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Winning With Digital Velocity: "Slow" and "Digital" Just Doesn't Work

NTT DATA Services
formerly Dell Services

Industrial-age businesses had an internal focus. As evidence, consider SWOT and PDCA.
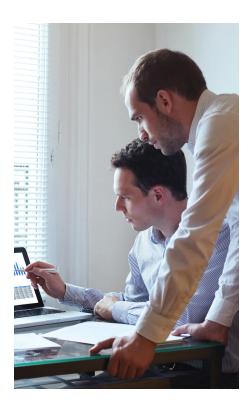
SWOT, a popular strategic planning framework, stands for "strengths, weaknesses, opportunities and threats." SWOT planning starts by looking inward, at a business's strengths and weaknesses.

Outward-facing businesses reverse the sequence — they perform a TOWS analysis instead. This means planning starts with understanding marketplace changes and how to deal with them (threats and opportunities). Strengths and weaknesses aren't meaningful, except in the context of marketplace threats and opportunities.

PDCA is the popular plan-do-check-act framework for internal process optimization. It's a useful framework, so long as planners understand that optimization is only meaningful when the process parameters to be optimized are clearly identified and ranked.

Usually, the goal of process optimization is assumed to be minimizing defects and incremental costs, which can help increase competitiveness — when process savings are used to reduce product pricing, and when product pricing and fewer defects are what customers care about most — an assumption that's often but not always right.

But even when the assumption is right, more often than not, the primary reason for reducing incremental costs and defect rates isn't to make products more competitive. It's to improve gross operating margin; EBITDA (earnings before interest, taxes, depreciation and amortization); return on equity; or some other measure of profitability.

The business case for speed: competitive advantage

Modern, digital businesses recognize that bottom-line results come, not from financial engineering, but from winning in the marketplace. Their intense emphasis is on competitive advantage. Outstanding products and services, industry-leading customer care, brilliant marketing and an aggressive sales force certainly can contribute. They're useful tools and are not to be taken lightly.

But competitive strategy has a deeper dimension. It's also about anticipating what competitors are going to do to win customers and developing tactics to make their efforts ineffective. Even more important, it's about anticipating unexpected sources of competition and neutralizing those threats, as well.

Businesses that compete at this deeper level apply a different methodology than PDCA. They adopt and master the OODA (observe, orient, decide and act) loop. Developed by Colonel John Boyd as a framework for military planning at all levels of engagement, OODA works as follows:[1]

1. **Observe:** Understand the situation you're faced with.

2. **Orient:** Understand your position in the situation,especially how your own biases affect your perceptions of your position.

3. **Decide:** Based on your situation and position, determine the best course of action available to you.

4. **Act:** Execute your decision.

And after you act, restart the loop. Unlike PDCA, the essential tenet of OODA theory isn't self-correction through feedback. It's the importance of having faster OODA loops than an opponent— faster, that is, without diminishing excellence in each of the steps.

The result: Your opponent must either sacrifice efficacy in each of the steps, or bypass the process altogether and simply guess as to the best course of action. Those with slower OODA loops are thrown into chaos by those whose loops are faster.

OODA in action
OODA is more than just another military metaphor whose application to business is purely theoretical. Here are three examples of modern businesses driving extraordinary growth by using OODA-like strategies and tactics to gain competitive advantage.

Amazon: The e-reader war
Even before introducing its Kindle e-reader, Amazon was defeating Barnes & Noble in the marketplace, even though Barnes & Noble had marketshare, mindshare, physical bookstores across the U.S. and longstanding relationships with publishers, while Amazon had nothing but chutzpah and investment capital.

The competition between Amazon's Kindle and Barnes & Noble's Nook is particularly useful for illustrating OODA principles.

In the mid-2000s, Amazon **observed** the failed attempts to sell e-readers and e-books that had been occurring since 1998. It **oriented** to its own existing capabilities, its customers' growing comfort with technology and the nature of the failures — none provided complete solutions and became little more than novelties.

> The result of having faster OODA loops is that before your opponent can act, your actions alter your opponent's situation, effectively resetting them to the beginning of the process.

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[1]"Sun Tzu, Maneuver Warfare, Boyd Cycles, Blitzkrieg," by Curt Sahakian. CEO-Notes Newsletter. http://ceo-notes.us/samplearticle.htm.

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Amazon's leaders **decided** it had the ability to create a marketplace for e-books, but only by providing a complete system that was more convenient for customers than physical books.

Then Amazon **acted**, launching the Kindle e-reader in 2007, with roughly 200,000 titles ready for download. Meanwhile, Barnes & Noble, a bookseller since 1917, waited until the evidence that consumers would buy e-books in large numbers was inescapable. And so, instead of preempting Amazon, it waited two full years after the Kindle was released to launch its Nook e-reader as a defensive move.

Unlike Amazon, Barnes & Noble chose a public domain format (EPUB files) for the Nook, giving it a significant theoretical advantage — it made more than a million Nook titles available.

Amazon's faster OODA loops more than compensated. During the two-year period Barnes & Noble needed to release its e-reader, Amazon built an entire publishing ecosystem with:

- E-reader software for every plausible e-book reading platform — selling Kindles was nice, but selling books mattered more.

- A complete self-publishing environment that lets anyone publish a book electronically at essentially no cost, complemented with

on-demand printing and physical bookselling through its CreateSpace subsidiary.

This self-publishing environment gave, and continues to give, Amazon two major competitive advantages beyond the direct revenue stream it creates: Amazon sells a large number of titles that aren't available for the Nook, and it disintermediates traditional publishers, giving Amazon significant negotiating power.

As of June 2015, Amazon is diversifying into other types of content, and its research and development budget across all of its businesses is more than $9 billion annually. Barnes & Noble hasn't invested in research and development in at least four years.

Apple: Winning by constantly changing opponents

There were at least six predecessors to the iPod — with companies like Sony selling their own MP3 players for years before the iPod was released in 2001. But Apple accurately observed the existing players, determined their poor designs constituted an opportunity (it oriented), and in 2000, decided to enter the market with a superior device. Then it acted, shipping its first iPod less than a year later.

The iPod shared Apple's trademark hip and elegant design and ease of use while changing the entire concept by adding

orders of magnitude more storage than its competitors. Instead of being just another portable music player, the iPod made its buyers' entire music library portable.

But elegant design, ease of use and storage are not protectable concepts. Apple's competitors responded rapidly but predictably. As early as 2003, the MP3 player marketplace began to show signs of commoditization. While the iPod was still considered the industry's premium product, competitors' products were easy enough to use, had as much capacity and cost less.

Apple responded with new models every year, each smaller and with more capacity than their predecessors, leading competitors to focus on matching the iPod's capabilities at a lower price. That is, they oriented wrong: Apple caught its competition completely off guard, not with new features or lower pricing, but by ignoring them. It chose a more advantageous group of competitors: Apple entered a completely different market by opening the iTunes Music Store in 2003 in competition with every retailer that sold CDs.

This added a "feature" — the convenience of buying and downloading music over the internet — that Apple's MP3 player competitors couldn't match, while giving iPod owners the opportunity to buy music one song at a time, instead of one CD at a time. And to own music

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legitimately: at the time, most sources of downloadable music were bootlegged.

Apple repeated this pattern in the intervening years. Observing marketplaces; orienting, especially in terms of the relative weaknesses of the existing competition compared to what Apple might accomplish with its own products and services; deciding which marketplace to enter in ways that also gave it a game-changing advantage in its existing ones; and acting through superior product design supported by highly effective marketing. This led to new products, including:

- **The iPhone:** upending the smartphone marketplace and destroying the hapless Blackberry by creating an apps marketplace and further decimating its MP3 competitors with a smartphone that was also a music player — and had apps.
- **The iPad:** attacking the low end of the notebook computer marketplace with a portable, touch-screen device, while making the iPhone an even

more appealing choice through sharing similar user interfaces and content.

Apple's mastery of the OODA loop isn't about evolving its products more rapidly than its competitors. It's about its ability to choose the right competitors, and the right form of competition.

ESPN: The "might have been" war

Throughout the 1970s, the three broadcast networks — CBS, NBC and ABC — vastly underestimated the aggregate demand for sports broadcasting.[2]

They could have expanded their sports coverage via a complementary cable channel at any time, but while each observed their relative and total marketshare through the Nielsen ratings system, none of them interpreted the numbers (oriented) as untapped demand.

ESPN's founders drew the correct conclusion and acted, launching its network in 1979, ignored by competitors that could have easily crushed it with superior coverage supported by their

longstanding relationships with major league sports and event providers.

Its initial success was more about its competitors being slower than about ESPN being faster.

ESPN continues to dominate sports media. But its challenge now is to identify potential sources of competition and prevent them from becoming actual sources of competition.

Many businesses in ESPN's position rely on intellectual property protection and litigation to protect their position. ESPN relies on velocity.

For example, ESPN's strategists understood that anyone with a smartphone could record a brilliant play directly from their television screen and post it on Twitter in less than a minute. Rather than using copyrights and the Digital Millennium Copyright Act to threaten sports fans with huge financial penalties, ESPN took the necessary steps to post on Twitter faster than any fan could manage.

[2]"SportsCenter: Inside the studio where ESPN is betting billions on the future of sports," by David Pierce. The Verge. January 28, 2015.

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ESPN:
- **Observed** fan behavior (posting video clips taken from ESPN programming on Twitter).
- **Oriented**, reinterpreting this behavior as a new and non-traditional form of competition, rather than as theft of intellectual property.
- **Decided** to preempt the competition by doing the same thing faster and better.
- **Acted** by executing its decision, investing in the necessary technology, processes and human abilities. ESPN recognized that it couldn't "just do it." It had to do it well.

The result: ESPN added another channel to its repertoire, increasing marketplace dominance and adding social media presence instead of alienating its media consumers.

The same is true for ESPN's decision to pioneer second screening, which provides complementary event content to sports fans via a smartphone app or website, offering superior content quickly and preempting sports fans who might otherwise satisfy the same demand. For ESPN, OODA isn't just about beating the competition. It's anticipating the needs of loyal sports fans and providing fast, innovative content.

Faster business and digital transformation

Digital transformation isn't explicitly about speed. It's about building new business and engagement models that depend on new capabilities, as summarized in the table below.

With its new, capability-driven engagement and business models, digital transformation can help speed up OODA loops with:
- **Business intelligence and analytics:** support faster decision making, not just more informed decision making
- **Cloud technologies:** ramp up new capabilities more quickly than possible with traditional IT infrastructures
- **Smart products:** send back information companies can use to develop marketplace messages more quickly than competitors
- **Social-web-driven customer knowledge:** helps businesses target each customer with the most effective marketing before competitors are able to deliver any message at all

Capability	Supporting digital technology
Make better-informed decisions	Business intelligence and analytics
Communicate with and empower customers more effectively and at their convenience — delivering content in the right place, at the right time, on the right device	Analytics, mobile and social web
Ramp up new capabilities more quickly and with less unrecoverable investment	Cloud
Provide more value and sizzle for customers with more capable products, while gaining a steady stream of return information that sellers and manufacturers can use to make their products even more valuable	Smart products/Internet of Things (IoT)
Allow businesses to use product intelligence and connectedness to predict and prevent failures	IoT, integration, analytics and mobile
Understand customers better and learn how to attract new ones using market intelligence and customer relationships	Social web integration and analytics

Figure 1: Digital capabilities and supporting technologies

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Conclusion

The application of OODA theory isn't merely a matter of speeding things up. It isn't about faster product development lifecycles or releasing new marketing campaigns more frequently.

OODA helps businesses beat the competition by outthinking them — and executing innovative ideas as effectively as possible. To be successful, OODA requires an end-to-end plan, engaging every part of the business.

About NTT DATA Digital Business Services

Digital Business Services enables digital transformation for clients by taking a business-first approach. We use a robust consulting methodology to create digital strategy roadmaps for organizations, enabling new revenue models, exceptional customer engagement and superior operational excellence. Our services utilize digital technologies, such as analytics, mobile, social media, cloud and the Internet of Things, to deliver end-to-end client solutions.

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