set of unwritten industry rules that many competitors in the industry follow to maximize revenue and margins. Understanding these rules and using them to your advantage is like being in a strong ocean current that is going in your direction – you can make fast progress without much effort. This is what it feels like to be on the "bright side" of Fingerprint. However, a Fingerprint also has a "dark side" that can sweep your business away like a powerful current that is impossible to overcome.

The unwritten rules of what it takes to succeed are demystified when a Fingerprint is well documented. The industry rules, the reasons for the rules, and how to win by using them, describe a reliable pattern of how the top competitors, their customers and suppliers, and other stakeholders act and react - how they behave. This common behavior is the industry's "Dominant Fingerprint".

New hires learn "the rules of the Fingerprint" from experienced managers, or more painfully, by trial and error. New hires also learn that failure to deliver business targets often results from missing or misinterpreting the rules. Those who do not or cannot follow the rules leave the company. Those who stay have "good cultural fit" and are good at operating by the rules. They make the key decisions after being promoted into key positions. Rewards for conforming ("having good cultural fit") motivate employees to become even better at playing by the rules. This process of natural selection makes the "old business model" become hard coded – part of the company's DNA.

Becoming brilliant at playing by one set of rules is the perfect set up to be blindsided and crushed when new rules emerge

It is not easy to change your DNA. As a company *slowly* gets better at playing by one set of rules (as we know, it *is* a slow, never-ending process), it *rapidly* becomes worse at learning how to play by a new set of rules. After all, if you play excellent golf, how motivated will you be to learn a new game like tennis? Even if you wanted to, how easily and quickly could your muscle memory, your natural golf instinct, adapt? It is possible that many of your painstakingly learned golf assets become tennis liabilities. *Some* people have learning disabilities, but *all* of us have crippling forgetting disabilities. It is very hard to even want to think of giving up something you know you are good at doing. The same is true for companies. Therefore, your company will continue to play excellent golf even when the game has changed to tennis.

How we find Industry Fingerprints

Three years ago, I did something I had planned for over a decade. I distilled 15 years of other people's wisdom about fundamentally important but frequently ignored rules about "Fingerprints". These unwritten rules in a category or industry compel most competitors (especially those who know what it takes to operate successfully in the category) to behave like trained circus animals - to accept and respond to the cues and rules of their industry like circus animals performing tricks, even if they don't like the rules or even agree with them. And again like circus animals, to accept meager rewards for doing so. My distillation was methodical. It followed three steps.

The first step was the most tedious. Over several months, I dissected and regrouped thousands of ideas and lessons collected for over 15 years. These ideas and lessons, which had been silent in dozens of notebooks filled with colorful hand drawn pictures, words and mind maps had eclectic origins. Some notes were taken during long experiences. For example, I had the pleasure of understanding several management gurus' thinking – how they approached and solved problems - when my employer, a multinational, hired them at great cost for projects I was assigned to, that lasted several months. Other notes followed odd opportunities – for example, one is a record of a profound answer given by Peter Drucker, then in his eighties, when someone asked him a question while he stood in a urinal during a conference break.

The notes are my security blanket, a way of being reassured that I had not lost the great wealth of others' wisdom. These "others" include practitioners and thinkers in many fields (including science, medicine, history, religion, physics, chemistry, biology, social sciences, technology, aesthetic design, architecture and information systems design), business consultants (big brand name firms as well as theory-bearing visionary gurus) and senior management (in both tiny startups and dominant players).

The second step was the most valuable. I practiced making powerful thinkers' ideas even more useful. For a couple of years, I mashed one expert's key ideas with allied ideas from by different experts - including those in very different fields. For example, how does Clay Christensen's idea of "Customer Jobs to be Done" compare with the way medical scientists and the FDA define the effectiveness of an "Active Ingredient" which takes care of the main "job to be done" by the drug? What does this mean for natural plant based medicines that do not have a single "active ingredient" and did many "jobs" by treating different conditions? How do all three of these *Product* related "jobs" relate to critical *Service* jobs to be in the *Distribution channel* that make or break a consumer's shopping experience online or in a mall store? And, how do the four of these relate to Daniel Kahneman's work about the errors people make when confronted with economic decisions about *how to pay* for their "jobs to be done", because of their biases and heuristics?

As another example, how does the smart design principle in "Blue Ocean Strategy" that requires innovations to improve customer value *and* reduce cost, relate to Michael Porter's idea that advantage was rooted in differentiation *or* low cost? How do both of these powerful theories relate to the value chain of a digital product or service, where the marginal cost of an incremental unit approaches zero, as explained in "Free" by Chris Anderson? And how do all four relate to Harvard Professor Ramon Casadesus-Masanell's thinking about Virtuous Cycles, which examines the value of choices and consequences of a business model in new ways? (In their January 2011 Harvard Business Review paper, "How to Design a Winning Business Model", Professors Ramon Casadesus-Masanell and Joan E. Ricart discuss how a business model interacts with the business models of other players in the industry (which makes outcomes more difficult to predict). And in a very interesting way, examines how a business model can have many self-reinforcing elements to drive revenues up and reduce management decision complexity and costs).

The aim of this second step, which is ongoing, is to reveal how to improve common business models (for example, the razor razor-blade model) and make them more powerful ways to create deliver and

capture value by mashing different and sometimes contradictory frameworks, each having a well defined set of rules, and loyal followers. In other words, to make common business models better in uncommon ways that we call "Value Accelerators™". For more details about this, see the article at http://www.innovationmanagement.se/2013/03/01/how-to-become-a-business-model-architect/

The third step is the most interesting – it is ongoing and I hope it never stops being enjoyable. It is to pressure test the essence of the mashups in hundreds of hours of thoughtful conversations with managers in tiny and huge companies, universities, think tanks, professional services firms and hospitals, in the US, Europe and Asia. These require everyone in the conversation to be "alert" in the context of Sir Winston Churchill's words, "There is a great deal of difference between the tired man who wants a book to read and the alert man who wants to read a book". Humes, James C. (2009-10-13). The Wit and Wisdom of Winston Churchill: A Treasury of More than 1000 Quotations (p. 10). Harper Perennial. Kindle Edition. Many of the executives I choose to speak with are deep thinkers, and many have a healthy distaste for "theories", so they ask difficult "practical" questions that pressure-test well-worn ways of thinking and expose those that aren't relevant any longer. They help me explore the unwritten rules and complex assumptions they follow by habit but don't write down for anyone, including themselves, to think about or learn. The conversations make their invisible thinking processes visible.

This work is addictive - the reward is the discovery of new ways to think about old problems. Asking smart people to reflect on their reflexive thinking patterns, against the backdrop of my mashup of solid ideas, new theories, and practical examples, isolates and amplifies useful frameworks. Put differently, this is an ongoing process of grinding new lenses – using reliable theories and tools to see old business problems in new ways, and having them validated by people who actually manage businesses or seriously analyze what business models work and do not work in specific industries.

Too many companies, trapped by the "rules" of their industry, deliver mediocre results

One conclusion of this work has incisive implications for all companies that emulate "the industry leaders' business model" as a way to succeed. The Fingerprint of an industry requires leaders to follow the industry's rules, and this makes sense. But common interpretation of the rules drives the best competitors, the Olympic athletes in the industry, to try to deliver better results than everyone else - *by using commoditized objectives, commoditized strategies, and a commoditized business model*.

Doing the same things everyone else does rarely delivers different results than everyone else. Business leaders accept this droll wisdom but still operate in this manner. There is a striking similarity in how competitors make the core decisions that affect the business - for example how to go to market - using very similar assets (what kinds of products, what kinds of channels) and very similar ways to treat the customer (how to create demand, what prices to charge, after sales policy). Frequently only the brand is different. The CEO of a brand new Health City (thousands of professionals in a big hospital with surrounded by multiple other healthcare facilities including assisted living a public gym and so on, built on more hundreds of acres of prime land) told us that all suppliers of a certain kind of asset the facility needed, looked the same. And he was talking about some of the biggest, best, and in *their* eyes, the most differentiated brands in the world who had competed very hard for his business. The biggest and best-defined brands have become commoditized.

How does this happen? Managers with specific authority levels make key decisions using a defined "process" that gives them and others who work with them reassurance that things are in control. However, this is a thin veneer of comfort. Analysis of a management team's record of successes, ineffective choices and failures reveals that, too-often, the "process" is really an enormously expensive trial and error approach that tests a very narrow set of well-worn alternatives dictated by the tried and true business model. How many truly differentiated products or services can your company offer and how long would it take to produce them? How many new channels of distribution can you use? What truly new ways do you know to create demand? How much pricing flexibility do you have? The truth is, *all companies in the industry run similar trials, and make similar errors*, because the difference in their new hires, the strength of the management team, the quality of suppliers, consultants, and advertising agencies, the intelligence of regulatory strategies, the kind of

manufacturing equipment and distribution channel tactics, the cleverness of the profit model...the list goes on...is minimal. So unsurprisingly, the results are also depressingly similar.

The cost of the crisis is massive. Let us look at innovation, which gets significant management attention in many companies and so is hardly an orphaned and neglected topic. Most companies are disappointed at the last decade of investment in innovation – it has cost too much and returned too little. Above all, they are not confident that the things that did work can be repeated – some managers who lead the efforts protect their "special knowledge" as a personal asset that might give them job security in a world where layoffs are common, and others may have left – so there is limited organizational learning to assure repeatability. Senior managers will tell you this when you are a trusted friend. When they speak to the press, their innovation record is wonderful and has made them much more competitive. Consultants at the Doblin Group who have spent decades studying innovation, have evidence that two percent of a company's innovation projects deliver over ninety percent of the total value from innovation. The rest – the *Ninety eight percent* of innovation projects deliver ten percent of the value are probably swept under the rug. Also, Professor Clayton Christensen has said that about 95 percent of new products fail because they use a (similar) flawed segmentation model. (Clay Christensen's Milkshake Marketing – Working Knowledge http://hbswk.hbs.edu/item/6496.html). This is astounding waste.

> If buildings were innovation projects, ninety eight percent would probably fall down

Armed with such statistics and insights, and a two decade long interest in how children, adults and organizations and systems learn, analogy (www.analogypartners.com) analyzed the business model innovation experience of about twenty five companies – some small, many big, in the US, Europe and Asia. We did this in the best way possible – as a secondary objective while we worked on projects inside the company, sometimes for many months. We were particularly interested in the waste and failure that results from "being trapped by your Industry Fingerprint". Three reasons proved most interesting – missing key changes in an Industry Fingerprint that made a business model ineffective, attempting to use a business model innovation to market using a business model that had no chance of succeeding, and using a commoditized business model – one that all competitors use – and expecting to get better results than the others. These three problems are the result of "being trapped by your Industry Fingerprint.

How can you tell whether your Industry Fingerprint has trapped your company into delivering bad results?

1. ***It has already happened when everybody is trying to get superior results by doing similar, ingrained, instinctive, predictable things that everyone else is doing.*** Even the consultants you hire for their expert advice dispel the same (commoditized) expert advice to everyone. The tired joke is that in too many industries, top competitors' strategic plans could be copies of the same document with just the company name changed. Sadly, this is more true than not. In company, after company, as we have sat through sometimes months of planning meetings, we have observed a high level of "commoditization" of both the planning process and the results.

2. ***It has already happened when what competitors do (their objectives) and how they do it (their strategies) become similar and predictable.***
   - ✓ Everyone has a haughty statement in front – "We will be the premier…." *Vision and Mission have become commodities*.
   - ✓ A bit deeper in the reports, everyone plans to double sales in 5 years, to achieve market share growth of x%, to earn higher gross profits…and of course to delight customers and value their best asset, their people. In these cases, *objectives have become commodities*.
   - ✓ Still deeper in the reports, one finds that R&D is (say) 11% to 12% of sales - for everyone in the industry. Marketing expenses are 20-22% of sales - for everyone in the industry. Cost of goods are 35% of sales - for everyone in the industry. Every company's salesperson carries three things in their bag and calls on five customers a day. Sometimes competitors' products are even made in the same factories using identical components (as commonly happens with clothes, shoes, computers and cameras). In these cases, *products and operations strategy have become commodities*.

3. ***It has already happened when executives working for top brands claim that their products and services have meaningful differences, but their customers don't see the differences.*** Coffee, soft drinks and cereal are examples of products that are supposed to have distinctive flavors and certain brands have die-hard fans. However, these loyal consumers frequently fail to tell the difference between products they really believe they prefer and competing products, when the brand label is removed from the package. Imagine what happens when the products are things like milk, flour, ketchup and other condiments, and consumer and personal care products like

moisturizer, make up, cleaners toothpaste, and so on. In the worst insult to the brand, consumers, confused by marketers, think that an innovation introduced by one brand belongs to a competing brand.

4. ***It has already happened when the other five cornerstones of your business model do not have differences that customers recognize and value enough to buy your brand more frequently, prefer your brand versus competing brands, or pay a price premium for what they buy from you.*** This means that, in addition to customers not seeing useful differences between your *product or service* and your competition's offerings, they also do not value differences in your branding and marketing. Nor do they see differences in how you collaborate with influencers (for example, for them to see such a difference, their dermatologist would recommend your skincare product, and their contractor would recommend your brand of kitchen cabinets, and so on). Nor is there something that makes them like how they shop for, select and buy your offerings. Nor do they value differences in your manufacturing or sourcing of materials. Nor do value differences in your profit model – how you price and ask them to pay for what they buy.

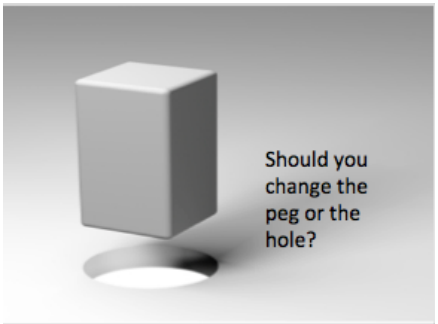
5. ***It has already happened when your company hires good minds from great schools, gives them intensive, extensive and expensive training, and then rewards them like heroes for delivering weak results.*** Look at the brands and lines of business in your company that have weak sales growth, high new product failure rates, and rising costs. This performance should earn grades that will make a schoolchild blush. If your company rewards the people at the top who deliver this dismal performance like heroes, then your company is in the trap.

Given what you just read, it might appear that avoiding being trapped by the rules of an industry is not only desirable, but also straightforward. Well, let us see.

Assume management has asked you to develop a strategy or business model for a new product. How will you set about the task? On one hand, you will increase the chances that your management will accept your thinking if you make sure your plan or model is similar to how your company and most other companies in your industry compete. To do this, you match the dominant industry Fingerprint - your plan must have only small differences from what is well-understood and proven to work. In other words, you must fall into "the trap". After all, if you come up with a brilliant new way, they could say, "If is such a good idea, why isn't someone already doing it?"

Even worse, they could view your innovative strategy and business model as evidence that you are too theoretical and just "don't get the practical realities of the real world" (or, as you and I know it, "the trap"). You realize, of course, that if you ever get this sign hung around your neck, you will find it very hard to get rid of, and it will kill your chances of management giving you responsibility for bigger brands. Of course, the problem is that small differences from the status quo are guaranteed to be ineffective as a *breakaway* competitive strategy.

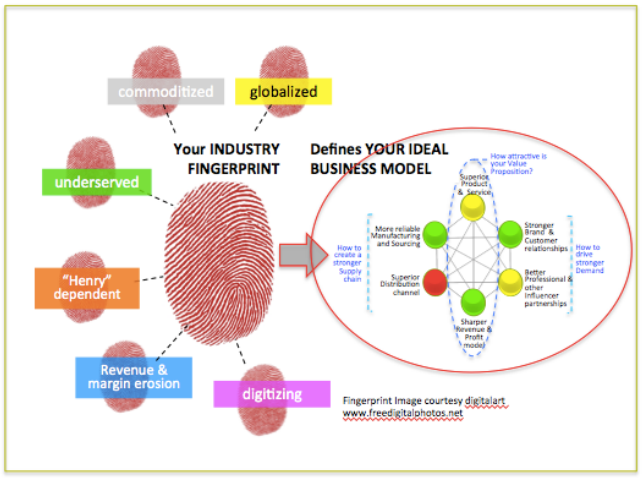
So your interesting dilemma is how to choose one of two ways to proceed, which are likely to have different implications for your company, *and for own career*. The first option is to recommend only small differences from the status quo, which wont add much value but will increase the probability that management will accept your plan. The second is to propose big innovations that are risky, but will break out of the Industry Fingerprint trap and probably yield much more value, but will confront management resistance and convince them you "don't get it", "have poor cultural fit", and stunt your career. OK, I have over dramatized…but only a little (really, I do know). Anyway, most managers choose the safe path – they design a strategy and business model with small changes at best, no changes at worst, and accept a destiny of mediocre future results. Their success is having their plan accepted, and this is enough to get them to the next milestone in their career. The company of course then must get better results than your competition by using commoditized objectives, commoditized strategies, and a commoditized business model.



As Clay Christensen has taught us, companies have good practice with taking a big breakthrough idea and whittling it down until it "fits" the organization skills and capabilities – by which time it has become a small idea. The process takes a square peg (the big idea), recognizes that it wont succeed with the current "Fingerprint business model" (the round hole), and then, instead of changing the round hole, changing the square peg – so the big idea finally looks like all the other round pegs that are delivering mediocre results. A better approach is to understand the implications of your "Fingerprint", and to modify your business model and operating rules to take best advantage of it.

It is one thing to be trapped on the dark side of a Fingerprint. It is another thing to know how to get out. Competitive advantage starts with finding a *different* way to gain an *advantage.* It is impossible to have an advantage by doing the *same* things in the *same* way as every competitor.

How can you use your Industry's Fingerprint to define a breakaway strategy and business model?



First, start by understanding your Fingerprint. Define which of the six key business model "cornerstones" are driving the success of the top competitors in your industry. Say you find that the "Product", "Brand/Marketing" and "Distribution Channels" are the Cornerstones that drive success in your industry. For information about business model Cornerstones, please read Include Business Model Review as a New Year Resolution.

When you highlight these three Cornerstones in the analogy hexagon illustrated on the left, and the three lines that connect them, you will have traced the shape of a triangle. Triangles are the backbone of good performance in most industries. For example, the three Cornerstones you traced form the Fingerprint of all Consumer and Personal Care industries (everything you find on the shelves at a grocer, or drug store). Other industries depend on different Cornerstones. For example, the Medical Technology industry relies on Product, Influencer (i.e. a healthcare professional) and Brand/Marketing (direct advertising to patients, to make them curious and ask doctors about specific medical devices such as blood glucose monitors). Retailers rely on Product, Distribution Channels and Brand/Marketing (direct advertising to consumers, to attract them as shoppers into retails stores). Other shapes described by connecting more than three Cornerstones – such as trapezoids and pentagons - describe a different type of competitive behavior – and a different set of business models. Adding a fourth or fifth Cornerstone is necessary when it isn't possible to get an advantage versus your top competitors with the typical "triangle".

This method is not a fixed recipe for a strategy and a business model. Fixed recipes do not work because too many practical nuances about the company, the industry and the customers make them irrelevant. This is like exploring a city with a great tour guide who shows you what is worth seeing

quickly, instead of wandering about a strange city on your own. After you've taken the tour, you can go back and spend more time at the places you like best.

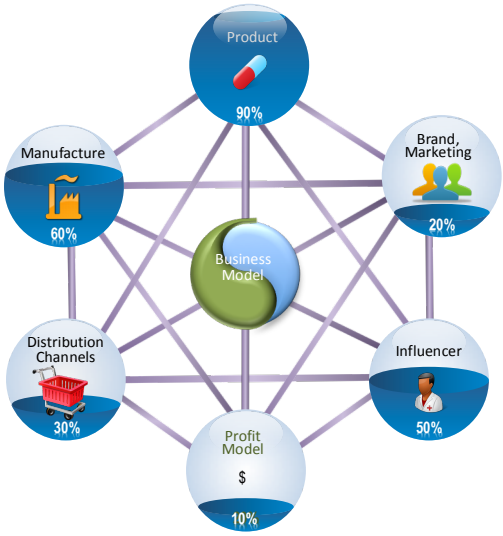
The second step is to decide how to make your competitive strategy stronger. There are only two ways to this. You can win by getting better at doing the same things everybody else is doing - at the commonly used Cornerstones - or you can do something new and different. A strategy can be *accommodating* (play by the rules, use the same Cornerstones), *dislocating* (change the rules, use the same Cornerstones in new ways), or reframe the context (change the game, use new Cornerstones).

An accommodating strategy accepts the rules of the category. Like water flowing downhill, it flows around obstacles in its path and finds the easiest way down. The chances are that anyone else sending water down that same hill (i.e. following the same industry rules) will see their water finding roughly the same path downhill. Companies following this strategy usually produce a series of small unimpressive innovations that do not add much to sales growth but are safe ways to refresh the brand and keep the consumer interested. Occasionally, they make a massive effort, and invest in a major innovation that adds a lot of revenue and makes the brand "hot" again. Sadly, this pattern has changed after the crash of 2008. Many brands seem to have lost the will, the skill and sometimes the capacity to invest in major innovations. So most innovations are small and unimpressive – and have high risk of failing to meet projected sales targets because many competitors seem to bring them to market at about the same time, and so they face stiff competition. They also cannot meet the profit targets because the companies have ingrained processes that cost a lot – many were designed to bring the big innovations to market and now are followed even for the small innovations. So the innovations have small revenues and big costs. An accommodating strategy delivers commoditized innovations – even though that sounds like an oxymoron.

A dislocating strategy changes either or both, the rules of the game (it does old things in new ways) or the game itself (it does new things in new ways). With this strategy, as your water flows downhill, it breaks obstacles apart and carves out a new way down. The trick seems to be to try to do these dramatically new and different things without attracting too much attention from incumbents with the power to shut you down before you get enough traction. Some management thinkers, notably led by Clay Christensen, the profound and humble Harvard Business School professor, who by habit explains "deep" things with "elegance" might call this "disruptive", but is also makes it clear that the best disruptive strategies are initially stealthy.

> "Deep" means complex things that have long eluded meaningful explanation, but seem like they should not have done so after somebody explains them well; as someone once said, "there is nothing more illuminating than a blinding flash of the obvious". "Elegant" means an explanation that has power because it reveals a lot, simply, while making only a few assumptions

A different approach to designing a dislocating strategy is proposed by Professors Chan Kim and Renee Mauborgne, both of INSEAD, with their powerful and popular non-confrontational approach, "Blue Ocean Strategy".



The third step is to align your new strategy with your business model. This requires defining precisely what to do differently in each "Cornerstone" of your business model after prioritizing the changes based on their potential to deliver better revenues, better customer results and experience, and better costs. For a detailed description of how to do this, see our article "How to become a business model architect"

http://www.innovationmanagement.se/2013/03/01/how-to-become-a-business-model-architect/

PART II

Today's most common Fingerprints

New Fingerprints and business models emerge and old ones fade away as business climates and practices change. For eighteen years, I have been an observer, designer and obsessive collector of business models.

Inspiration for this work, which we at analogy call business model architecture, comes from brand new ideas in Singapore, Silicon Valley and Sri Lanka, as much as it does from still-bustling, centuries-old souks in Istanbul, the IT industry in India, or an advertising business in Indonesia. It also comes from the hundreds of books and thousands of articles analyzed every year as much as it does from thousands of conversations and meetings with people in big, small, new and old businesses. The four months a year I spend in Asia and Europe (the rest is in the USA) give me the opportunity to "collect and observe" models first hand. I run a forty-three year old office technology business in Sri Lanka, a family business, which is a proper lab to test many business model hypotheses. As the informed reader will note, many of the Fingerprints also have solid academic foundations. Some are based on theories that emerged from the minds and observations of well-regarded management thinkers like Clay Christensen, Chan Kim, the late C.K. Prahalad, Michael Treacy, Gary Hamel, the late Michael Hammer, Pankaj Ghemawat, Ramon Casadesus-Masanell and Adrian Slywotsky, to name a few.

Here are twenty-four of today's most common Fingerprints, a selection from about forty that have been identified from the time this work started. I find these to be powerful "lenses" to look at different industries and the interested reader will find that they reveal a wealth of ways to think about the underpinnings and implications of these Fingerprints. I would warmly welcome thoughtful discussions on these Fingerprints as well as others you may find.


Many Customers are:
1. Overserved
2. Underserved
3. Underserved
4. Business Model Cornerstones are commoditized
5. Natural or Artificial barriers Protect some players
6. Category has Globalized + new markets are in your reach
7. Category has flattened + new low cost players have entered your market
8. Product or Service is becoming Digital
9. Parts of the Value Chain are moving online
10. You can become the Hunter
11. You can become the Hunted
12. Demand is becoming more important than Supply
13. Supply is becoming more important than Demand
14. Product
15. Brand + Marketing
16. Influencers
17. Manufacturing
18. Channel of Distribution
19. Profit model
Competitiveness is driven by:
20. State Owned Enterprises are becoming powerful
21. Behavior Modification is key to success
22. Your primary customers are "HENRYs"
23. Your industry is a pariah
24. Your product or service is ahead of its time

Twenty-four of today's most common Fingerprints

1. Many customers are Overserved

2. Many customers are Underserved

3. Many customers are Unserved

4. Your Business model cornerstones are Commoditized

5. Some players are Protected by natural or artificial competitive barriers

6. The category is Globalizing and once-inaccessible markets are within your reach

7. The category has Flattened and new, strategically low cost competitors have entered your home market

8. Your product or service is rapidly Digitizing 9. Parts of your industry Value Chain are moving from land to online

10. You can become a Hunter and eliminate some vulnerable competitors

11.You have become the Hunted because a new powerful new predatory player has entered your category

12. Your category's historical Supply chain dominance is switching to Demand side dominance

13. Your category's historical Demand side dominance is switching to Supply side dominance.

Competitiveness and competitor identity is driven by six things (items 14 to 19 below):

14. Product, science and technical leadership

15. Brand and Marketing

16. Influencers who are strong partners to a brand

17. Superior manufacturing

18. Broader and more effective Channels of Distribution

19. Profit model innovations that allow value to be captured in new ways

20. The Rise of State Owned Enterprises as powerful competitors

21. Consumer Behavior Modification is key to success

22. You are dependent on "Henrys" – high earners, not rich yet – as your primary customer

23. Your Industry is regarded as exploiting a segment of society (e.g. tobacco, coal, using sweatshops)

24. You are ahead of your time – for example, you must sell ice cream in a country without a cold supply chain

Describing some of the Fingerprints…and their implications

My objective in this section is to use Fingerprints to advocate a specific way to think about competing that goes beyond what a company can do internally to improve products, processes and people. A way that also includes how the company can leverage or respond to external industry changes that can have a massive impact on success.

The Fingerprints described below have two reasons that should make them more relevant to you. They are *common* (so there is a better chance that your company/industry will "fit" one of them), and *interesting* (so even if your company does not fit any of them, it is likely that reading their implications will catalyze a new way for you to think about business models).

An industry Fingerprint has positive and negative aspects. It is like a coin with a bright side and a dark side. The scope of this article is to describe the implications of the "dark sides". These are the most important because they make products and brands fail. analogy has curated ways to leverage the "bright sides" – they will be discussed in future articles.

Your objective is to decide whether any of these Fingerprints describe a bad scenario that your company finds itself in and if so, to use the implications described below to inspire winning innovations in the six "Cornerstones" of your business model that will.

The nine Fingerprints below are organized in four groups that represent familiar bad scenarios – the "dark sides" of these Fingerprints. To paraphrase former Australian Prime Minister Paul Keating, "they are shivers waiting for a CEO's spine to run up":

- ✓ Two Fingerprints affect your **value proposition** (Overserved and Commoditized).
- ✓ Two Fingerprints are **caused by competitor's** strategies and actions (Flattened and Hunted).
- ✓ Two Fingerprints are caused by a **sharp shift in a core technology** (Digitizing Product and Bricks and Mortar operation moves Online).
- ✓ Three Fingerprints directly affect your **Profit Model** (Demand side Fingerprints, Supply side Fingerprints, and Fingerprints that help you Capture Value).

The best way to proceed is to first decide whether any of these nine Fingerprints describe a predicament that your company faces. If none do, then select a few of the nine that seem most interesting and imagine your company/brand is confronting it now. Next, study the "**implications for value creation and competing"** described for each Fingerprint and internalize what they mean for

your company/brand. Finally, answer the six questions below, which are designed to provoke business model innovations in each of your company's business model Cornerstones to break away from the "dark side" of the Fingerprints.

> A strong business model innovation is more valuable than a product or service innovation. Competition is far less likely to imitate it quickly.

These three steps are key to getting value from this approach, so it is helpful to do them well. *Reader tip:* The simplest approach is to think by yourself. Approaches that are more complex tend to improve the quality and value of the learning. For example, some clients assemble a team and get the three steps done over a couple of days.

After "internalizing" the Fingerprint's implications, answer these six questions - each relates to one of the six Cornerstones of your business model:

1) How can I create value by including functional or design differences in my product or service that my customers really like and value?
2) How can I create emotional and logical value that rapidly grows demand by superior branding and marketing?
3) How can I create value by using innovative ways to build strong partnerships with influential experts so they will encourage customers to buy *my* product or service (for example, how can I get a pharmacist to recommend my healthcare product to a customer in the pharmacy? How can I get a retailer to promote my food ingredient to a shopper? How can I get an influential blogger to write a product review?), and then help those who do buy to get the best value from my product or service (for example, how can I have post-purchase FAQs - frequently asked questions - answered in the simplest way?
4) How can I create value by sharply improving my distribution channels so the customer's shopping experience for *my* product or service is much better than their experience with my competition?
5) How can I create value that is obvious to my customer by better manufacturing/sourcing?
6) How can I *capture* more value via my profit model – how can I make customers appreciate how I price things and ask them to pay?

These six questions do not comprehensively cover the ways to improve your business model in response to a Fingerprint, but they do offer insight into what that would entail.

Group 1: Two Fingerprints that affect your value proposition weaker (Overserved and Commoditized)

1. THE OVERSERVED FINGERPRINT

Companies on the "dark side" of this Fingerprint find that their previously successful model of keeping up with competition by bringing small innovations to market with accelerating frequency is no longer viable.

Being in the grip of the "dark side" of this Fingerprint is like being on a treadmill that keeps going faster and faster until it is obviously too fast to be safe. It feels good initially that you are pushing yourself, but soon, you feel very unstable and at risk of falling off and seriously hurting yourself. The reasonable thing to do at this point is slow the treadmill down. However, many brands in the grip of this Fingerprint cannot slow down – if they do, their competition, also on treadmills going too fast, will beat them. Therefore, their only choice is to try to stay on and not fall off. However, it is taking lots of effort just to keep up and they are sure they cannot stay on for much longer.

What are the implications for value creation and competing?

For several reasons, these small innovations do not have an attractive Return on Investment (ROI):

- ✓ They do not get much Sales Volume - they are attractive mostly to thin segments of existing customers. Because they are unattractive to many, they do not improve market penetration (share) substantially or attract enough new customers (grow the market).
- ✓ They do not earn a price premium – most customers consider the small innovations unnecessary and irrelevant – so it is hard to get customers to value them highly enough to pay a premium.
- ✓ They are easy to imitate - they are not based not on breakthroughs, but on commonly available technologies that make them easy for competitors to imitate – so they cannot create a competitive advantage for long.
- ✓ They cost a lot - despite being "simple", the companies producing them have sophisticated R&D and consumer research, pay their people well, and have complex stage-gate processes that take a long time - so even the small innovations cost big bucks.
- ✓ They do not last long - after the high sales hoped for do not materialize, the company withdraws the innovation from the market because it has failed (and because room must be made on the shelf for the next incremental innovation, which is ready to be launched). In one company, over a

period of seven years, the average shelf life of a new product decreased from 5.3 years to 2.25 years – so meaningless innovations have a short shelf life, making them even bigger failures.

Despite the problems companies are proud of their meaningless innovations and their marketing people are sophisticated professionals, use nuanced language to explain why the "meaningless differences" that *they* really believe in should matter to consumers who do not believe them.

Why would big companies (they are mostly big) follow this unattractive strategy of producing innovations that are meaningless to consumers and bad for profits? The short answer is they are in the Overserved Fingerprint trap. Here are three common scenarios that make it hard for companies to escape the "dark side" of this Fingerprint:

1. Scenario 1: current products and services are already meeting the biggest consumer needs. Consumers are already very satisfied, and so "wow!" innovation is not easy to achieve (e.g. in OTC pain medications).
2. Scenario 2: There may be a big unmet need (e.g. the pain medicine can cause gastric discomfort, or may be related to liver damage with prolonged use), but the company cannot resolve these very tough problems. Therefore, all they can focus on are simple innovations (e.g. make the pill in a new shape that makes it a bit easier to swallow).
3. Scenario 3: after a long time of producing "small innovations", the company's R&D capability becomes geared to deliver only small innovations and not breakthroughs. The skill and ability to invent and deliver breakthrough innovations erodes, and building it up again is hard. It takes a very different kind of R&D organization to deliver a breakthrough - the scale and scope of planning, the processes, and people – are completely different. The effort also needs lots of investment (which isn't easily available because funding processes have now been designed to fund smaller bets). Finally, management has no practice handling the high degrees of risk or the long gestation – and so have no confidence that their organization can handle the "big innovation".

How do you break out of the "dark side" of this Fingerprint?

One way is to establish three product pipelines and assign different R&D teams to them.

- ✓ Use a metaphor of "Headlights" and "Searchlights" and "Flashlights" to focus the search for which new products to develop. The different "lights" illuminate a dark landscape (the as yet undefined three new product pipelines) in different ways. *Flashlights* illuminate several hundred feet ahead – for example, for consumer and personal care pipelines this is less than 18 months,

which is the typical period in which a brand manager must make an impact to be "noticed". Why is this important? Because if a brand manager needs to make an impact in eighteen months, s/he will prefer not to invest time on a new product that can come to market only after three years – even if it might be a very good business. Doing so will award her successor a win but is unlikely to give *her* a win. On the contrary, by investing in this business has an opportunity cost - it will take resources away from a win she could deliver in 18 months. *Headlights* illuminate one mile ahead – say a period of 18 months to 3 years. *Searchlights* illuminate several miles ahead – say a 3 to 5 year period. What this means is, each team will have a revenue target and will build a portfolio of projects.

- ✓ Set up three R&D groups, one for each of the "lights". Why three groups? Why not have one group that looks after all three pipelines? Because the innovation spaces revealed by the three "lights" are fundamentally different. The thinking, the people, where they look, how they look, the R&D methods, the pace of progress, the difficulty and risk of the problems encountered – *everything* is different for the three groups. You must fund the three groups well, but must also set tight targets and milestones for each. It isn't possible to innovate on demand, but it is possible to define stages in a "Big Innovation Funnel" (one for each group) that will give you a sense of whether each group is making good progress with its portfolios of "Flashlight", "Headlight" and "Searchlight" projects.

2. THE COMMODITIZED FINGERPRINT

Companies on the "dark side" of this Fingerprint find that their customers do not have a reason to prefer or pay a premium for their offering because the products and services they offer are similar to competing products.

Commodities are products or services that look and perform so similarly that customers believe there no meaningful differences between them. They could be low priced goods like sugar and salt or expensive things like gold and oil. "Expensive commodities" offer many insights into business model innovations for cheap commodities.

There are several reasons for commoditization. One reason is that meaningful innovations are not possible because the next generation technology to deliver them is not yet available. A second reason is that some kind of differentiation is possible, but it would make the product prohibitively expensive and limit commercial viability (after all, only a few many people would buy really expensive sugar even if was "better"). A third reason is that the products (or services) actually are so similar that no

amount of dressing up with branding and marketing can persuade customers that there is a meaningful difference. There are other reasons as well, but these three are easy to find in many industries.

What are the implications for value creation and competing?

Irrespective of the reason for commoditization, the *result* is that customers become unwilling to pay a premium for an innovation because they do not see enough value in it. This removes the brand's incentive to innovate. When your customer does not appreciate anything except price reductions and frequently buys the lowest cost product or service offered, you stop trying to innovate, and start cutting costs because reducing cost is the only way to reduce price and maintain margins. Over time however, as downward price pressure continues, margin erosion is inevitable. In addition to this loss of profits, commoditization limits revenue growth - cost reduction is not a growth strategy.

We live in a world where rapid imitation is the norm, and this means there are a great many products and services that are rapidly becoming commodities (look at most brands that sit next to each other on a grocery shelf and think about what differentiates one from another). Competitors are even able to imitate difficult technical innovations that directly deliver valuable, consumer preferred performance gains - consider, for example, the smart phone industry. Think about the many new functions that were technically impossible just a few years ago, but have quickly become a standard, "commoditized", phone feature. Your phone probably has a camera, a GPS navigation capability, can select, stow and play music, will let you stow, read and annotate books. How many of these functions are available in competing phones? All of them. Therefore, do you decide to buy Samsung or Apple or HTC or Nokia because of one has a distinctive difference of these "core phone functions"? You probably do not. Core "phone functions" are commoditized.

The "dark side" of commoditization is easy to recognize:

- ✓ The customer prefers the lowest priced product (or service).
- ✓ The customer will not appreciate an innovation enough to pay a premium for it.
- ✓ This removes a company's incentive to invest in R&D.
- ✓ Marketing is less effective because consumers are smart and know a commodity when they see one.

How do you break out of the "dark side" of this Fingerprint?

There are many ways to escape the "dark side" of commoditization. If this weren't true, then companies in categories like water, beef, cement, fizzy soft drinks, mobile phones, moisturizer, coffee, headache medicine and Baby Shampoo should have products that are very difficult to differentiate – after all these are categories that are easy to characterize as commodities. However, are the products from brands like Dasani, Angus, Cemex, Coca Cola, Apple, Neutrogena, Starbucks, Tylenol and Johnson's Baby, commodities? Fans of these brands would disagree.

One way to escape commoditization is to differentiate by branding that amplifies some aspect of the *product or how it used* and convinces consumers that this aspect is physically or emotionally valuable. Johnson's Baby, Neutrogena and Coca Cola (which also owns Dasani), follow this approach. This explains why Apple iPhone ads promote apps as much as the quality of the screen. A second approach is to provide a unique, useful, enjoyable buying experience that educates or entertains, and making *that* an aspect of the brand. Starbucks, CEMEX and Apple follow this approach. A third approach is to use high prices to amplify the differentiation from the first two approaches – as we know, "commodity" does not automatically mean "low price", as diamonds, gold and inkjet ink prove.

Group 2: Two Fingerprints caused by competitor's strategies and actions (Flattened and Hunted)

1. THE FLATTENED FINGERPRINT

Companies on the "dark side" of this Fingerprint worry that they don't know how to respond if low cost foreign competitors enter their market.

In other words, they fear being "flattened" by the new entrant (the context for "flattened" comes from The World Is Flat 3.0: A Brief History of the Twenty-first Century by Thomas L. Friedman). Eventually, low cost competitors *do* enter their home market. They can be of two types. The Type 1 new entrant is easy to defeat, at least in the short term. The Type 2 new entrant is very hard to defeat from the start and poses one of the toughest Fingerprint problems.

What are the implications for value creation and competing?

The Type 1 new entrant offers products of such low quality that the incumbent's customers can easily tell the difference and do not buy the new offerings. In this case, the incumbent finds it easy to win in the short run. However, the Type 1 new entrant improves quality over time, in addition to typically offering low prices. The incumbent's least demanding customers buy the new entrant's offerings when the quality is good enough. The degree of the incumbent's loss depends of value of sales they lose from their "least demanding customers" who switch to the good-enough product. As the new entrant continues to improve, their products become good enough for more and more of the incumbent's customers. As Clay Christensen has shown with his "Disruption Theory" (The Innovator's Dilemma by Clayton M. Christensen), this can drive the incumbent to abandon one customer segment after another and suffer a shrinking market.

The Type 2 new entrant enters the incumbent's market by *initially* offering high quality products, not just good enough products, at low prices. They have not only resolved the quality problem but also either are willing to sacrifice margins or have a low cost infrastructure. The nightmare scenario is having this kind of *strategically lower cost* foreign competitor (let's call this company X) enter your home market. X has had many years to refine its offering and processes in isolated foreign markets that were not lucrative, but had less-discriminating customers who accepted weak products because, perhaps, they had no better alternatives. These distant markets were unattractive to producers of better quality goods, and they did not enter the markets – thus, X had a sheltered sanctuary that allowed

them to improve at a slow pace. Now, X has entered the incumbent's market with very good products and services that compete head to head with the dominant incumbents.

How do you break out of the "dark side" of this Fingerprint?

Responses to the first kind of new entrant have been well documented – but this does not mean they are easy to follow. The Innovator's Solution: Creating and Sustaining Successful Growth by Clayton M. Christensen and Michael E. Raynor is a good resource dealing primarily with responses to the Type 1 new entrant. In addition, Pankaj Ghemawat, Professor of Global Strategy at IESE Business School in Spain, when previously at Harvard, conducted research that revealed two factors that work well as barriers to entry:

- ✓ Industries where incumbents spent a lot on R&D measured as a percent of sales, seemed less attractive to Type 1 new entrants. My interpretation is that R&D spending is a proxy for the incumbent's ability to deliver innovations that customers value. As such, Type 1 new entrants, who initially prefer imitation to innovation, would prefer easier competition. Therefore, if the incumbent can increase the rate of innovation by investing in more R&D (that actually delivers innovation), this would make it harder for Type 1 new entrants to compete.
- ✓ The second factor was the amount of marketing, measured by the percentage of marketing expense to sales. My interpretation is that Type 1 new entrants typically do not have a culture of spending a lot on marketing and in many instances lack a sophisticated understanding of the psychology of the incumbent's customer, making their marketing efforts less effective. Therefore, if the incumbent invests heavily in sophisticated marketing that strengthens brand equity and customer loyalty, this, too, would make it harder for new entrants to compete.

In summary, the incumbents must deliver valuable innovations that come from heavy R&D investments and then use strong, expensive marketing to train their customers to need the innovations.

Incumbents' potential responses to the Type 2 new entrant are so complex and varied that the scope of this article will allow a useful way to address them. Therefore, here is a discussion of the *reasons why the Type 2 new entrant* can win quickly – starting as soon as they enter a new market, as an invitation to the reader to consider and/or research ways to win. Research into these *strategically lower cost* players (especially those from China as described in Dragons at Your Door: How Chinese Cost Innovation Is Disrupting Global Competition by Ming Zeng and Peter J. Williamson) reveals that these players can do several things well. If the incumbent's customers appreciate some of these competencies in the new entrant, they become weaknesses for the incumbent.

To compete aggressively with these Type 2 new entrants, incumbents must abandon some things that have been hardcoded into their plans and practices, and adopt some new things that the new entrants

are already good at doing. Here are three things that strategically low cost players from emerging markets do well, that some western competitors have difficulty coping with:

- ✓ They Deliver consumer-preferred variety without incurring the typical associated costs of complexity: Typically, producing a broad variety of product configurations incurs high costs of complexity. Therefore, although consumers like having choices, serving this desire typically sacrifices profits or raises prices. The new entrants (the "Flatteners") do not incur the typical costs of complexity to manage the variety they offer. They have either evolved systems to manage these that many developed market players do not have. In addition, their cost structure is lower, and so they earn much higher profits while offering consumers many choices at low prices.
- ✓ They do not "skim" for new technology: Products that include the latest technology and innovations usually have initially high prices to help recover sunk R&D costs. This does not deter early adopters - the people who stand in line outside a store overnight to be the first to buy a new phone or sneaker. This is "market skimming", a well-tested, temporary pricing strategy. After a short while, sellers reduce the price. The "Flatteners" are willing to offer the latest technology without market skimming and sacrifice the temporary gain. Incumbents struggle with this - they have grown addicted to the temporary high margins they can get for new technology.
- ✓ They personalize without charging premiums: Some new entrants offer to customize/personalize products for very low price premiums, because they can do so for very little extra cost. For example, some allow consumers to design highly customized sneakers – different leathers, colors, laces, and so on for low price premiums (big brands do this as well, but charge a high price). Custom suits tailored in many Asian markets are another example. Many developed market incumbents must charge high prices because they incur very high costs for such customization. The "Flatteners" offer real customization at low costs that incumbents cannot match.

2. THE HUNTED FINGERPRINT

Companies on the "dark side" of this Fingerprint find that wake up one morning to really bad news - a formidable, well-resourced company who was not a competitor previously, has purposefully entered their market.

Few companies *want* more competition - the exception is if you are trying to establish a new category, then having a big, capable competitor will help the category grow quickly. However, can you imagine being the neighborhood grocery store and learning that the Wal-Mart and Target a few miles away have begun carrying groceries? Can you imagine being Best Buy, when Wal-Mart and Amazon decided to strengthen their electronics departments?

What are the implications for value creation and competing?

The key question, of course, is how to respond. Usually, there is a bit of time to build up defenses, because this new entrant is not a complete surprise – advance word leaks out about the fact that they are seriously planning to enter your category. Therefore, the incumbent can quickly gear up to do something. However, do what? Lets take a worst case - if the new entrant is huge (say Home Depot or Barnes and Noble), and the incumbent is small, family owned business, there is not very much that can be done. The incumbent's demise is sadly only a matter of time. Bigger incumbents appear to have two kinds of response that are explained below.

How do you break out of the "dark side" of this Fingerprint?

Not surprisingly, some responses work better than others do. One knee jerk response is a price war, a flight to lower ground. This does not help the incumbent or the new entrant – although the consumer wins for a little while. Instead of helping, it erodes value in the category – the lower prices result in lower margins, which kicks off a cycle of cost cutting and eventually drives lower quality products and services in a misguided effort to maintain margins. Nobody wins.

Business models that have a better chance to win are those where both the incumbent and intruder take a flight to higher ground. Neither takes direct aim at each other. Instead, both consolidate their strengths and improve the overall offer without sacrificing margin. For example, ways to grow demand include, making the customer shopping experience more pleasurable, offering better credit terms to make the buying decision easier, and improving after sales service and returns policy. This approach grows the entire pie – it brings in new consumers who did not previously shop in the category. Being able to adopt these changes quickly is key, and the first mover can win a share advantage that proves surprisingly durable – even if later followers do the same things, customers who become loyal to the first mover do not switch allegiance.

Group 3: Two Fingerprints caused by a sharp shift in a core technology (the Digitizing Product and Bricks and Mortar operations move Online)

1. THE DIGITIZING PRODUCT FINGERPRINT

Companies on the "dark side" of this Fingerprint find that one of their key assets (a key product or a core technology underlying the product) becomes a liability, sometimes so fast that there is no time to react.

Because this strikes at the heart of the company – its identity, brand, and the core product or service it offers, this is one of the toughest problems caused by the "dark side" of a Fingerprint. How does it happen? It happens because the company has *an advantage with the current generation of a technology*. This valuable asset prevents the company from adopting a newer technology even if it preferred by customers. The advantage becomes a barrier to adopting innovation, and sales, costs and efficiency suffer. When competitors adopt the new technology, the old technology that was a powerful asset immediately becomes a liability.

Here is how it typically plays out - the company invests heavily to take advantage of the latest advances in the core technology. This results in an exceptional, deep and carefully cultivated skill that is a real advantage. Let's say the product is a class of office machine, like a scanner, that captures the image of a document. The company invests in developing better ways to capture the image, and designs better products to improve customer appeal. The core technology (i.e. scanning) and core activities and business processes (e.g. the distributor network) do not change for years except for incremental improvements.

Then "suddenly", it does change, and the company is left behind. An important new technology S curve (a new generation of technology) emerges; competitors adopt it, and sharply improve the value of their scanners. What could such a "new" technology be in the relatively simple technology of a scanner? Let's say it is the ability to email a scanned document (an invoice for example) to the finance department, after the numbers are automatically dropped into a spreadsheet using intelligent text recognition to read, extract and organize key information from the source document. This saves the user many manual steps (better convenience and operating cost) and improves internal controls (better quality). Users love it, and our incumbent does not have it.

What are the implications for value creation and competing?

We scoped this Fingerprint to focus exclusively on an atoms-based or analog Product or service that is transformed by a digital technology, because there are so many examples of companies that hurt by this kind of change. The "old company" has processes and managers who are unable to understand the change and continue to operate as if it isn't really happening. When a competitor adopts the new technology, *immediately,* selling the current generation of scanners feels like selling horse drawn carts to customers looking to buy modern cars. Demand for the old product evaporates. The new competitors gain significant advantages and win. When a new technology emerges, the "old" prized assets that are core to the current business model become ineffective overnight (e.g. Kodak).

Of course, these new technologies and processes did not "emerge overnight". They emerged slowly and there was plenty of evidence that they are important – for those who paid attention. However, our protagonist, the incumbent, invested heavily in the current state of the art, ignored the evidence and remained *ignorant about the potential cost and benefit of the new technology*. The problem is that this is a normal reaction. It is like a top athlete, say, an excellent golfer, being reluctant to learn a new sport, even though all his friends have taken up tennis, because he is so good at golf. Therefore, he continues to play golf even though the game has changed.

How do you break out of the "dark side" of this Fingerprint?

At analogy, we focus more about avoiding getting on the "dark side", because "breaking out" after you are on the "dark side" without significant losses is almost impossible. We propose setting up an Emerging Technology Radar Screen (ETRS), using these steps:

- ✓ List the core technologies you rely on most in your products – especially in the products that drive a lot of your business value. Focus more on those you feel you have heavily invested in "the state of the art".
- ✓ Also list innovations that are transforming industries but are currently unrelated to your own industry – the web, mobile technologies, Software as a Service and so on – even if you don't think they could affect your own industry.
- ✓ Ask technology experts what the next generation of each core technology is, and where it is being developed. Be sure to include thoughtful questions about how the "unrelated technologies" might improve your core product (as in the case of our scanner).
- ✓ This next step can be done very simply and at low cost, or can be done with a substantial investment – it depends on how important you believe the ETRS is. At the "light" end of the

spectrum, develop a network of automatically generated news feeds from the universities, labs, thought leaders and startups that are developing the next generation technology – *and read the news that comes to you*. At the more robust end of the spectrum, invest in teams that are focused on tracking the advances in the core technologies, and deciding when and how to invest in them to modify your product or service. An example is the new trend for major companies to have technology scouts in major universities around the world.

- ✓ Establish management forums where the implications of the new technology are seriously discussed, *and decisions are made about what to do about them*.

2. THE DIGITIZING VALUE CHAIN FINGERPRINT OR BRICKS AND MORTAR OPERATION MOVES ONLINE

Companies on the "dark side" of this Fingerprint find themselves in a predicament that is similar to the "Digitizing" fingerprint above - but the thing that becomes digital is not the product or service. Instead, it is a key step in the value chain.

The "key step" that becomes digitized is a value pool that gives the incumbent profits. When it transforms from the current bricks and mortar version to a digital version, the incumbent loses. It happened to travel agents who sat in offices and booked air travel for customers who came to their office, to photo printing labs to which you took your film to be processed into pictures, and to booksellers (remember when there used to bookstores in malls?).

What are the implications for value creation and competing?

When a bricks and mortar process in the value chain is transformed by a digital version that makes the old value chain step less convenient and more expensive, customers abandoned it and switch to sellers who have the new digital process. If that process is your main business, or is key to how to create, deliver and capture value in your main business, you are in real trouble. The change can happen so quickly that it is hard to respond, because new players launch new businesses that are designed to take best advantage of the innovation, while the incumbent must first try to stop doing what they are doing and recover what they can of their existing assets, before they jump aboard the new approach. For example, in the massive medical technology market, companies typically have had large, expensive sales forces that call on buyers in hospitals and sell them products.

In Asia, many sales force-based approaches are becoming extinct. Many of the sales territories are so large that it is simply impractical to have enough salespeople to cover them. So the market has evolved. MedTech and Office Equipment is acquired by published Tenders and more recently, in online public markets (like Amazon Marketplace) or private markets (where a single large company invites suppliers to submit offers for things it needs, where all suppliers have full visibility of each other's offers). In fact, Tenders are a standard approach in Europe as well. Many US MedTech companies may be surprised because new startups are driving eBay-like marketplaces for MedTech.

Consider our office technology company selling scanners in the "digitizing" fingerprint described above. This means they successfully transitioned to include the new email capability in their product. Now, a new threat has emerged. With this "Digitizing Value Chain" Fingerprint, they could succumb to a *process* that is based in bricks and mortar and currently is a strong asset. Say they have a well-trained, highly efficient distributor network to sell their scanners. This used to be a serious asset. Now, competitors sell scanners online, without a distributor network. This is a major structural advantage – it reduces value chain costs by 30% to 40%. What used to be a major asset, a source of competitive advantage, and a barrier to competition (one couldn't sell scanners without a distributor network that took a lot of time and money to establish) has immediately become a liability.

Blockbuster is a well understood example of being on the "dark side" of this Fingerprint – their retail stores were a key asset and barrier to competition, but became a huge cost relative to Netflix's "light" delivery system – what was once a proper asset became a serious liability.

How do you break out of the "dark side" of this Fingerprint?

Set up a Radar Screen, using these steps:

- ✓ List the core *processes* you rely on most - *in your value chain*.
- ✓ Follow the rest of the steps described in the "Digitizing"

Group 4: Three Fingerprints that affect your Profit Model (Demand side Fingerprints, Supply side Fingerprints, and Fingerprints that help you Capture Value)

What is a Profit Model, and how can Fingerprints affect a Profit model?

All companies have a Profit Model – a way they capture value, a way they price the products and services they sell to earn a good profit. Truly successful companies have found ways to get customers to feel good about how much they pay – even if is a premium price - and how they pay.

Let us look first at *how much* customers pay. analogy has studied how customers feel about paying very high prices for things like eyeglass frames, hearing aids and sneakers. In all these cases, the cost to produce the products is very low relative to the retail prices (frequently, for every $100 retail price, cost to produce could be as low as $5). Even after consumers learn about these facts, they actually are not annoyed about how much they pay – instead, they *justify and rationalize why the brand needs to charge such high prices!* Compare this with the many purchases you make, when you feel that the product or service is overpriced, and wish there was a less expensive alternative.

Now let us look at *how* customers pay. Consider the contrast of two buying experiences: In the first case, think about how you feel when paying for something in a very crowded Apple store (why do not you mind that it is so crowded? How does overcrowding almost become something positive?), where the salesperson who served you takes your credit card payment and email address while standing right next to you, and tells you your receipt has been emailed to you. Now consider how you feel when standing in line at a different electronics store, where you must stand in a traditional line, refuse to give up your email address at the register, and your receipt and bag are security checked at the door before you leave. What do you think prevents the second company from adopting Apple's business model innovation for *how* you pay for stuff?

What are the implications for value creation and competing with Profit Model innovations?

The big advantage of Profit Model innovations is that competition will find it very hard to imitate you even when it is clear you have found an advantage, because they are in the "trap" of following the traditional industry Fingerprint – which follows the old Profit Model. The three keys to having a great Profit Model innovation are a) having some kind of advantage in how you *create* value, b) having some advantage in how you *deliver* value to your customers and c) how you *capture* value for

yourself. Let us assume you have one or more of these advantages. How can you develop a Fingerprint problem? You have a problem when a change in a Fingerprint erodes your advantage and you cannot respond in a way that gets your (previous) advantage back.

Let us look at the three Profit Model Fingerprints:

1. DEMAND-SIDE FINGERPRINTS: PROFIT ADVANTAGES IN HOW YOU *CREATE* VALUE

Companies on the "dark side" of this Fingerprint find that the strong advantages they have carefully cultivated in creating demand for their product or service at low cost have been seriously eroded.

Advantages in the Demand side (how you create value) are typically based in two things:

- ✓ Superiority in your product or service that encourages your customers to readily pay a price premium – this could be because your product performs better than competition, has a better design, or delivers confidence via a strong brand, and so on.
- ✓ Being able to spend less in marketing expenses to explain the benefits of your product and create demand for it in a big-enough segment of customers who love what you offer and can afford to buy it.

2. SUPPLY SIDE FINGERPRINTS: ADVANTAGES IN HOW YOU *DELIVER* VALUE

Companies on the "dark side" of this Fingerprint find that the advantages they had in low cost manufacturing or distribution are seriously eroded.

Advantages in the supply side (how you deliver value) are typically based in two things:

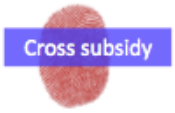
- ✓ Incurring a lower Cost of Goods than competition to produce a high quality product or service, which allows you to charge a lower price than competition and still maintain strong margins, or to charge the same price as competition and earn much higher margins. This could be achieved, for example, by having privileged access to a raw material in short supply, or a skilled, low cost labor force, and so on.
- ✓ The other typical way to get a supply side advantage is by having a more effective, efficient, or lower cost to distribute your product from the time it is ready for consumption to the place where it is consumed.

3. PAYMENT FINGERPRNITS: ADVANTAGES IN HOW YOU *CAPTURE* VALUE

Companies on the "dark side" of this Fingerprint find that advantages they enjoyed because they could price their products and services cleverly, have eroded.

Let's look at two business models that use clever ways to price – cross subsidies and razor-razor blades, and the "dark sides" of these models. There are dozens of other "clever ways to price".

CROSS SUBSIDY MODELS



This is a class of business model that was made new again in Wired Editor, Chris Andersen's book, "Free" (Free: How Today's Smartest Businesses Profit by Giving Something for Nothing by Chris Anderson). The book describes four classes of "Free" models, in the author's insightful, provocative voice:

1. Free – when the seller does not ever expect payment.
2. Third party markets – where someone gets something free and someone else pays – for example, Google gives away search free to the searcher, but is paid by advertisers who wish to reach the searcher.
3. Freemium: where you get the basic version free and pay for upgrades – for example some online videogames and software.
4. Strings attached – where you get something free but only if you pay for something else – for example, buy one, get one free offers.

analogy has analyzed several versions of "free" models in existence today, and defined the key Value Accelerators™ (VAs) for each of them. VAs are to business models what ingredients are to recipes.

> A Value Accelerator™ is an asset, strategy or tactic that allows a company to get superior results compared with other companies using the same business model. It is a key success factor in a business model.

3rs Party Markets are one the four kinds of models described in "Free". They are part of a complex and diverse class of business models called multi-sided markets that were more limited and harder to design without the Web. They are perhaps the most interesting example of how to make a cross subsidy a competitive advantage. The simplest version of this model is a "two-sided model" – where

there are two kinds of customers, and one of them is attracted to the platform by a low price or special service. An example is a club that offers free drinks for women. The fact that they are on the platform then attracts the "other side" – men, in this case. A multi-sided model follows similar principles but can have more than just two "sides". The complexity of a multi-sided market becomes a barrier to imitation by the competition. It requires a platform to be built and managed. The platform owners (or orchestrators as analogy describes them) must attract two or more kinds of customers who meet on the platform and transact something they would not be able to do if the platform did not exist. PayPal, Groupon, Google, and credit card companies are good examples of multi-sided business models. For a deeper understanding of the massive scope and power of these models, see Catalyst Code: The Strategies Behind the World's Most Dynamic Companies by David S. Evans and Richard Schmalensee, Harvard Business School Publishing.

Is there a "dark side" to "Free" business models?

There are several. Here are *three* that have particular impact on the business model.

- ✓ *Negative network effects in multisided cross subsidy models*. There are two kinds of "network effects" in multi sided models: a) the dark side of "Same-side network effects" emerge when actions by parties on one side cause negative impact for others like them on the same side. For example, when too many advertisers compete for the customer's attention (the "other side"), other advertisers are reluctant to sign up. b) The other "dark side" comes from cross side network effects (where actions by a party on one side causes negative impact for those on the others side). For example, when too many advertisers compete for customer's attention, customers are bombarded by too many ads.
- ✓ *Mis-pricing subsidies in multisided cross subsidy models*. Many multi-sided models have a subsidy built in. That is, one side that uses the platform subsidizes the activities of the other side. The subsidized side is price sensitive, and finding the right "tipping point" to make the deal attractive isn't easy. Too much subsidy and too little subsidy leave money on the table.
- ✓ *Using "free" as a primary model vs. as a bolt on*. Many companies use some version of a "free" model. For example, consumer goods brands offer a "bogo" (buy one get one free) at key points in the year. This is a bolt on to a more traditional model. It serves a purpose, but does not drive the brand to think deeply about the "free" model. It is a tactic and not a strategy. Alternatively, consider Dropbox, which has "Freemium" as its core model. the entire enterprise is dependent on this model and therefore hones it really well. The strategic use of "free" drives more meaningful use of the model.

RAZOR-RAZOR BLADE MODELS

This is an old model, made famous by King Gillette, who, as a salesman at the Crown Cork and Seal Company in the 1890's had a simple insight – you could make a lot of money with a product that could be reused only a few times. Today, this venerable business model is alive and well - analogy has researched and identified 23 variants.

The basic model requires a product (or service) to have at least two parts, one that can be re-used, and one "consumable part" that can be used once or reused only a limited number of times. The reusable part is sold below cost, to make it an attractive value (for example, my local pharmacy just sent me a free Gillette razor). The blades that must be re-purchased after they are used are very profitable. Therefore, the reusable part of the product sustains an initial loss (an investment the brand makes), but then, after several "blades" are sold, profits start to build up. Most brands use this original basic version of the business model (how many examples can you think of?).

Apple has reversed this model – they make most of their profits on the reusable part (i.e. the "razor handle"). Their "i" products (iPhone, iPad, and so on) are razor handles, and Apple makes lots of profits on them (estimated at an extraordinary over 60% to 68% GP). There is very little of their profits on "blades" – Apps, iTunes songs etc.

Is there a "dark side" to this venerable model?

There are three primary risks to this model and the descriptions below will make the ways to avoid the risks clear: One risk is greed. If customers believe they are being overcharged for the "blades", they will seek alternatives. An example of an alternative for branded inkjet printer ink is a big company like Cartridge World (http://www.cartridgeworld.com/home.aspx), which many see as a good quality alternative to branded ink (which is one of the most expensive liquids you can buy). The second risk is that the blades are a profit sanctuary that many imitators want to invade. So, the incumbent must constantly produce meaningful innovations to keep customers from switching to a competitor's blades. The third is not really a risk to the model, but a lost opportunity that results from it. To explain, the Gillette and Apple examples above are just two of the twenty-three variations of the razor razor-blade business model. It is remarkable that even companies that are experts at using one of the twenty-three variations rarely discover the value of using any of the other variations. They don't even try to experiment with them. They may not even realize that they exist.

Conclusion

A Fingerprint is like a coin with a bright side and a dark side. If you are on the bright side, it will deliver positive power and help your brand perform well; like a favorable ocean current, it will help you move without much effort. However, if you are on its dark side, the same Fingerprint will prevent you from creating, delivering and capturing value - like a dangerous ocean current, it will sweep you away and destroy you.

What makes the difference? You must understand the power of the Fingerprint and develop the will and skill to take advantage of it. If you are on the "bright side" of the Fingerprint, your best strategy is to define how to leverage its value to accelerate revenue and margin growth. If you are on the "dark side" of a Fingerprint, it can trigger a cascade of poor decisions, so your best strategy is to be clear about how to avoid being trapped in this negative spiral of bad decisions and consequences. If you are already in the trap, your best strategy is to define how to escape its trap – trial and error approaches are wasteful and frequently fail. There are many public companies on both sides of every Fingerprint and their experiences are extolled or excoriated in the business press. They provide a rich source of materials that reveal valuable lessons about what to adopt and what to avoid.

When you translate these "lessons" into business model innovations, they will seem mysterious to your competition – our research reveals that many competitors are paralyzed by these moves because they haven't interpreted the changes in the Fingerprint you are responding to - they don't see them, don't understand them, don't believe your innovations are necessary or that they will succeed. In today's world of Open Innovation, where the reward for most *product and service innovation* is faster imitation, *business model innovations* – especially those thoughtfully designed to take advantage of a change in an industry Fingerprint - are valuable and durable ways to create, deliver and capture value. They directly translate into accelerated revenue and margin growth.

> Which side of an industry Fingerprint you *start* on is partly due to luck and partly due to having great or terrible judgment. Which side you *stay* on is the result of mastering how to retune your business strategy and business model to leverage the Fingerprint

For more information about Fingerprints and Business Models, visit www.analogypartners.com or email tonys@analogypartners.com or Johna@analogypartners.com