

Digital experimentation: The way forwards



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A brief guide to experimentation

Digital experimentation isn't the next big thing. It's the big thing, full stop. Experimentation is rapidly establishing itself as the way successful companies do business: not only mega brands like Amazon, HP, Visa or Sky, but also the numerous startups for who it is an intrinsic part of their DNA.

Why? Digital experimentation goes far beyond testing cosmetic changes to the text, layout and imagery on a website. It also allows you to gauge the impact of changes to underlying functionality: a refined search algorithm, a new way of displaying recommendations, different price points and so on. In short, it allows you to test how products actually work, rather than just how they look.

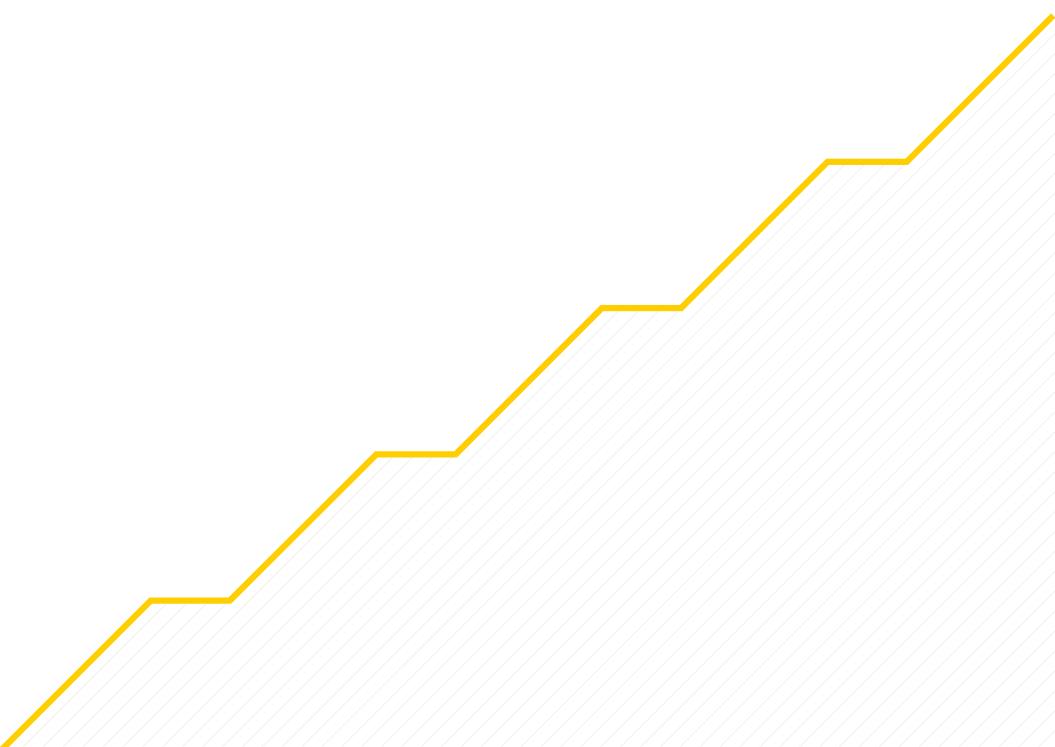
This in turn provides accurate, reliable insight into what customers respond best to, allowing you to continually fine tune every aspect of every journey across every digital channel.

By replacing the guesswork with hard data, you consistently deploy compelling experiences, maintain a competitive advantage and maximize ROI from your digital investments.

Class-leading companies are using data to increase their understanding of customers and products, then feeding that knowledge back into development as part of a continuous process of non-stop improvement.

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In short, digital experimentation shows you what your customers really want, as opposed to what you think they might want.



For them digital experimentation is the only real way to understand what works more accurately, release it more quickly, and grow more successfully.

Our new guide will help you to understand the five stages to implementing a high-performance program, as well as the 6 benchmarks that allow you to measure your progress towards unleashing the full power of experimentation.



Experimentation improves ROI

You end up investing in the innovations you know will work, rather than wasting budget on those that don't.

Experimentation removes the guesswork

By making decisions based on hard facts, you can accurately forecast the impact of new experiences, campaigns, features and functionality.

Experimentation lets you test everything

Don't limit your program to big ideas and innovations, but drive progress through continuous incremental changes too.

Experimentation equals understanding

By understanding customer behavior, you can improve their digital experiences to increase loyalty.

Experimentation minimizes risk

When you know what works, you not only de-risk the deployment of new experiments and features. You also accelerate the development process from idea to roll out across your entire technology stack.

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The optimization journey

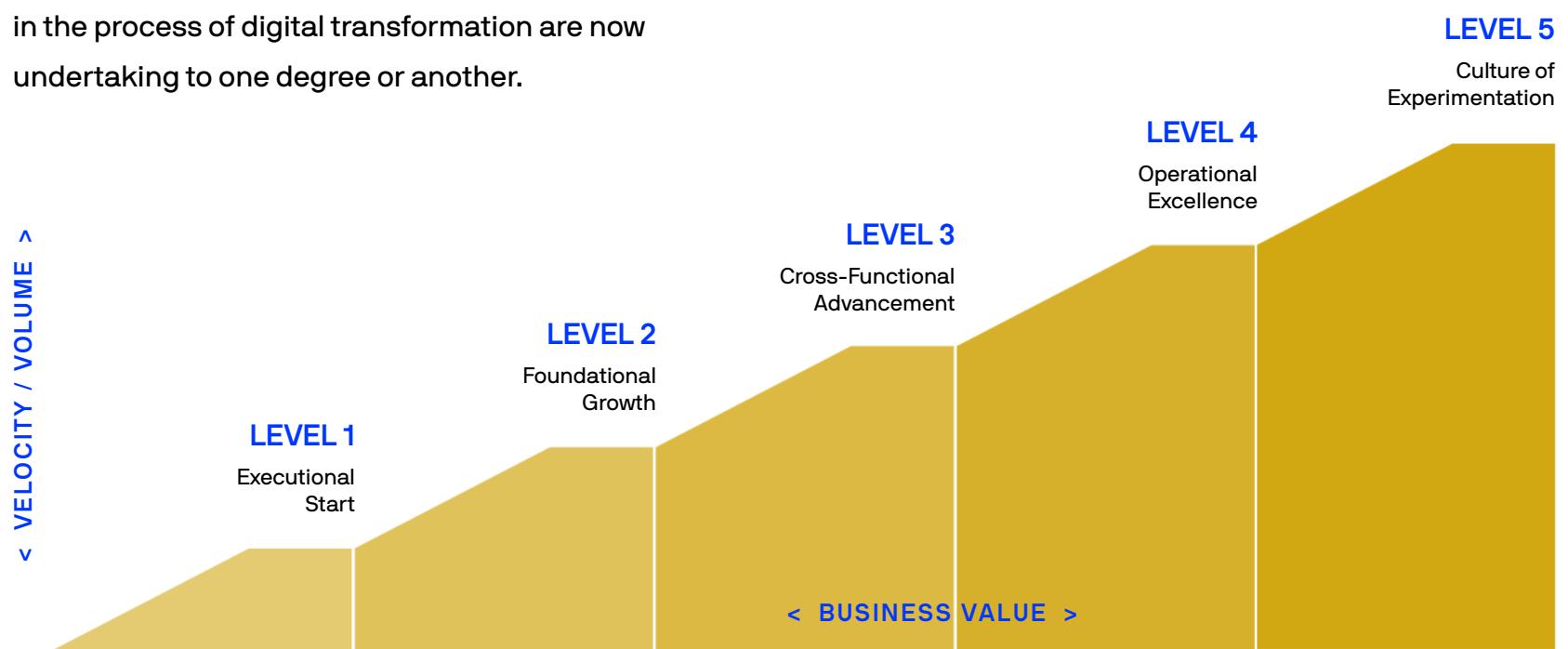
Section 1 The journey begins...

Experimentation isn't a thing. It's a journey. Or even, the way we see it at Optimizely, like climbing a mountain.

The optimization journey takes you from the very beginnings of building an experimentation program all the way to creating a true culture of experimentation.

This is the journey that more and more organizations in the process of digital transformation are now undertaking to one degree or another.

Sure, it's a challenge. But with the right preparation, team and tools - plus a real understanding of the route you need to take - your progress to the summit can go smoothly ahead one stage at a time. And when you do get there, it's all so worthwhile.



Section 2 The 5 stages in the journey

Level 1: Executional Start

Getting your program started.

Level 2: Foundational Growth

Acting on initial learnings to build a solid foundation with a dedicated team and clear strategy.

Level 3: Cross-Functional Advancement

Applying the experience of your first team to others across both marketing and product development.

Level 4: Operational Excellence

Strengthening your program and finely tuning it across each category.

Level 5: Culture of Experimentation

Creating a true culture of experimentation across your entire organization.

So what are the challenges you'll be facing along the way?

- 📍 Building a dedicated experimentation team
- 📍 Designing an experimentation strategy for your team to implement
- 📍 Adopting the technologies that allow you to make the most of that strategy
- 📍 Creating a culture of experimentation within the wider organization

Section 3 Which stage are you at?

Experimentation is a new discipline for many companies, so it can be difficult to benchmark where you are on the journey. To help, we have created a brief online evaluation that measures your progress across four key categories.

- 1. Team:** the types of roles you have working on your program, and how much time they dedicate to experimentation.
- 2. Culture:** how widely experimentation is embraced within your organization.
- 3. Strategy:** the types and the complexity of the experiments you run.
- 4. Technology:** the technologies that support your experimentation program.

Want to take the test?

You'll find it at www.optimizely.com/maturity-model

We've found that the majority of our customers are at the start of their journey at levels 1 and 2. Those at a higher level have already made significant organizational commitments to experimentation.

Yet even just being on the journey puts you ahead of the thousands upon thousands of companies still to embrace experimentation. And however far you go, there's always room for improvement. Take Sky for example, who have stated their intention to push things even further despite the fact they are already highly advanced.

Experimentation in action:

Sky began investing heavily in digital innovation for Sky.com in 2015, climaxing in a purpose-built Digital Center of Excellence. Their focus on excellent customer experience saw them run an experiment that resulted in a seven-figure reduction in call center interactions.

Section 4 So what do the four categories of the model look like at each stage?

1. Team

Levels 1 and 2: limited or part-time resources are dedicated to experimentation, say 10 hours a week or less.

Level 5: 120 hours a week across a variety of roles is the norm, with many organizations establishing a Center of Excellence.

Moving to the next level

Get teams to spend more time on experimentation – so think how to justify the additional resources required.

2. Culture

Levels 1 and 2: Management is aware of but not actively driving experimentation, with the program likely to be limited to a single department at best.

Level 5: The entire C-suite will be aware of and engaged in the value of experimentation. Many will even speak publicly about the positive impact of the program on the business.

Moving to the next level

Expand the reach of your programs and build management awareness by creating the right reporting and communication structures.

3. Strategy

Levels 1 and 2: No detailed long-term strategy and maybe not even a defined list of goals. The focus is usually on testing changes to the front-end: color, text, imagery, etc.

Level 5: A fully developed roadmap will include advanced experimentation that also tests underlying features and functionality, as well as multiple channels such as email, mobile and even wearable devices.

Moving to the next level

Set clear business goals that align to company metrics. Goal trees help define the strategic KPI's your program will optimize. Implement process best practices and hypothesis frameworks.

4. Technology

Levels 1 and 2: Technology likely to be limited to basic analytics.

Level 5: Custom-built API integrations and access to first and third party data allow far more advanced targeting, segmentation and evaluation.

Moving to the next level

Clarify the metrics you need to track, evaluating if you are able to track them and, if not, what you need to do.

Experimentation in action:



To increase the number of sign-ups to their Instant Ink subscription service, HP tested a variety of enrolment offers – including a free trial as well as positioning the service as a printer feature. Numbers grew by 37%.

In fact, HP have built a Center of Excellence that has seen almost 500 experiment campaigns and driven an incremental \$21 million in revenue working with Optimizely.

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The 6 metrics to benchmark your program

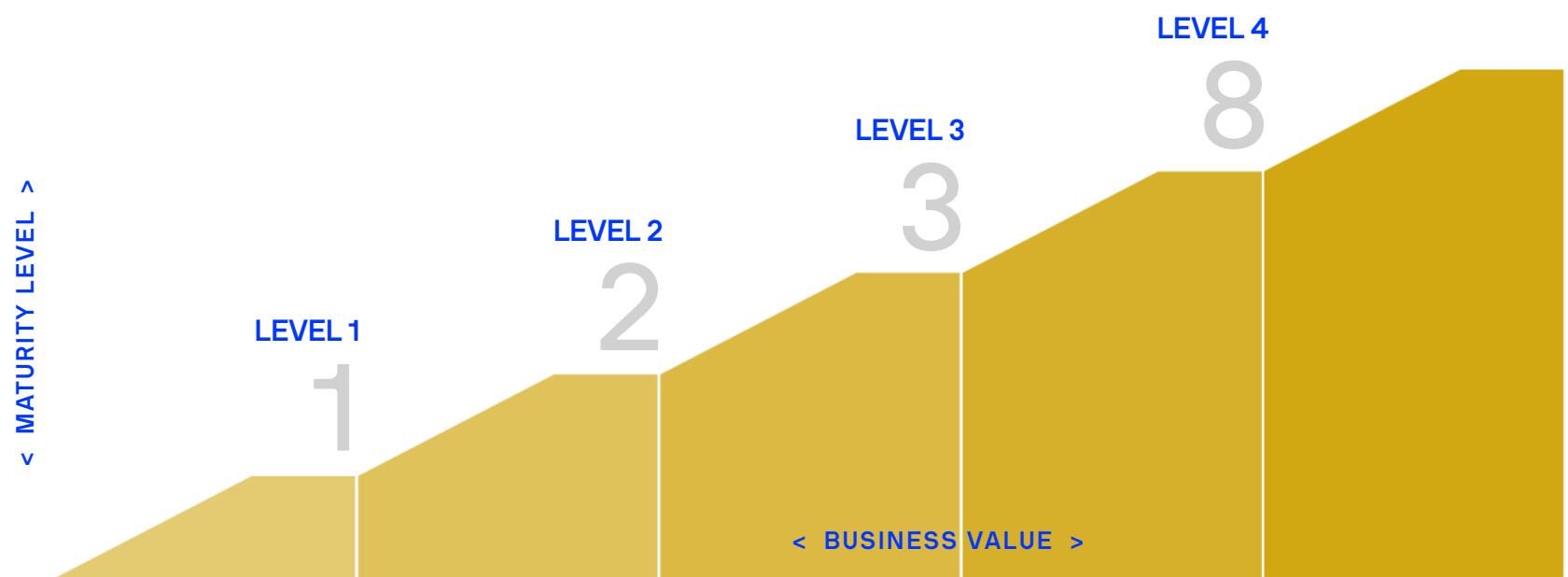
You've got your experimentation up and running.

You've identified where you are on your journey.

So how do you measure how efficiently your program is actually working?

We've identified six benchmarks that will help you identify any inefficiencies. This is not intended to be an exhaustive list. Not all may be applicable to your organization. But experience has shown they work well.

These six metrics are divided into two categories:
performance and complexity.



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Optimizely offers all kinds of features designed to increase the number of experiments, support faster decisions, and ensure your organization is making the most of experimentation.

“Our success at Amazon is a function of how many experiments we do per year, per month, per week, per day.”

– Jeff Bezos



Benchmarking metrics > **Performance**

1. Velocity

Velocity basically means the number of experiments that you run each month, quarter, or year. You never know the outcome of experiments in advance and it's a simple fact of life, that most of them will fail. So velocity matters because the more you experiment, the higher the chance of determining winning ideas.

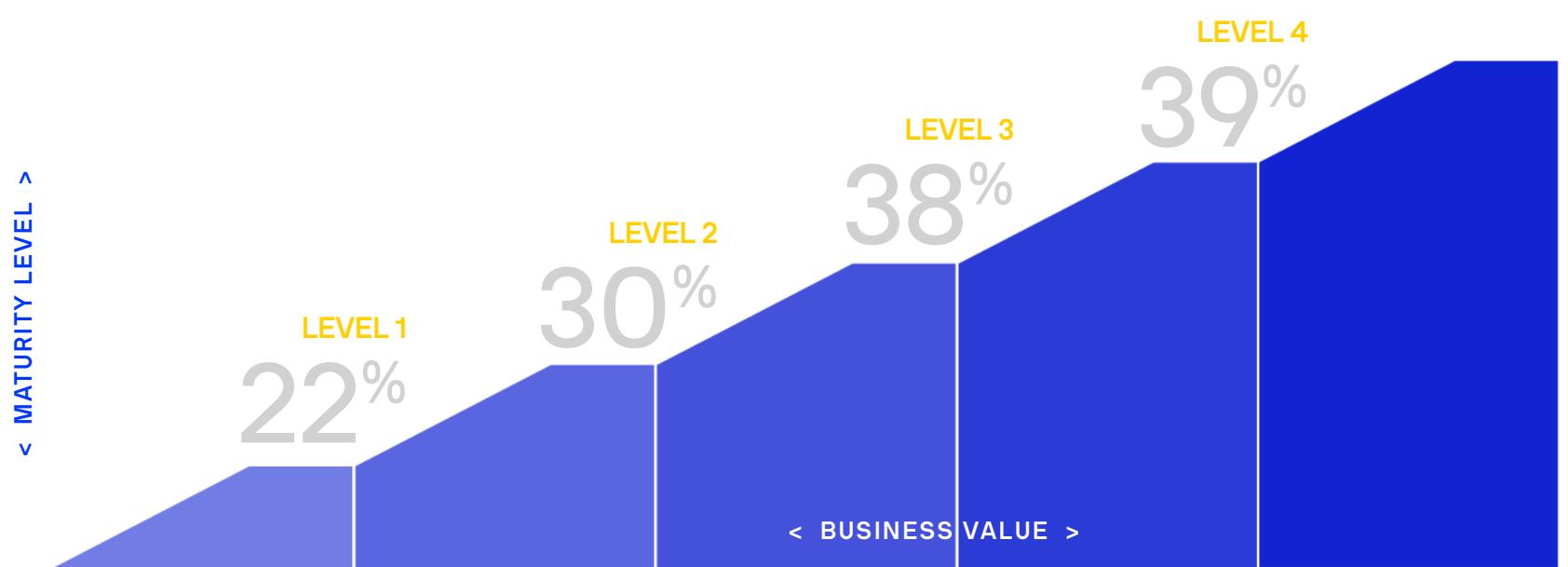
The further along the journey you are, the more experiments you are likely to perform. At level 1, you may just perform a single experiment each week. By level 4 this often rises to as many as eight.

2. Statistical significance

Statistical significance represents the likelihood that any positive impact of a new idea compared to the original baseline is not due to chance. The higher the level of statistical significance, the more confident you can be in the results of an experiment. For example, if your results show a 90% significance level, you can be 90% confident that they are due to an actual underlying change in behavior and not simply random chance.

This figure is vital because in statistics you use a small sample of your audience to make assumptions about the total population.

The percentage of experiments that hit a statistically significant result can range from c.22% at the first level of your journey to 39% by level 4.





3. Win rate

Your win rate is basically the number of experiments that reached statistical significance and saw a positive improvement. The further along your experimentation journey you are, the higher the win rate is likely to be. For example, more complex experiments targeted to the right audiences are often key drivers of better win rates.

At the start of your experimentation journey, you can expect your win rates to hit around 9%. By level 4, this should increase to something in the region of 23%.

At the same time, don't be afraid of failures. Experimentation is all about testing everything - pushing the limits of what might work, not just testing safe ideas you're pretty sure will work.

Experimentation in action: BBC

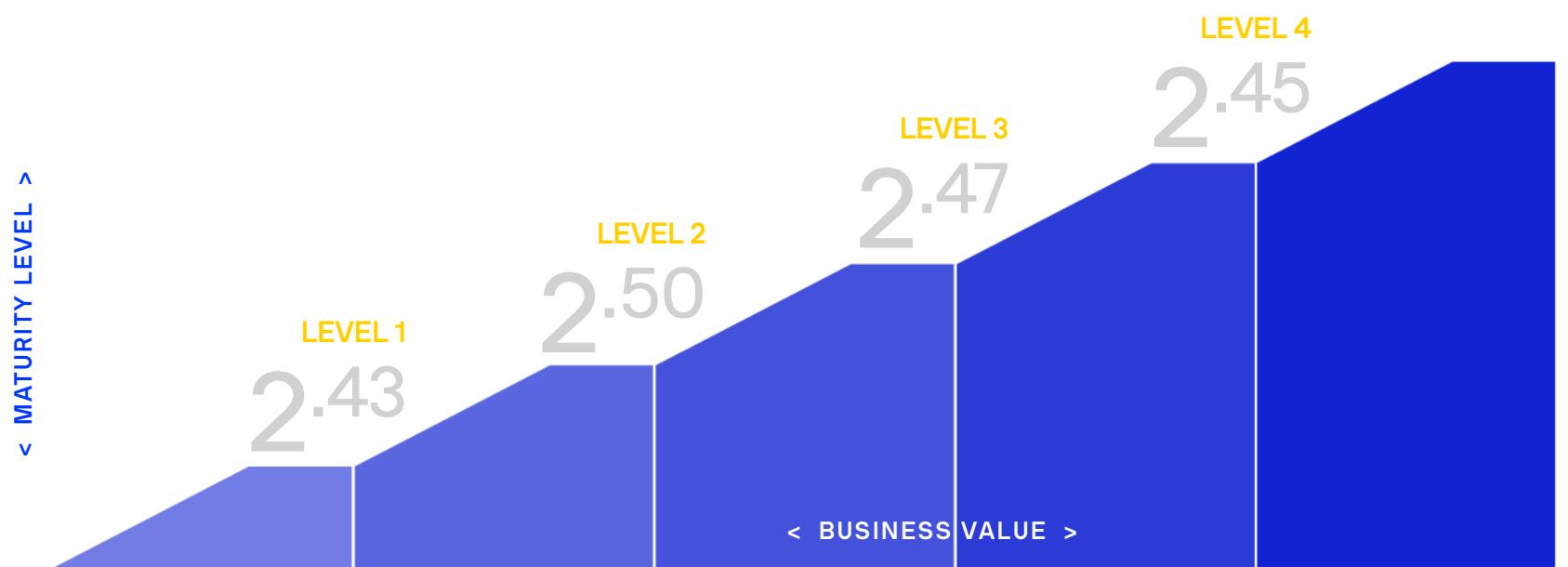
iPlayer is the BBC's TV and radio catch-up service that allows viewers to stay up-to-date with their favorite shows across devices. The goal was to increase the time people spend watching video content. Using Digital Experimentation to test autoplaying the next episode, the BBC increased engagement levels by 50%.

Benchmarking metrics > Complexity

4. Variation count

To become a customer-centric organization, to apply the customer is king to the digital era, you shouldn't be asking: "does this specific change work?" but "which is the best change for our customers?" In other words, you shouldn't just be testing one single solution to any particular customer issue, but 10.

A larger pool of ideas, on the other hand, allows you to test a range of different solutions - and combinations of solutions – to identify what works best. By increasing the variation count, you move away from simple validation testing (will this idea work?) to true experimentation (which idea works best?).

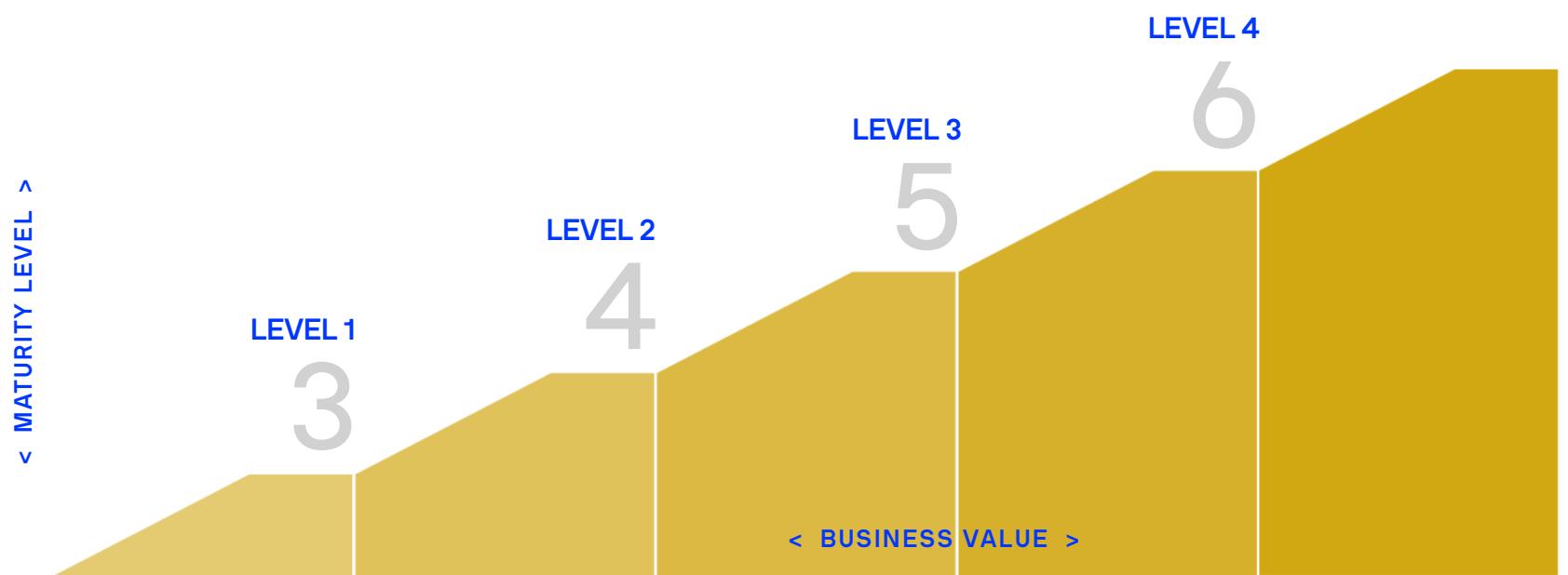


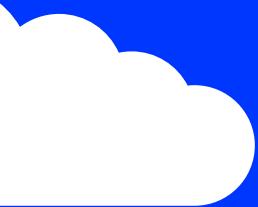


5. Goal count

By goal count we mean the number of metrics you use to measure the results of your experiment. The more goals you set, the more you are trying to understand what is going on and why. So in a nutshell, the higher your goal count, the more you will learn from your experiment.

As you might expect, the further along you are on your journey, the higher your Goal Count will be. At level 1 your goal count should be three or so, but by level 4 this will usually double to six.





You can also use goals as a control mechanism. As well as your specific testing goals, you could also monitor those that are important to business success, such as revenue. That will put you in a position to understand the wider impact of a variance. For example, say you want to follow Brooks' lead and create a new telephone advice line to offer guidance to customers.



Optimizely's Sample Size Calculator lets you calculate the length of time an experiment will likely run based on sample size.

Sure, that may well provide an uplift in conversions as desired - but what if the cost to the business outweighs this increase?

More goals also equals more data, which obviously helps to inform better business decisions.

Experimentation in action:

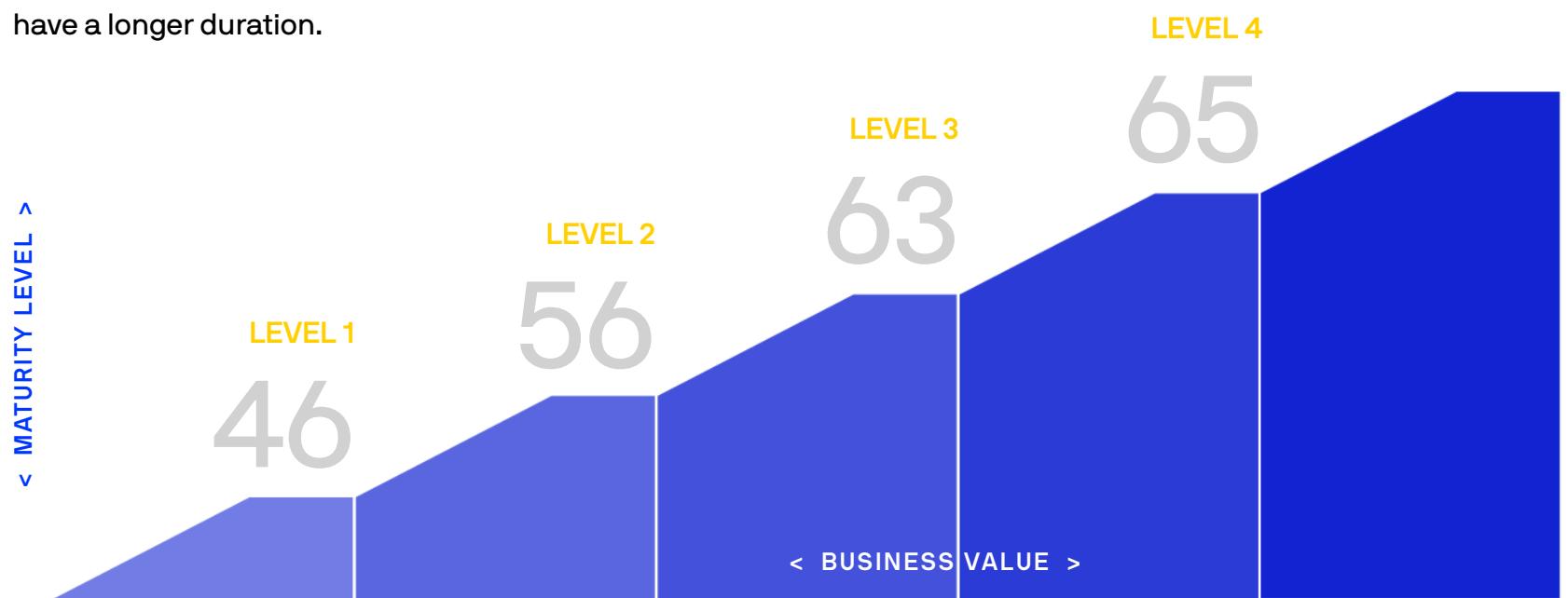
Brooks reduced returns by 80% by offering a dedicated phone line offering guidance on which size to choose whenever a customer added two different sizes of the same shoes to their basket. Customer service engagements averaged five minutes, which was less expensive than the hard costs of fulfilment and return shipping on every returned order.



6. Test Duration

You have a new idea to improve conversion rates, you've built your test, and you're ready to turn it on. But how long do you have to wait to find out the impact of the change? Any test plan should clearly state the duration of an experiment so everyone is aware. Organizations at the higher levels of the experimentation journey will often run more complex, fine-tuned tests targeted at specific audiences which are smaller sub-sets of their traffic. These will typically have a longer duration.

Traditionally, calculating the right duration involves figuring out the total sample size you need, dividing it by your daily traffic, then stopping the test at the exact sample size that you calculated. Well, it just got a lot easier.



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So... what now?

The higher the stage you've reached on your journey, the more important experimentation will be to your business. Yet even if you're just taking your very first steps, you'll have at least some idea of the potential impact of getting it right.

**First things first,
find out where you stand right now.**

Our advice is to start by taking our free online assessment. The free, no-strings-attached Optimizely evaluation will allow you to identify where you are on your journey of experimentation, clearly understand your organization's capabilities, and begin the process of building a high-performing program.

Take our free online assessment at
www.optimizely.com/maturity-model

Then view our Optimism series of free webinars at
www.optimizely.com/optimism-webinar-series

Remember, wherever you're at right now, the journey never ends. Leaders never sit back with the idea there's nowhere left to go. Experimentation is a continual process of testing, learning, refining, repeating. Higher velocity, more variations, improved win rates, new goals counts, increased durations, higher statistical significance... because once you've got ahead, you need to stay there.

"At any given point in time, there isn't just one version of Facebook running. There are probably 10,000." – Mark Zuckerberg

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