



product development
technologies, inc.

PULSE

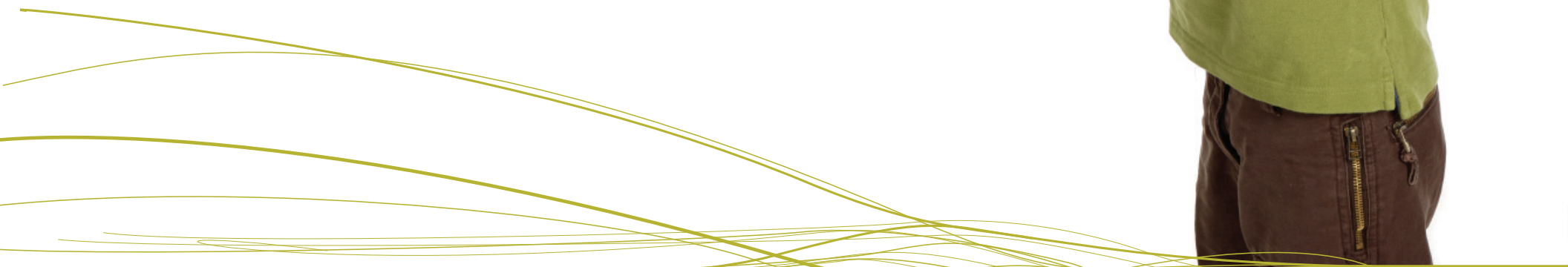
A bi-monthly publication by PDT

Issue 7
June 2009



In this issue:

Discovery of Change
Kickstarting the Ostrich



Discovery of Change

When we are born we have instinct, but our brains are void of knowledge that will carry us through life. From day one, we begin to build a picture or a model of our worlds based upon our experiences - connecting the dots and creating perspectives. In the first few years, I believe there is no recognition of 'change,' just learning of what is 'now,' what is 'new' and what is 'different,' which leads to a discovery rate that can never be matched later in life. I find this a good thing as I see 'change' as the toughest thing to encourage, initiate and sustain in all areas of work and life.

As my first daughter grew and was able to engage in conversation, I (as most parents do) quickly connected with her seemingly random thoughts. She linked experiences, activities



and time with no barriers, crossing events laterally and creating relevance and loose associations that most adults have a hard time grasping. In her mind (as in all 3 year olds minds) lateral thought and loose interpretation is the norm. Children pull from their experiences and draw parallels in their minds just as adults do. However, the conclusions often seem random because their knowledge bank is limited. Children will pull the closest thing they have to relevance, no matter how loose it is. I don't pretend to understand exactly how the Neocortex works. However, I have quickly built an appreciation for and envy of how my daughter forgoes the recognition of 'change,' enabling her to sustain openness for discovery.

Now, fast forward to adulthood. You have been through an education system, travelled somewhat, made good friends, discovered your passions and have established a career. You have a richer, deeper knowledge base to draw your conclusions and actions from,

What's leading you to discovery?

EVOLVING ECONOMY

"I no longer am paying for cable and phone. I am only relying on the internet for all my viewing and communication."

"My kids will struggle to find summer jobs so we will delete the landscaper and the kids will get paid to do the landscape maintenance. Same holds true for car washes, house cleaning etc. This hurts the service providers."

NEW DISCOVERIES

and your mind quickly pinpoints the 'new' or 'different' as a change in state.

The knowledge you acquire instinctively gets segmented, aligned and organized – so much so anything out of the ordinary is flagged immediately or filtered out, and anything new quickly gets assessed, categorized and filed. Loose interpretation is no longer accepted as an instinct.

As you progress through life, the volume of impromptu discoveries seems to diminish. Most of us establish a 'base,' a home, a workplace and hobbies, etc. We identify our favorite teams to follow, the restaurants we favor and TV shows we watch. This creates what I call a 'lifesphere.'

... continued

We all have 'lifespheres,' and they scale: your largest encompasses your entire life (ever expanding), and your smallest encompasses a single day (often becomes contained). One key thing about a lifesphere is that as we get older, the expansion rate tends to slow proportionally. It becomes human nature to find the comfortable areas within our lifesphere and settle within them, new discoveries slow as we reduce our exposure to the unknown and thus expansion of the lifesphere slows. We soon define variation and difference as 'change.' In turn, the action of 'change' becomes associated with something driven by a fundamental shift – either good or bad, rather than seeing change as a continual and incremental process of learning. Sure, we have blips and bursts – especially when we reach the lifestyle and perspective change of retirement – but

in general, I believe they slow over time.

I find that in order to understand people's perspectives, I try to understand and engage in their experiences myself. People's characters are largely defined by what they have experienced... understanding that, and being open minded yourself, allows you to better



What's leading you to discovery?

EVOLVING ECONOMY

"... so for the first time ever I have primary responsibility for morning logistics and getting our three kids to school. There was a bit of a learning curve, but it's become a fun start that I really enjoy. The prospect of summer vacation, and leaving a slumbering house to go to work, is actually bumming me out."

NEW DISCOVERIES

"see through their eyes" at the problem/issue at hand. As designers, we actively seek to expand our lifesphere's. We build context by engaging in as many experiences as possible, we try to stay open to those that happen by chance and we identify targets that may lead us to discoveries that feed assignments. We connect these experiences, move in and out of other people's lifesphere's, and draw parallels to enrich the discovery process and create possibilities. We train our minds to think across barriers, build new perspectives and identify opportunities.

Discovery is at the foundation of creation, whether it is approaching a product, service or business. Remaining open to discovery allows us to further expand our lifesphere.

... continued

Ultimately, I believe this is fundamental and essential in all industries and professions if there is any desire to remain relevant. Ideally, we would be expanding our experiences and perspective at such a rate that we could eliminate the word 'change' all together, and hopefully break down the barriers and negative perceptions that 'change' is so often associated with.

So what to do? Here are seven simple tips that will immediately help to start expanding your 'lifesphere' :

1. **Read something new:** Pick up and read a magazine or newspaper with a topic or subject matter that you know nothing or little about. Read it cover to cover, and do this again once a month or so. This works well when you have the opportunity to travel, especially if you are overseas.
2. **Drive a different route:** To work, to home, to school – do this at least once a week. Take the back roads, discover the houses, businesses and landscape that you miss out on by taking the fast track home.

3. **Strike up a conversation** with a stranger: You could discover a new business partner, the best place for sushi, or simply open up a perspective that might have remained unknown otherwise.

4. **iTunes Mining:** Browse the podcasts directory, and randomly pick content to download, there is so much easily accessible free content that you are guaranteed to discover something new- listening while you drive to work.

5. **Shop Backwards:** Notice how you always start at A and end at Z, no matter what you go in for? Try another route or walking down aisles/segments that you don't usually frequent – see what's there. Take home a vegetable you have no idea how to cook, and search out a recipe for it.

What's leading you to discovery?

EVOLVING ECONOMY

"Our typical week-long, resort vacation has been replaced with a few weekend camping trips. It's a good thing we love camping:)"

"...I'm now much more in tune to politics to a point that it's almost an addiction. This is a very annoying habit."

NEW DISCOVERIES

6. **Become an RSS Junkie:** Subscribe to your favorite websites through an RSS reader rather than visiting each site individually. This allows you to quickly skim through all the headline content from multiple locations fast, pulling out those that catch your eye. Add an unfamiliar feed regularly to see if you learn something new from it.
7. **Share:** Tell others about your discoveries, send links and recommendations. Social networking sites are a perfect way of spreading the word quickly – if you feed others, they will feed you.

KICKSTARTING THE OSTRICH



STRUGGLING?

If you're struggling with how to unstick a badly-needed development program or characterize the payoff of a risky or hard-to-predict initiative, maybe you need to play ostrich.



photo by: Steve Harris

TALK MONEY TALK

Maybe in our situation, the finance guy is the one who needs to pull his or her head, well, out.

And, to help him along, maybe we need a lever – like how to catch his attention by framing the opportunity with methods and terms that he will understand.

PLAY OSTRICH!

Contrary to its reputation, the ostrich responds to danger with action. It can reach speeds in excess of 45 mph, and their powerful kicks can cause serious injury and death.

Yet the reputation for burying their head in the sand sticks. Take behavioral finance, where the 'ostrich effect' is the avoidance of apparently risky situations by ignoring their existence.

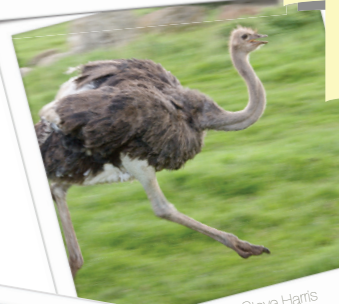


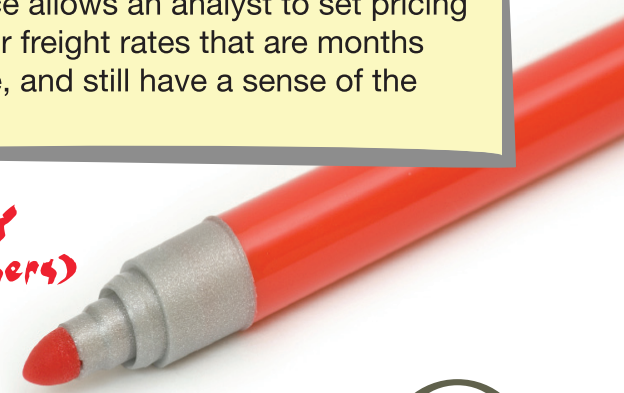
photo by: Steve Harris



In the world of corporate finance, options are used to manage risk. An option gives the right – without the obligation – to buy or to sell something at a later date at a specified price. It's most common for high-volume commodities such as fuel, where the ability to cap the price allows an analyst to set pricing for tickets or freight rates that are months in the future, and still have a sense of the profitability.



EMPATY
(not just for users)



O, P, T,

There are techniques from Option Pricing Theory that provide a compelling glimpse of how we can value and manage the development process. The interesting thing is it shows us how volatility – the swings in price that occur as more information comes out about a future opportunity (which we'll call 'risk' here) – is actually where value is created.

By looking at the structure of possible outcomes, we can evaluate an unpredictable situation while staying within designated budgeting and commercialization guidelines.

This insight informs four guideposts for development of products, services and experiences:

If you're interested in the supporting details, or having trouble sleeping, there's a companion white paper written by Marc Bertaud - please contact askpdt@pdt.com for more information.

GUIDEPOSTS

1. SPACE NOT PRODUCT
2. FEWER INITIATIVES
3. EXPAND YOUR OPTIONS
4. MOCK IT UP

Innovation is one of the most engaging and exciting spaces in business – so have fun while you're creating possibilities, and know that you don't have to be serious all the time to be successful. In fact, it's quite the opposite.

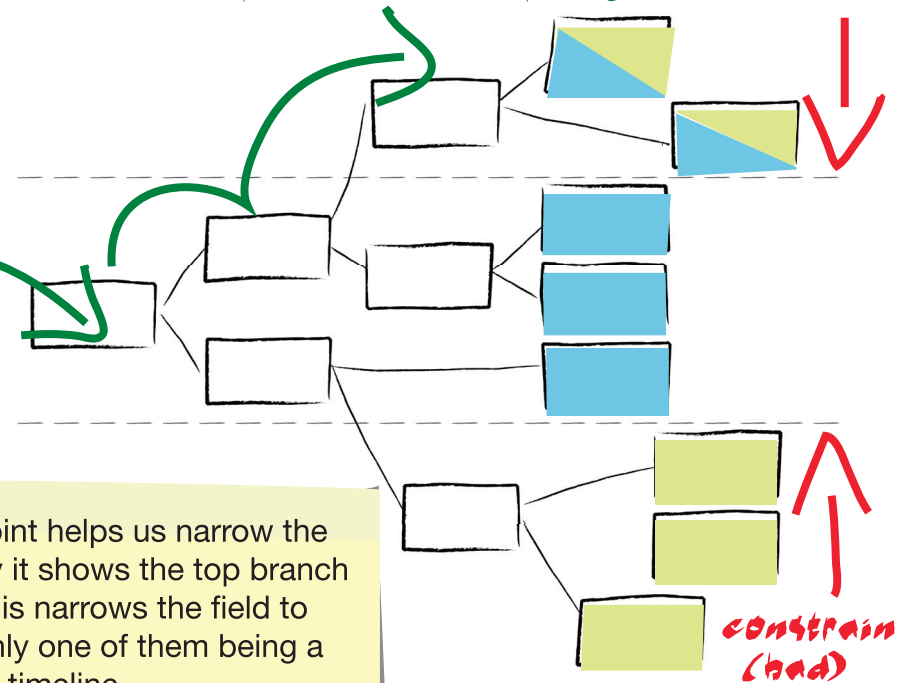
① SPACE NOT PRODUCT

Laying this out visually shows the broadest opportunity to create value occurs when we maintain the freedom to explore and strengthen a broad range of possible solutions (ends of branches, on the far right).

Targeting an opportunity space (rather than an anticipated solution) with a defined performance criteria and constraints allows us to learn, test, and iterate in steps as we work our way to the final branch in a decision tree.

We can progressively tighten the borders of the territory we are considering, working with a much better understanding of the terrain. It is the same basic principle behind a Stage-Gates methodology, but applied in reverse - we are maximizing potential rather than cutting the project pool.

Sometimes a solution is clearly defined at the outset, and it simply needs to be executed well and within business objectives. However, innovations that can swing the competitive balance tap into an unknown need or unanticipated path.



The first decision point helps us narrow the focus – and let's say it shows the top branch is the way to go. This narrows the field to four final options, only one of them being a longer-development timeline.

On the other hand, if we start with boundaries (as when we have an anticipated solution), just by narrowing the initial focus we have removed 5 of 8 possible opportunities and all three options that take a bit longer to develop.

④ FEWER INITIATIVES

There's a natural tendency to try to address risk by spreading the bets, in the hope that one is right.

Ever heard the phrase 'hope is not a strategy'?

The reality is that every organization has a limited ability to take new initiatives to market at any given time based on funding, capabilities and production capacity.

As exploration shifts to investigation, and funding requirements start to grow, before you consider investment or feasibility, first look at the areas that:

- are rooted in core elements of the user experience,
- have high intrigue based on their possibility to transform.

A skilled development team will help you figure out how to deliver on a great concept. An uninspiring selection will only ensure you of underwhelming results.

Developing a laser-like focus on what you stand for doesn't necessarily mean you miss other opportunities along the way. What it will do is clarify how you connect with your customers, and force your organization to consider why this is meaningful.

Concentrating also allows you to back the most strategic growth opportunities with adequate investment, and it helps preserve enough flex in the budget to power through when the inevitable surprise arrives.



Concentrate on fewer initiatives with greater potential for impact against your growth objectives!

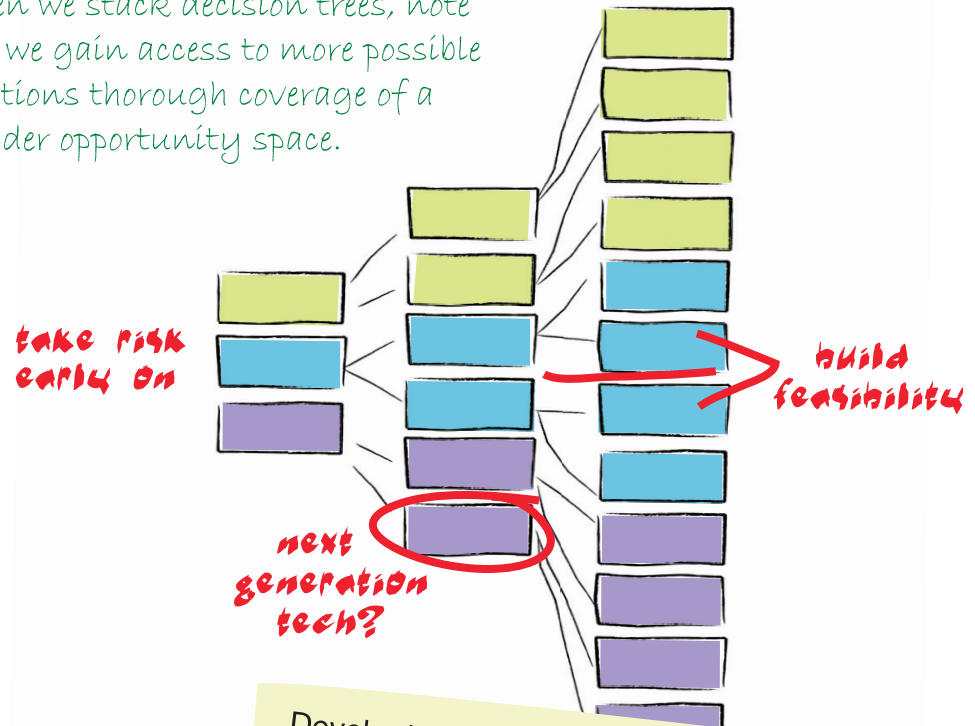
⚡ EXPAND YOUR OPTIONS

Within an opportunity space, there is a dramatic benefit to investigating a broad range of possibilities. The difference between this strategy and the misguided approach of 'spreading bets' is that we are now looking at different ways of thinking about the need or delivering a solution within one opportunity space.

Let's be clear, this is not the typical exercise in pie-eyed optimism. The technique is manageable because the effort and focus quickly concentrate as investment needs grow:

- It uses low-investment approaches in the highest-risk areas, tapping potential and recognizing practical budgeting constraints.
- The downstream process progressively embeds business, technical and manufacturing feasibility assessments, bringing together the best of innovation and execution.

When we stack decision trees, note how we gain access to more possible solutions thorough coverage of a broader opportunity space.



Developing a better understanding of the territory enables you to define a solution platform as the starting point – framing the user and context in a way that can support multiple generations of your product, service or experience. This allows you to further leverage your investment in development because it shields you from delivering a one-shot wonder.

4. MOCK IT UP

Prototyping is also a way of thinking, and it should always be your first step. Strive to systematically develop low-fidelity, conceptual prototypes from the start, which gets at one of the hidden traps in business innovation.

Business cases and product plans are primarily written documents.

If we go back to Psych 101, **there's a reason visual images are used to probe the thinking, feelings and emotions that are involved in processing an experience.** Words have multiple meanings and are full of hidden assumptions. On the flip side, using a detailed concept visual too early in the process will tend to shut down productive refinement simply because it looks complete and final.

The power of prototyping is we learn as we go. It makes us express our reactions, consider multiple strategic levers, and interpret the implications out loud, exposing areas that need more thinking and uncovering our embedded assumptions.

- ideas
- scenarios
- environments



Rather than trying to perfect the description of a solution while parked behind a flat-panel monitor, slap together something that represents the physical object, the experience or the environment and see if it's what you had in mind.

Even better, build and debrief your prototypes as a team to help build shared understanding without being dragged into toothless consensus.



product development technologies, inc.

About PDT

At PDT we believe the success of a project relies on our team members' insight into today's product development issues, advances, technologies and trends. We actively seek out information to stay savvy to the issues and opportunities facing our clients. Our global team uses these insights to create products and strategies that help our clients bring new ideas to market which inspire, spark desire and impact their bottom line. We try to share just a few of these insights, observations and opinions in each issue of PULSE, but please visit www.pdt.com for more information or contact us at any of our offices below.



PDT Lake Zurich

p 847 821 3033

PDT Minneapolis

p 763 694 8851

PDT Austin

p 512 244 1795

PDT Oxford, UK

p +44 (0) 1844 278 000

PDT Chicago

p 312 440 9404

PDT Fort Lauderdale

p 954 428 3404

PDT Los Angeles

p 310 601 7167

PDT Lviv, Ukraine

PDT Shenzhen, China

This Issue's Contributors

Tim J. Morton is passionate about knowledge, family and adventure. Design Manager at PDT-Austin, Texas, Tim quickly discovered how experiences outside of your regular 'lifesphere' can lead directly to breakthrough ideas for design, business and life. 'Don't be afraid to step out once in a while!'

Marc Bertaud draws on a broad base of experience as a p&l manager and consultant to help clients clarify the opportunity space, envision strategic platforms, and ensure concepts meet both user needs & business objectives. When he's not rattling about with his very active family, serving as their on-demand chef, or recrafting the homestead, you'll find him on a back road, chasing Zen moments astride a thundering chrome horse.



Tim J. Morton, Marc Bertaud

askpdt@pdt.com
www.pdt.com