

Business Evolution

This Free Masterclass Helps You Drive Innovation-Led Growth In Your Business

Research & Development



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Overview: Research and Development (R&D)

What does the masterclass cover?

- Research And Development
- The State of Modern R&D
- How Big Tech Does R&D
- Case Study: Amazon
- Case Study: Google X
- Metrics for R&D Optimization
- The Innovation Ambition Matrix
- Determining R&D Focus
- Where Companies Fail
- R&D Portfolios
- Measuring Patents
- Modern Metrics For R&D
- Allocating Resources To Initiatives
- M&A and Acquiring as R&D
- Best practices For R&D



How does this help you?

The masterclass offers strategies to align R&D with your business goals, ensuring innovations drive desired outcomes and positions you at the forefront of industry innovation by adopting practices from leading tech giants.

How does this accelerate your growth?

Understanding R&D fundamentals empowers you to anticipate tech trends, innovate, and differentiate, driving your business's growth and market distinction by rapidly launching breakthrough products on your own path of continual evolution and differentiation.

How does this delight your customers?

R&D insights enable you to exceed customer expectations with innovative solutions that evolve with their needs, fostering loyalty and enhancing satisfaction.

How does this empower your team?

Integrating R&D principles cultivates a culture of curiosity and innovation, empowering your team to creatively solve problems and drive your business's innovation agenda, fostering a dynamic workplace of continuous improvement and creativity.

Where is this Masterclass available?

The free masterclass and playbook are available at:
<https://howdo.com/masterclass/tools/research-and-development/>

Business Evolution

MASTERCLASSES

Overview



Business Evolution Teaches You Innovation – for Free

What Is Innovation?

Innovation is the process of introducing new **solutions** to your business.

Solutions can be products, platforms, processes, services, technologies, experiences, and brands.

How Does Innovation Help You?

Innovation helps business leaders:

- **Grow revenue** by identifying untapped markets and creating new solutions. *E.G.: **Amazon** created the cloud computing category by launching AWS.*
- **Decrease operating costs** through automation, continuous improvement, supply chain optimization, and efficient resource use. *E.G.: **Toyota** reduced waste and costs with lean manufacturing and just-in-time inventory.*
- **Delight customers** by improving customer service, anticipating needs, and personalizing experiences. *E.G.: **Netflix** keeps users engaged with AI-based content recommendations, increasing engagement and reducing churn.*
- **Mitigate risks** by proactively identifying and addressing potential threats. *E.G.: **Siemens** uses AI-powered sensors to predict maintenance and prevent failure.*
- **Empower teams** to increase productivity by automating tasks while accelerating creativity. *E.G.: **Google**'s innovation policy led to the creation of two of their most popular products: Gmail and AdSense.*
- **Attract investors.** Investors prefer innovators. *E.G.: The most innovative companies are consistently the most valuable companies: **Alphabet (Google), Amazon, Apple, Meta (Facebook), and Microsoft.***

Business Evolution Gives You a Comprehensive Curriculum

These **Free** Masterclasses Walk You Step-By-Step Through the Innovator's Journey

01

Mindset



Develop the mindsets that drive business innovation and growth.

- [Growth Mindset](#)
- [Resilience](#)
- [Continuous Learning](#)
- [Data-Driven Decisions](#)
- [Customer Obsession](#)

02

Plan



Grow your business by designing solutions that customers need.

- [Customer Analysis](#)
- [Competition Analysis](#)
- [Market Analysis](#)
- [Solution Analysis](#)

You Are Here

03

Tools



Boost growth using proven tools from top companies.

- [Key Performance Indicators](#)
- [Weekly Business Reviews](#)
- [Product Management](#)
- [Startup Accelerator](#)
- [Business Incubator](#)
- [Mergers and Acquisitions](#)
- [Research and Development](#)

04

Team



Build talented teams that act with urgency to drive growth.

- [Talent Acquisition](#)
- [Corporate Culture](#)
- [Team Experience](#)
- [Mentorship](#)
- [Communities of Practice](#)

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Business Evolution was Created by an Innovation Expert

West Stringfellow created Business Evolution.

West has over 27 years of experience growing startups and Fortune 500s with innovation:

- **Innovation Leader**
 - **Amazon:** Senior Product Manager
 - **PayPal:** Senior Director, Product & Platform Innovation
 - **Rosetta Stone:** Chief Product Officer
 - **Target:** Vice President, Innovation and Entrepreneur in Residence
 - **Techstars:** Created & led the Techstars + Target Startup Accelerator
 - **Visa:** Vice President, European eCommerce & Innovation
- **Inventor:** Awarded five patents for advertising, payments, and social technologies
- **Entrepreneur:** Sold two patents to a Fortune 50 company
- **Coach:** Empowered hundreds of entrepreneurs, executives, and teams

West founded HowDo in 2017 to democratize innovation.

Dear Innovator,

To help you grow your business using innovation, I'm excited to offer you HowDo's **free** Business Evolution Masterclasses.

These Masterclasses contain actionable insights that you and your team can use to grow your business today. They distill the growth formulas used by the world's most innovative companies into step-by-step guides designed to transform your business ideas into profitable realities.

Having spent nearly three decades navigating the highs and lows of innovating in Fortune 500s and bootstrapped startups, I designed these Masterclasses to work for your business, regardless of size or budget.

I am sharing these Masterclasses as part of my ongoing commitment to democratize innovation.

Wishing you the very best,



West Stringfellow

Founder & CEO, HowDo
Creator, Business Evolution



Research & Development (R&D)

Masterclass



Content

RESEARCH & DEVELOPMENT

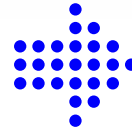
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RESEARCH AND DEVELOPMENT (R&D)

Perhaps the more realistic purpose of R&D investment is to sustain a competitive market position in an environment where advances are coming thick and fast.

R&D investment builds the moats, through IP and operational efficiencies, that can secure a firm's future amidst the seemingly infinite barrage of competition from corporates and startups alike.



That is what R&D means to firms and why it is so important to them.

Fall behind and fall out of the market.

Some of the world's most recognizable innovations are products of R&D labs:



- In the past, AT&T's Bell Labs gave us the transistor and the cellular telephone.
- Today, we see R&D products in the form of Amazon Echo, Google's autonomous car unit, and digital health wearables that measure heart vitals, temperature, and can track when someone falls.

THE STATE OF MODERN R&D

Huge R&D corporate budgets

Specialist R&D tax advisers Swanson Reed reported that, in 2015...

...business R&D spending reached \$356 billion in the United States, an increase from the previous year of close to 5 percent.

...companies are also investing more of their own funds in R&D, particularly manufacturing companies, which accounted for over 60 percent of domestic R&D spending.

This torrent of R&D activity, somewhat based on the belief of many that R&D is the way to market leadership, belies the fact that no scientific correlation has been found between R&D expenditure and company performance.

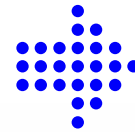
Source: [Swanson Reed](#)

THE STATE OF MODERN R&D

According to Tendayi Viki, Managing Partner at Benneli Jacobs, a strategy and innovation consultancy firm, the belief that R&D spending is somehow connected to increased innovation, revenue growth and profits is just a presumption.

R&D Spending \neq Innovation

PwC's [Strategy&](#) has published the [top 1,000 most innovative companies](#) in its annual report for the past 12 years or more.



Interestingly, each year, the top 10 most innovative companies are rarely the top 10 spenders on R&D.

So, why are companies investing so heavily in a strategy that has no empirical connection to profits?



- R&D is a long-term strategy that creates original moats supported by intellectual property and unique efficiencies.
- While spending on R&D may not bring the instant lucrative breakthrough, it [keeps a company on a level playing field](#) with its competitors as technology and industry practices advance (in addition to providing [tax benefits](#).)

Source: [PwC](#), [Forbes](#), [CNBC](#), [Investopedia](#)

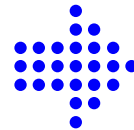
HOW BIG TECH DOES R&D

While corporations are spending more than ever on R&D, at the same time, R&D productivity on a national level is on the decline. Further, The United States has dropped out of the top 10 in Bloomberg's Innovation Index.

R&D Benchmarking

R&D is difficult to benchmark among firms because R&D practices and strategies are unique to individual firms.

For example, Amazon's practice of expensing R&D hides the firm's economic earnings.



According to [Valens Research](#), for Amazon, "GAAP guidelines that require R&D costs to either be expensed or capitalized from acquisitions as in-process, or written off later leads to a low-quality earnings number and an unreliable balance sheet."

Source: [PwC](#), [Bloomberg](#), [HBR](#), [Valens Research](#)

HOW BIG TECH DOES R&D

Comparing the results of R&D across different companies and industries to find patterns is troublesome.

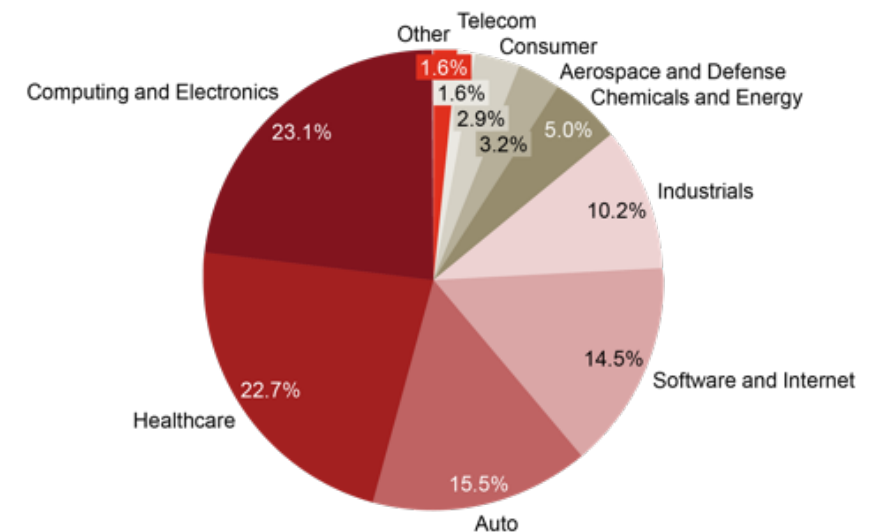
For example, tech companies spend more on R&D than any other companies in the United States (23 percent in 2017, according to PwC). In contrast, consumer packaged goods (CPG) companies are spending a fraction of that (3 percent in 2017, according to PwC), and 60 to 80 percent of their budgets go towards renovation and maintenance of existing products.



Source: [PwC](#)

Computing & Electronics, Healthcare, and Auto contributed 61.3% of R&D spending in 2017, almost the same as in 2016

2017 R&D Spending by Industry



Source: Bloomberg data, Capital IQ data, 2017 Global Innovation 1000 Study

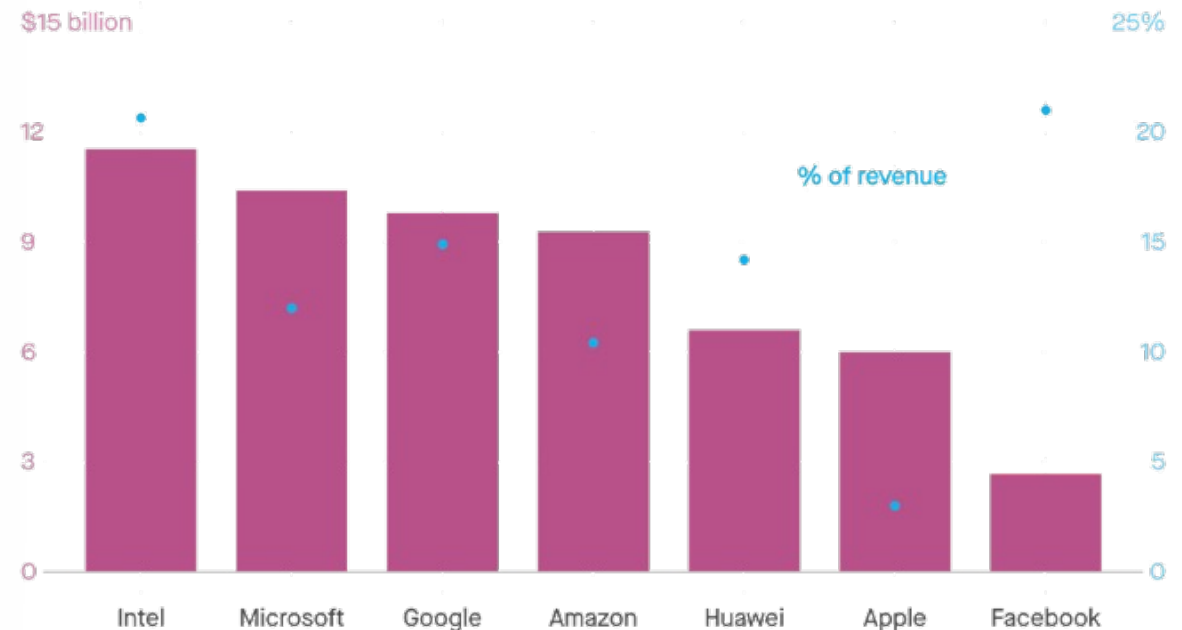
HOW BIG TECH DOES R&D

Zoom in on tech companies and the picture becomes even murkier. As a percentage of revenue, firms such as Apple spend very little on R&D, 3 percent, while Facebook spends 21 percent, according to Alice Truong, reporter for Quartz.

This lack of relationship doesn't mean R&D shouldn't be pursued – Amazon, Facebook, Google, and Microsoft all have high (and increasing) R&D expenditures and are also considered some of the most innovative in the world.



What tech companies spent on R&D relative to revenue



Source: [ATLAS](#), [BCG](#)

CASE STUDY: AMAZON - R&D AS CULTURE

Amazon is the third most valuable in the world, and has been ramping up R&D spending since its inception.

It has surpassed Volkswagen as the world's highest spender on R&D, and the company is nipping at the heels of Apple and Alphabet in terms of market capitalization.

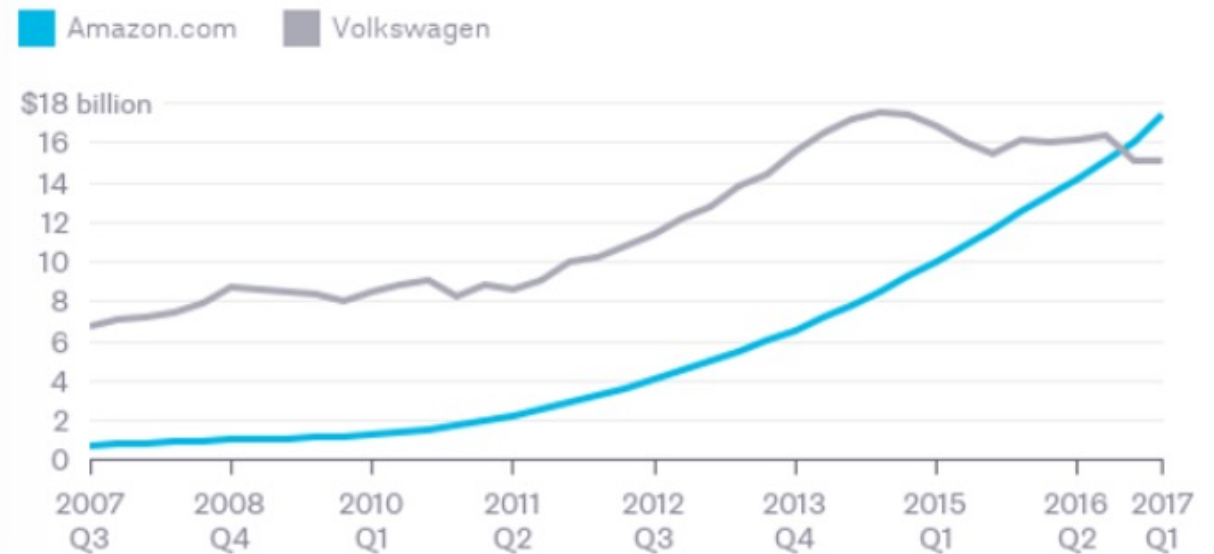
Amazon's most visible efforts are found in Lab126, an R&D subsidiary based in Sunnyvale, California. This is the branch responsible for all of the hardware products tied to Amazon – the Kindle, Echo, and the [ashamed] Fire Phone.



Source: [Fortune](#), [Bloomberg](#)

Amazon Passes VW

Research and development spending, trailing 12 months



Source: Bloomberg

BloombergView

CASE STUDY: AMAZON - R&D AS CULTURE

To better understand the origin of Amazon's R&D strategy, we can look at Bezos' 2010 Letter to Shareholders. Bezos explains why Amazon aggressively invests in technology, and it goes beyond Lab126:

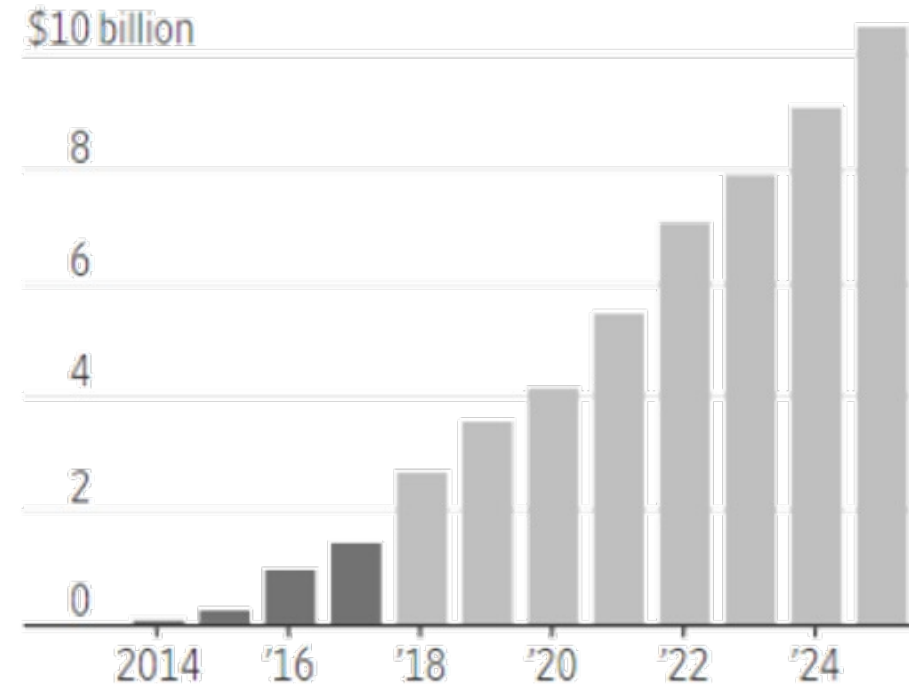
"All the effort we put into technology might not matter that much if we kept technology off to the side in some sort of R&D department, but we don't take that approach. Technology infuses all of our teams, all of our processes, our decision-making, and our approach to innovation in each of our businesses. It is deeply integrated into everything we do." Bezos adds, "these techniques are not idly pursued – they lead directly to free cash flow."

Amazon's R&D strategy suggests many best practices. Here are two:

- Use technology throughout an organization not just as part of partitioned R&D activities.
- Recognize core competencies and maximize them.

Source: [Sec Info](#)

Amazon Echo market value



Sources: Loup Ventures estimate

CASE STUDY: GOOGLEx - SEARCHING FOR RADICAL BREAKTHROUGHS

R&D can also be responsible for many of these companies most ambitious (and sometimes bizarre) projects that are not part of a firm's core competencies.

Google has a sandbox meant solely for these types of projects – “X.” X, aptly subtitled, “The Moonshot Factory,” focuses on radical projects that are 10 times better than any existing solution.

Why?



- According to Astro Teller, director of Google X, a 10 times improvement is often easier than a 10 percent improvement.
- Teller explains that when looking for a 10 percent improvement, a company is tied to existing technologies and solutions, but when shooting for 10 times, anything goes.
- Moonshots are at the intersection between a huge problem, a radical solution, and a breakthrough technology.

Source: [Wired](#)

CASE STUDY: GOOGLE X - SEARCHING FOR RADICAL BREAKTHROUGHS

The most visible effort from Google X is its autonomous car project, spun out as an Alphabet Subsidiary called Waymo. **The Waymo moonshot is framed as follows:**



Problem: Close to 1.25 million people die on roads every year globally, and 94 percent of those accidents are caused by human error.

Radical Solution: What if cars could drive people safely from point A to point B at the push of a button – without needing a human to take over driving at any time?

Breakthrough Technology: Vehicles could have built-in sensors to detect pedestrians, cyclists, vehicles, road work and more from a distance of up to two football fields away in all directions. Smart software could predict the behavior of objects and road users to help the vehicle navigate the vehicle safely through everyday traffic.

Source: [Google X](#)

CASE STUDY: GOOGLE X - SEARCHING FOR RADICAL BREAKTHROUGHS

Today, Waymo is the frontrunner in the autonomous car space...



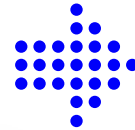
- Lucinda Shen, reporter for Fortune, writes that analysts from Morgan Stanley have estimated the firm's value at or near \$70 billion dollars.
- Waymo struck a partnership in 2017 with Lyft, which has the second biggest volume in U.S. ride service.
- Further, Shen reports that Waymo and Honda are close to finalizing a deal to build automated delivery vehicles, which is a significant commercialization push from a giant that generates around 90 percent of its revenue from advertising.

But this success doesn't come without struggles...

Source: [Fortune](#), [Bloomberg](#), [Investopedia](#)

CASE STUDY: GOOGLE X - SEARCHING FOR RADICAL BREAKTHROUGHS

Google X kills projects — a lot of them



For every Waymo or Verily (Google X's life science spinoff), there are countless projects that don't make the cut.

The organization moves quickly, fails a lot, and iterates based on feedback. Teller describes the thought process behind the killing of their buoyant cargo ship project:

"However cheap they would be in volume, though, we found out it was likely to cost close to \$200 million for the R&D and materials to design and construct the first one. Since X is structured around tight feedback loops of making mistakes, learning, and new designs, \$200 million is way too expensive for us to get the first data point on whether we're on the right track."

— Astro Teller

This cost-benefit analysis must run through every decision, from the mundane to the risky. Google's R&D strategy also suggests best practices that the lay company can apply:

- Balance risk and potential breakthrough goals with investor and stakeholder tolerance.
- Develop a cut-throat portfolio selection strategy.

Source: [Business Insider](#), [Wired](#)

THE INNOVATION AMBITION MATRIX

Ninety-nine percent of mature companies fail when entering new markets, which makes bold R&D ventures both high risk and costly.

Bansi Nagji and Geoff Tuff are partners at Monitor Group and leaders of the firm's global innovation practice.

→ They have researched best practices for R&D portfolio management considering the pressures of market expectations, investors, and global competition.

Nagji and Tuff discuss three types of R&D, or innovation, that they have incorporated into an Innovation Ambition Matrix

Core Innovation

Based on optimizing existing products

Adjacent Innovation

Expands existing business and products

Transformative Innovation

Aims to develop breakthrough products

Source: [HBR](#)

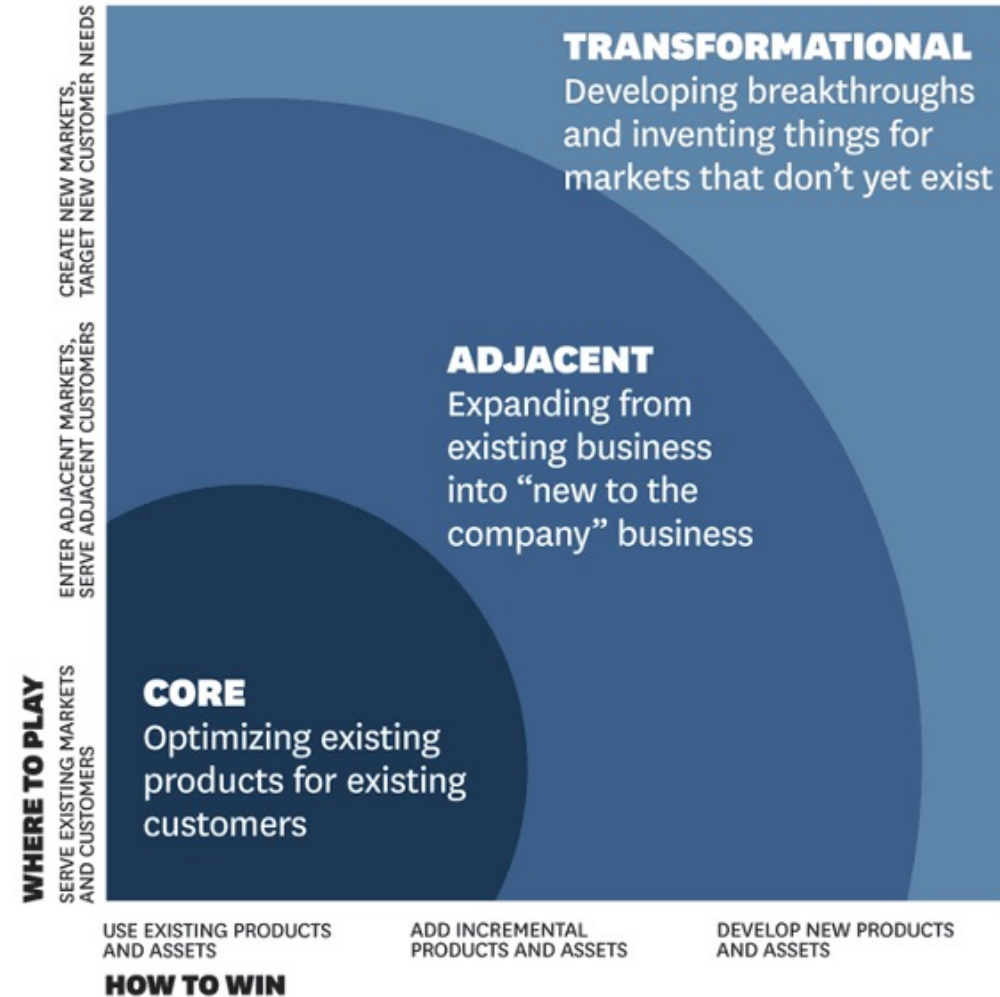
THE INNOVATION AMBITION MATRIX

The matrix helps managers to assess ongoing R&D initiatives, the number of initiatives and the level of investment.

provides a way to shape the overall ambition for the company's innovation, whether it be short or long-term small projects that complement existing products, or high-risk efforts that might offer a breakthrough or a bigger payoff.



Source: [HBR](#)



THE INNOVATION AMBITION MATRIX

The authors developed the Innovation Ambition Matrix to help companies in their decisions to allocate funds to R&D and growth initiatives, and they explain it in detail in their article in the Harvard Business Review.

Core Business R&D

- Nagji and Tuff explain that for some projects, estimating returns to develop an R&D portfolio is easy.
- Traditional financial metrics such as net present value and ROI are applicable and straightforward when evaluating R&D aligned with the core business.
- These calculations assume variables such as adoption rates and price points of new products or ideas, which is entirely feasible for core products.

Transformational R&D

- However, where transformation efforts are concerned, making such assumptions is impractical.
- Some products are abstract, some products build platform stickiness and, in some cases, to quote the late Steve Jobs, "People don't know what they want until you show it to them."
- Estimating transformational ROI and attempting data-drive assessments, in this context, is pointless. Companies need to think differently.

Source: [HBR](#)

THE INNOVATION AMBITION MATRIX

Nagji and Tuff found that, because chief executives often do not have a strong grasp of the myriad initiatives that might already be underway in their organizations, R&D can be haphazard and episodic.

According to Nagji and Tuff, “the companies that have a strong track record of creative endeavors....”



→ Articulate a clear R&D ambition.

→ Balance core and transformational ventures.

→ Have the infrastructure, tools, and capabilities to manage and integrate initiatives.

Source: [HBR](#)

DETERMINING R&D FOCUS

Beyond the core, adjacent, and transformational lens introduced previously, firms must decide on where to focus their R&D efforts in relation to their product offerings. For the majority of companies, the focus has shifted towards software.

From Strategy&'s, "[Software as a Catalyst](#)" report:

"Most of the world's major innovators are in the midst of the same transformational journey. R&D is shifting more and more toward developing software and services. Software increasingly carries the burden of enabling product differentiation and adaptability, and enhancing customer experiences and outcomes."

"This transition is for a good reason — it's the same tactic that has skyrocketed tech giants ahead of the competition. According to Ben Thompson of Stratechery, "while digital infrastructure obviously needs to be maintained, by-and-large the investment reaps dividends far longer than the purchase of any physical good."

Source: [strategy+business](#)

DETERMINING R&D FOCUS

Thompson goes on to provide examples of the strides made due to tech giants' R&D:



- It was expensive to develop mainframes, but IBM could reuse the expertise to build them and most importantly the software needed to run them; every new mainframe was more profitable than the last.
- It was expensive to develop Windows, but Microsoft could reuse the software on all computers; every new computer sold was pure profit.
- It was expensive to build Google, but search can be extended to anyone with an Internet connection; every new user was an opportunity to show more ads.
- It was expensive to develop iOS, but the software can be used on billions of iPhones, every one of which generates tremendous profit.
- It was expensive to build Facebook, but the network can scale to two billion people and counting, all of which can be shown ads.
- Aside from a general preference for software, metrics can help guide firms efforts and spending when creating a research and development portfolio.

— Ben Thompson, *Amazon Go and the Future*, 2018

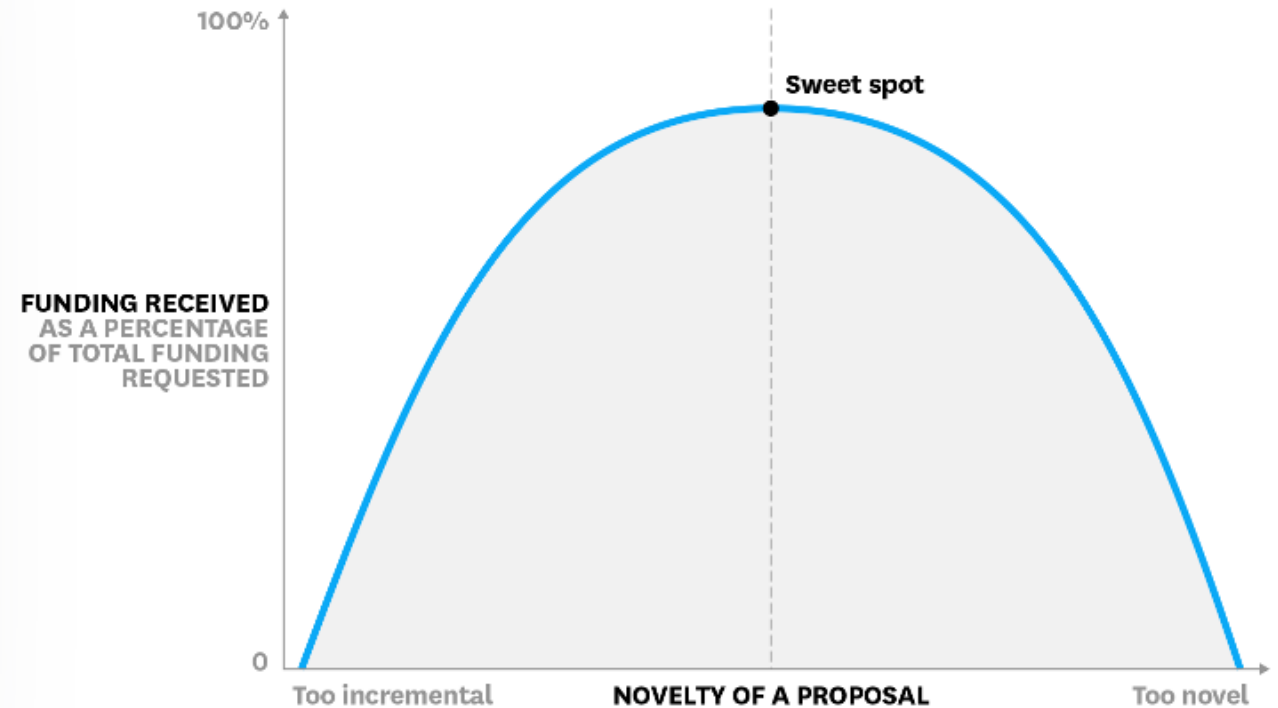
Source: [Stratechery](#)

WHERE COMPANIES FAIL IN SELECTING AN OPTIMAL R&D PORTFOLIO

A study by researchers Paola Criscuolo, Linus Dahlander, Thorsten Grohsjean, and Ammon Salter published in the Academy of Management journal **found that many R&D funding decisions were undermined by simple human bias:**

- The illustration by Criscuolo, Dahlander, Grohsjean, and Salter illustrates how R&D selection is not always conducted scientifically.
- How can this problem be overcome, and a best practice instituted for portfolio selection? Metrics can serve as the guide.

To Win Funding, Innovative Projects Must Hit the Sweet Spot of Novelty



SOURCE "EVALUATING NOVELTY: THE ROLE OF PANELS IN THE SELECTION OF R&D PROJECTS,"
BY PAOLA CRISCUOLO ET AL., ACADEMY OF MANAGEMENT JOURNAL, 2017

© HBR.ORG

Source: [Academy of Management](#)

R&D PORTFOLIOS

A portfolio for R&D should reflect a company's position regarding risk and reward.



- According to Nagji and Tuff, that means building a portfolio that produces the highest overall return and that meets its appetite for risk.

In [Managing Your Innovation Portfolio](#), Bansi Nagji and Geoff Tuff state that a combination of noneconomic and internal metrics can best assess transformational efforts in their early stages.

- For example, one achievement of an R&D initiative is that a team learns by exploring and experimenting.
- This concept of valuing organizational learning can be a tough sell, but it's an important one.

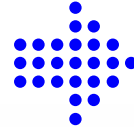
**The most innovative companies are all known for their tolerance of failure and their belief in building a learning organization.
This is central to their cultures that fuel growth and innovation.**

Source: [HBR](#)

MEASURING PATENTS

The number of patents is one measure of R&D efficacy that has persisted for years.

Many researchers within R&D departments come from academic backgrounds and published papers are signals of success.



However, this measure is the equivalent of a blunt instrument when assessing a firm's innovativeness.

Patents are subject to a number of confounding variables.

- For instance, if the firm partners with a university, there is a higher propensity to patent.
- If the firm conducts international business, there is a higher propensity to patent.
- Further, tech companies are moving towards open-source software development, resulting in a lower propensity to patent. These factors hinder patents' value as a measure of communicating value to stakeholders or the greater market.

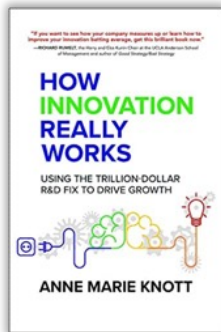
Source: [Oxford Scholarship Online](#), [TechCrunch](#)

MODERN METRICS FOR R&D

Research Quotient

Knott used a metric that she developed to measure R&D productivity – the output that firms get in return for innovation inputs – which she calls research quotient, or RQ.

- This metric is a useful one for managers trying to secure R&D budgets from decision makers and investors.
- RQ calculates the percentage increase in revenue from a 1 percent increase in R&D spending across the organization (for the theory of RQ, see “[Estimating Firms’ Research Quotient \(RQ\)](#)”).



According to Anne Marie Knott, professor in Business at Washington University's Olin Business School in St. Louis and author of the book “[How Innovation Really Works](#),”:

“despite all the experts dedicated to helping companies innovate, the money companies spend on R&D is producing fewer and fewer results. In fact, my research shows the returns to companies’ R&D spending have declined 65 percent over the past three decades.”

Source: [HBR](#), [HBR](#), [Knott](#), [How Innovation Really Works](#)

MODERN METRICS FOR R&D

The decline that Knott sees in the RQ of companies mirrors the overall decline in GDP growth in the United States for the past 30 years.

Knott suggests three theories that might explain the declining trend in returns from R&D spending.

Less Novel Ideas

The first is that R&D work is **more difficult in the current age because the best and most obvious ideas are quickly discovered, and the remaining ideas are less novel or groundbreaking.**

Diminishing Returns

The second theory is that there are diminishing returns to investment in research labor – more researchers decrease the number of innovations per worker due to duplicated efforts.

R&D Skill

But Knott does have another explanation, which is that companies may have become worse at R&D.

Source: [Oxford Scholarship Online](#), [TechCrunch](#)

MODERN METRICS FOR R&D

What Knott identified using RQ is that companies aren't necessarily fated when an industry declines or is disrupted; they often find opportunities elsewhere by diversifying.

- Knott claims that “if the top 20 firms traded on U.S. exchanges had **optimized their 2010 R&D spending** using the RQ method, the collective increase in market cap would have been an astonishing \$1 trillion.”
- Part of that optimization uses RQ to leverage the potential longer-term benefits. According to Knott, “RQ also allows companies to **link changes in R&D strategy, practices, and processes more closely to profitability and value.**”



ALLOCATING RESOURCES TO CORE, ADJACENT AND TRANSFORMATIONAL INITIATIVES

Nagji and Tuff (referenced previously) conducted research on the industrial, technology, and consumer goods sectors that showed a pattern whereby **the allocation of resources across core, adjacent, and transformational initiatives correlated with significantly better performance that was reflected in a firm's share price.**

Optimal Resource Allocation

According to Nagji and Tuff companies that allocated the percentages below “outperformed their peers, typically realizing a P/E premium of 10 percent to 20 percent.”

Core Innovation

Based on optimizing existing products

70%

Adjacent Innovation

Expands existing business and products

20%

Transformative Innovation

Aims to develop breakthrough products

10%

Source: [HBR](#)

ALLOCATING RESOURCES TO CORE, ADJACENT AND TRANSFORMATIONAL INITIATIVES

While each company will look for a different balance depending on their risk profile...



- ...the authors stated that Google strives for a 70-20-10 balance and estimates that the 10 percent allocated to transformational efforts are responsible for the company's new offerings.



Risk

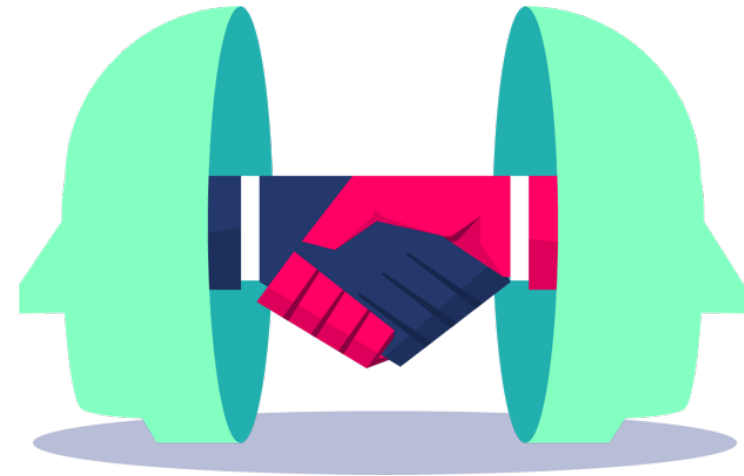
- Nagji and Tuff state that a company that seeks to catch up with industry leaders might choose a more risky, transformational portfolio.
- A company that is already dominant may decide to reduce its risk and concentrate on core initiatives, not transformational ones.

Source: [HBR](#)

M&A AND ACQUIRING AS A NEW FORM OF R&D

The trend in M&A of acquiring high-tech startups has become a popular strategy for supplementing or mimicking traditional R&D.

- According to Matt Garratt of Salesforce, [it's not just tech companies that are involved](#).
- Of the total number of tech acquisitions in 2016, Garratt says "around half were from non-tech buyers."
- The panelists noted that corporates who do invest and acquire tech startups are unfamiliar with the process and concepts such as "deal flow, diversifying bets, and portfolio company growth."



Source: [CB Insights](#)

BEST PRACTICES FOR R&D

Based on Nahji and Tuff's research and a case study analysis of Amazon and Google outlined in the previous article, "Research and Development – Who Does it Well and How," we summarize some **best practices of these market leaders**.



- Articulate a clear R&D ambition ([Nagji and Tuff, 2012](#)).
- Balance core and transformational ventures ([Nagji and Tuff, 2012](#)).
- Use technology throughout an organization, not just as part of partitioned R&D activities ([Bezos, 1997](#)).
- Recognize core competencies and maximize them ([Bezos, 1997](#)).
- Balance risk and potential breakthrough goals with investor and stakeholder tolerance ([Nagji and Tuff, 2012](#)).
- Develop a cut-throat portfolio selection strategy ([Google X, 2016](#)).

Source: [HBR](#), [Business Insider](#), [SEC Info](#)

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01

Mindset



Develop the mindsets that drive business innovation and growth.

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02

Plan



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03

Tools



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04

Team



Build talented teams that act with urgency to drive growth.

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West's Closing Note to Innovators

For those driven by a passion to make an impact, solve large problems, and reap significant rewards, successfully innovating stands as one of the most exhilarating and fulfilling pursuits. That said, **just a friendly reminder:**

Knowledge is Power. To empower you, I am sharing the knowledge I have gained from 27+ years of hands-on experience. Please do not stop learning here.

- **Empower yourself with the right knowledge.** Do not rely solely on my experience and knowledge. To determine what is right for you, your team, your business, investors, and customers, do your own research. To help, I have curated thousands of links in Business Evolution's [Masterclasses](#). Use this as the foundation for your further research.
- **Seek multiple experienced perspectives.** Follow relevant experts who share their insights on YouTube, LinkedIn, X, StackOverflow, Reddit, GitHub, or wherever they share their insights. The more you know, the more likely you are to make the right decision.
- **Stuck? Get help.** Others have solved your problem before. They may have even written about it. You may be able to hire them. Or use a generative AI to brainstorm (I'll show you how). In my experience, the joy of the journey is finding answers, learning and growing.

Innovation takes commitment and requires real time, money, and effort.

INNOVATION IS HIGH RISK

- **Innovation involves real risks.** If you fail, you risk your professional reputation, your credibility, your mental health, and your personal wealth.
- **Everyone fails at some point on their journey.** But remember, every great success story 🎉 has its chapters of challenges overcome.
- **To reduce the risk of failure, hire experts and use data-driven decision making, customer-obsession, long-term planning, and continuous improvement.**
- **When you fail, learn quickly from the lessons, ensure you don't repeat the mistakes, and forge ahead only if you assess it is safe to do so.**

Time is our only non-renewable resource. Use yours wisely.

- **Please take time for yourself – especially your health and loved ones.** It's easy to get lost in innovation's allure and lose track of what truly matters.

"Best Wishes Innovating! I hope the Business Evolution Masterclasses help you on your journey." – West Stringfellow

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