The Essential Tools of Digital Experience Analytics

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Introduction

Using websites and apps is becoming second nature to the average consumer. It's nearly as familiar as walking into a brick and mortar retailer and shopping, as we've done for years. And customers online have made it clear that the digital experiences on websites and apps matter a lot. In fact, two in every three customers churn due to poor experiences, but conversion rates can jump up 400% if you nail those experiences.[1]

With the pressure on brands to continuously improve their websites and apps, they often face a common problem: accurately and efficiently investigating and measuring digital experiences. While online customer feedback along with web and app metrics offer crucial insights, they don't directly uncover and diagnose pain points within digital experience. For that reason, tools of digital experience are essential for any business committed to its digital strategy.

And there are a few tools that are essential for improving experiences on websites and apps moving forward: digital experience scores, heatmaps, session replay, form analytics, and journey visualizations. Each brings its own unique benefits, and if combined properly and used effectively, they can help transform digital experiences to move the needle on your bottom line.
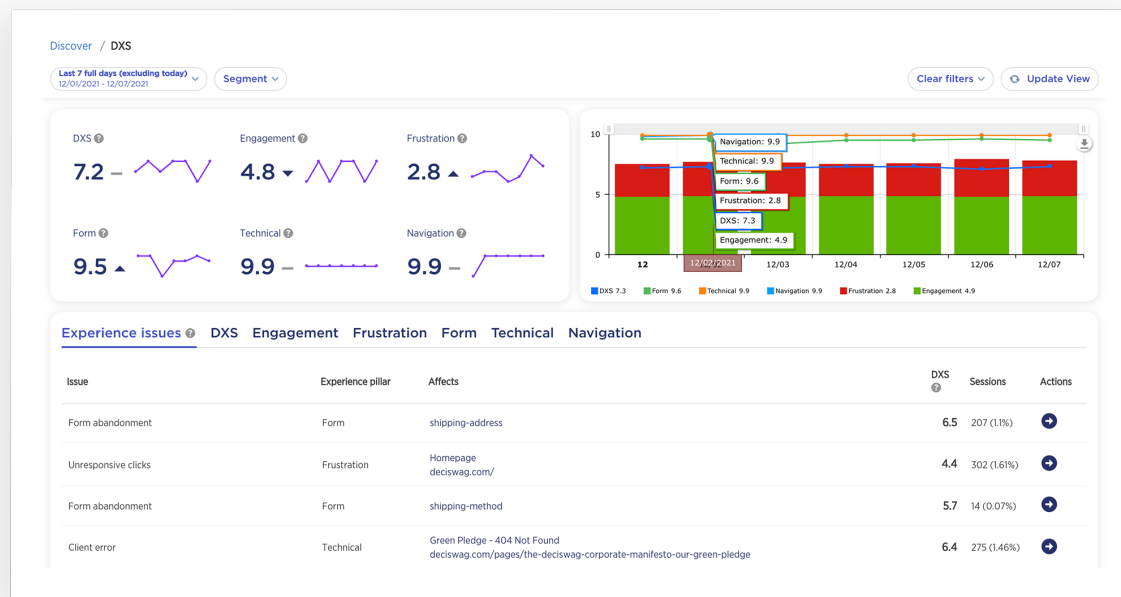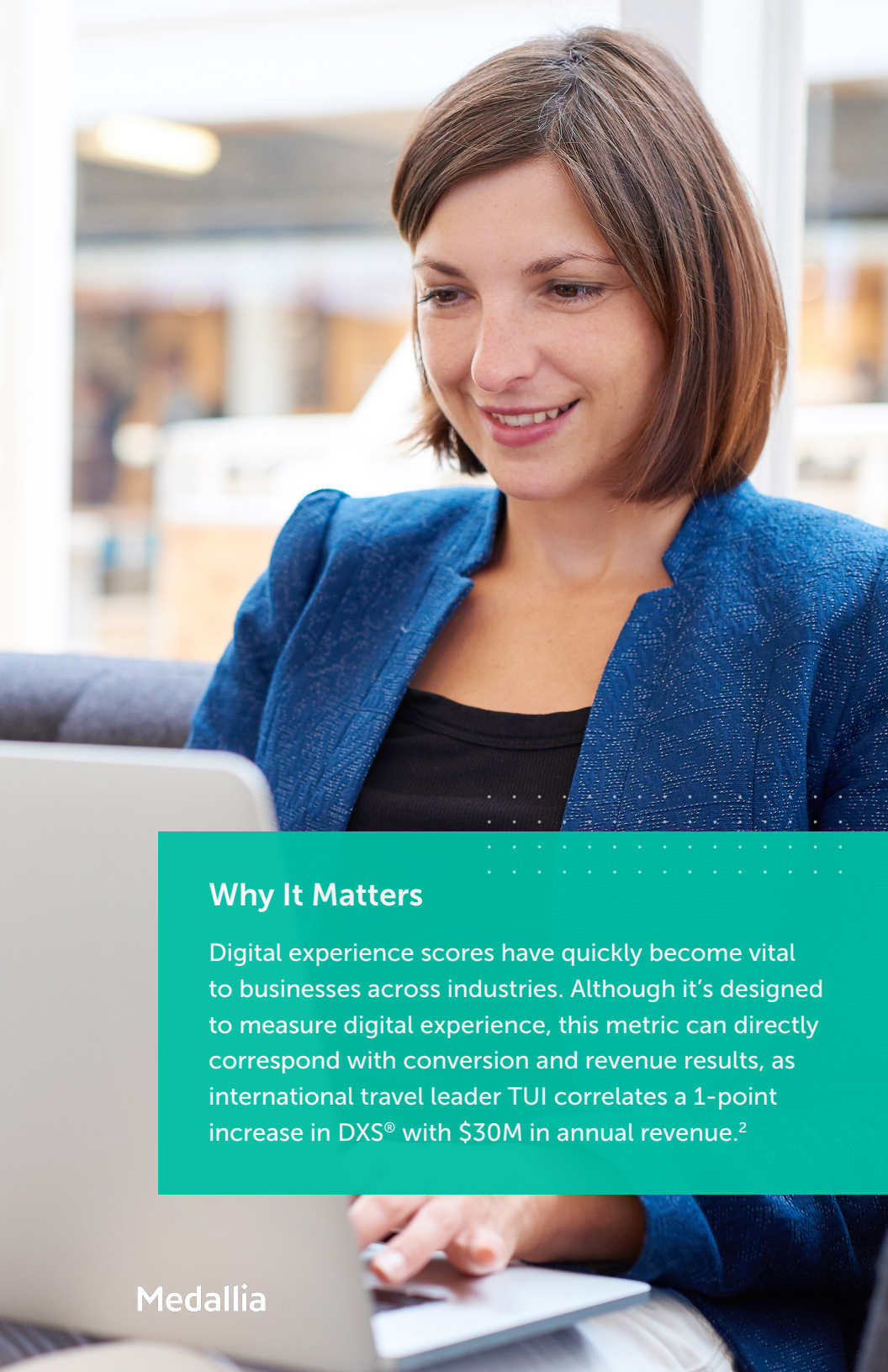
Digital Experience Scores

Defining Digital Experience Scores

A digital experience score is a metric that quantifies the online customer experience on websites and apps at scale. Often a fixture in digital experience analytics solutions, this type of metric automatically analyzes every user journey and interaction on your website or app. It

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Decibel by Medallia's Digital Experience Score (DXS®)

DXS® uses five pillars of digital experience: engagement, frustration, navigation, technical, and forms. Making sense of every user session and behavior, DXS® measures the overall digital experience of a website or app on a scale of 0–10. A score of 10 reflects a seamless, friction-free experience, while lower scores reveal problematic experiences worth optimizing.

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Why It Matters

Digital experience scores have quickly become vital to businesses across industries. Although it's designed to measure digital experience, this metric can directly correspond with conversion and revenue results, as international travel leader TUI correlates a 1-point increase in DXS® with $30M in annual revenue.[2]

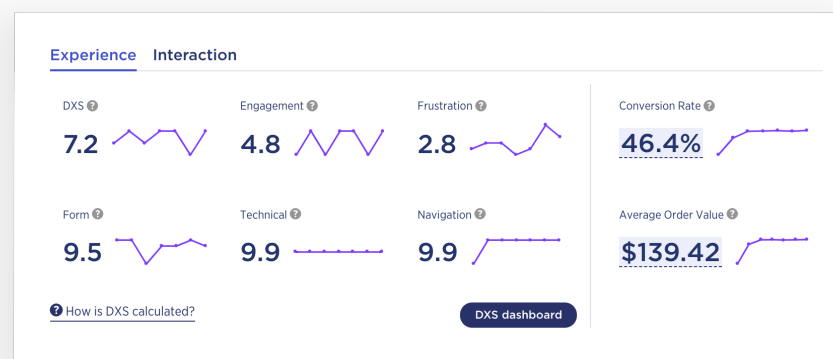## The Use Case for Digital Experience Scores

A digital experience score gives you advantages other metrics can't match — it measures every single customer experience across your website or app without requiring direct feedback. Unfortunately, typical dashboard metrics like conversion, engagement, and revenue-based metrics measure transactions rather than experiences. And powerful voice-of-customer metrics like CSAT, NPS®, and others alike provide eye-opening, experience-based insights. Instead, those metrics rely on responses that are limited by the number of users visiting your website or app. However, by combining transactional and direct feedback metrics with a digital experience score, you can create the most complete end-to-end view of every experience.

By filling in those gaps, a digital experience score makes sense of unsolicited customer feedback that would otherwise go untracked by traditional metrics. Depending on your online traffic, that's potentially millions of user sessions and billions of user behaviors boiled down into a single datapoint — no surveys or direct engagements required. It reveals a user's digital experience without any effort from the customer or your own team.

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then prioritizes the most urgent experience issues causing user frustration or confusion, which ultimately sinks conversions and engagement.

01 Benchmark current digital experiences

Before investing resources into changes to your website or app, it's best to benchmark your current digital experience score. Simply record the score for your website or app as a whole, along with scores for the highest trafficked pages and most common journeys. This allows you to confidently determine the existing quality of web or app experiences without any guesswork.

Experience Interaction

DXS ?	Engagement ?	Frustration ?	Conversion Rate ?
7.2	4.8	2.8	46.4%

Form ?	Technical ?	Navigation ?	Average Order Value ?
9.5	9.9	9.9	$139.42

? How is DXS calculated?   DXS dashboard

02 Investigate and improve poor experiences

Examine poor experiences reflected by the lowest scores on your website or app with tools such as heatmaps, session replay, form analytics, and journey visualizations. These forensic tools will allow you to go more granular and find specific pain points disrupting the online customer journey. Then it's a matter of rolling out the right fixes and improvements to those digital experiences.

03 Compare new digital experiences to benchmarks

After pinpointing and optimizing specific issues derailing digital experiences comes the true test: Did your optimizations work? Compare the new digital experience score to your original benchmarks, and ultimately determine whether those efforts paid off or more work is required.

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Buyer's Guide for Digital Experience Scores

As a newer type of metric in the realm of digital and customer experience, there are a few high-priority features the digital experience score should bring to the table.

✓ **Learn how the digital experience score is calculated.**

Prioritize a metric that weights pillars of experience such as engagement, frustration, navigation, forms, and technical — these factors matter most.

✓ **Be sure the digital experience score tracks more than just clicks.**

The metric should account for hundreds of behaviors, including signals from mouse movements and scrolling actions.

✓ **Look beyond just a single digital experience score.**

Additional dashboard metrics like focus rates and times, download and loading times, page counts, and more all provide deeper digital experience insights.

✓ **Focus on a digital experience score that reveals the user's state of mind.**

A combination of behavioral data and experience metrics should reflect whether customers find experiences enjoyable, engaging, frustrating, or confusing.

✓ **Invest in a digital experience score that has a proven track record.**

Ensure the metric's scoring directly corresponds with levels of engagement, conversion, and revenue — it should closely mirror changes in those KPIs.

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Heatmaps

Defining Heatmaps

In short, heatmaps track and visualize on-page user behaviors in aggregate across websites and apps. This is a tool often included as a part of a digital experience analytics solution, and there are a number of different kinds, each with unique purposes:
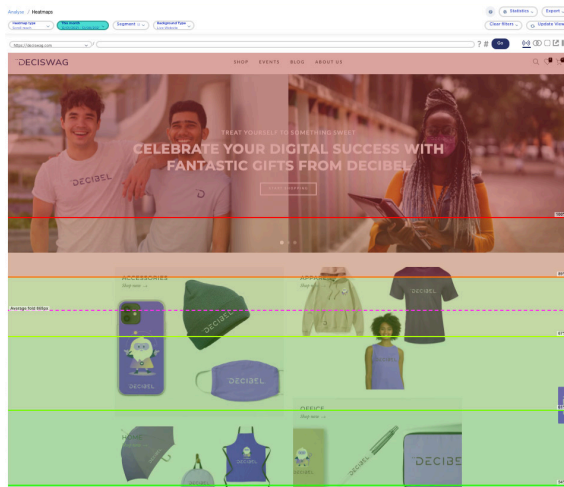
**Click/touch heatmaps** refer to mouse clicks on websites or touches on apps.

Hover heatmaps refer to where a user's mouse moves and the content it hovers over on websites.

Scroll heatmaps refer to the depth, speed, and rhythm of a user's scrolling on a website or app.
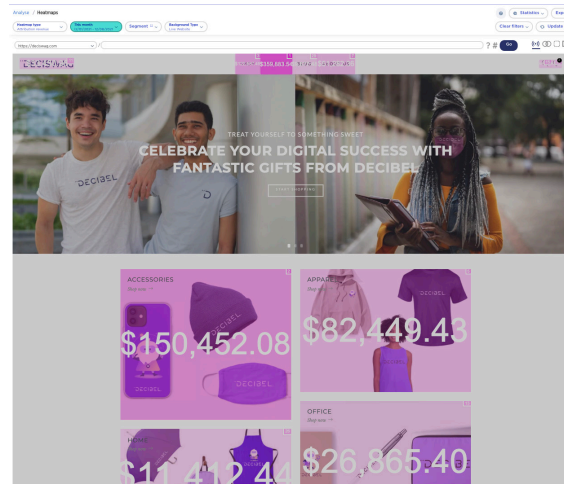
Behavior heatmaps refer to the specific ways users behave and engage (for example, multi-clicks, bird's nests, reading, select and copy, etc.).

Attribution heatmaps refer to specific on-page zones that track engagements and conversions for elements like buttons, menus, and carousels.
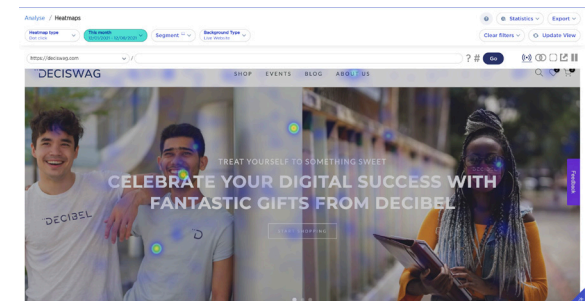
Aggregate heatmaps refer to overlaying heatmaps for separate pages with similar layouts (for example, two different landing page forms).

Comparison heatmaps refer to cross-checking heatmaps side-by-side for the same page, but with different audience segments or heatmap types.

The Use Case for Heatmaps

Heatmaps stand out with their unique ability to clearly display and analyze large volumes of user interactions on any web page or app screen. Aggregating millions of user behaviors into a single picture, heatmaps showcase how the bulk of user journeys and actions unfold on your website or app. It's clear why 95% of practitioners find heatmaps highly effective for measuring web and app experiences.[3]

This tool brings scalability to your tech stack, enabling you to easily assess the impact of digital content and site or app functionality across every online customer experience on the page or screen level. Various types of clicks, hovers, scrolls, and mouse movements each reflect where users focus, engage, and encounter issues. Heatmaps make it easy to determine whether engagement or conversions rise or fall due to a button, video, image carousel, page layout, navigation menu, and many more factors.

Why It Matters

These highly actionable heatmaps can surface a gold mine of insight valuable to any digital team. In fact, major travel and expense solution provider Amadeus Technology utilized heatmaps to make data-driven web page layouts and CTA optimizations that increased clicks by over 400% in a 60-day period.[4]

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Best Practices for Using Heatmaps

It's not enough to just look at heatmap data for random pages across your website or app — you need to use heatmaps with a specific purpose or goal in mind.

01 Choose a specific web or app experience issue or area for improvement.

02 Organize heatmap investigations by page type, performance, device, and channel.

03 Establish context using web and app analytics along with voice of customer feedback.

04 Determine the best-performing and worst-performing on-page content.

05 Measure engagement corresponding with on-page elements and page layouts.

06 Identify user frustration and confusion tied to specific on-page content.
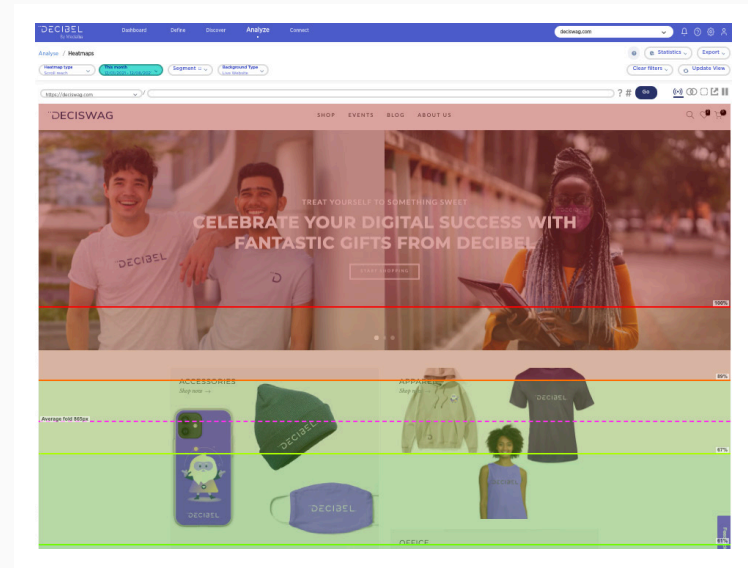
07 Leverage session replay and segmentation to further investigate notable friction.

08 Review form analytics to contextualize behavior on form-based pages if appropriate.

09 Use tagging and overlay toggles to track and compare page changes when optimizing.

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Buyer's Guide for Heatmaps

While there's a crowded list of heatmap vendors on the market today, capabilities — especially heatmap types — often vary quite a bit between solutions. The best solutions will contain:
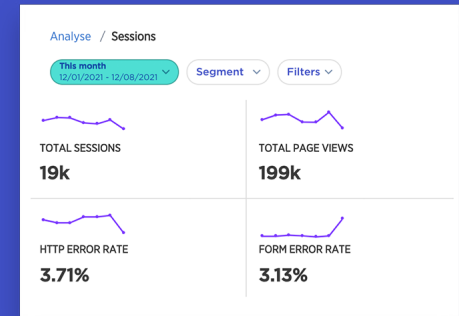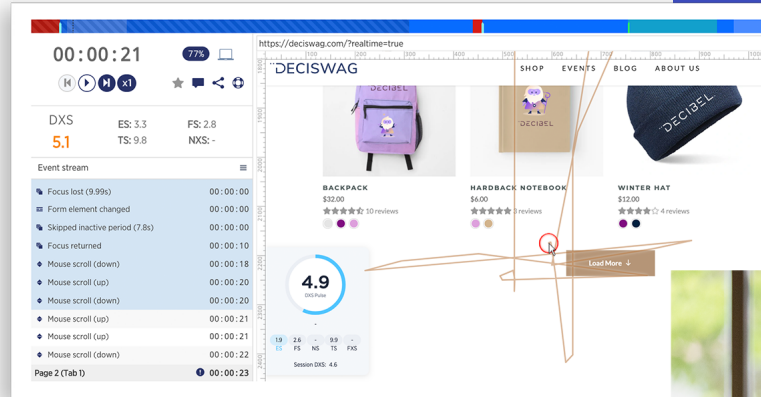
- ✓ **A wide range of standard and advanced heatmap types (tip: reference the "Defining Heatmaps" section in this guide).**

- ✓ **Extensive segmentation that enables narrow and user-specific heatmap analysis.**

- ✓ **Overlay data for comparing multiple pages with similar or identical layouts.**

- ✓ **On-page behavioral data that illustrates user engagement, frustration, and confusion.**

- ✓ **Compatibility with external analytics data to contextualize and enhance heatmap insights.**

- ✓ **Automatic tracking of static and dynamic on-page elements without manual tagging.**

- ✓ **Page toggling to easily gauge performance differences between alternate layouts.**

- ✓ **Integrated session replay to correlate insights with specific user sessions.**

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Session Replay

Defining Session Replay

Session replay refers to technology that enables digital teams to watch back videos of real, anonymized users interacting with websites or apps. Session replays can capture and show every experience, behavior, and interaction exactly how it happens on a website or app. It provides an "over the shoulder" view of digital experience, so teams get a firsthand look at the real problems causing frustration and derailing journeys. Session replay is often included as a fundamental tool within digital experience analytics solutions and is sometimes referred to as "session recordings."

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The Use Case for Session Replay

With a playback of any and every user session, session replay goes beyond just data sheets and dashboard metrics — it lets you experience what your customers experience and diagnose issues in plain sight. When watching back user sessions, you can spot digital body language cues like multi-click behavior that signals clear user frustration, or mouse-reading behavior that indicates positive levels of user engagement — among dozens of other behaviors that reflect the quality of digital experiences. And for many of these reasons, 95% of practitioners find session replay effective to highly effective for measuring online experiences.[5]

As WiderFunnel's Michael St Laurent says, "Session replays provide incredibly in-depth insights. In fact, they often offer the easiest, most cost-efficient way to get into the minds of your customers."[6] Session replay allows you to investigate experiences and discover the "why" (the digital experience issues) behind the "what" (website and app analytics data). It can reduce the endless hours spent hypothesizing and testing the reasons for underperforming metrics.

Why It Matters

Session replay is perfect for drilling down into apparent but unknown issues derailing user journeys and impacting KPIs. Leading telecom provider Vodafone leveraged session replay to investigate its NPS® results and pinpoint a broken button on a form, which enabled a fix that led to response rates jumping by 17% on desktop and 13% on mobile.[7]

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Best Practices for Session Replay

There's more to session replay than just watching back user sessions and searching for digital experience issues.

01 Don't watch random session replays; review recordings from key moments with timestamped incidents.

02 Create context with analytics and investigate known digital experience problems.

03 Establish a repeatable and practical way to share insightful recordings between teams.

04 Rely on journey funnels to pinpoint and review areas of user drop-off and friction.

05 Leverage behavior detection to spot frustration and confusion to further analyze.

06 Review heatmaps to find compelling patterns worth checking out with session replays.
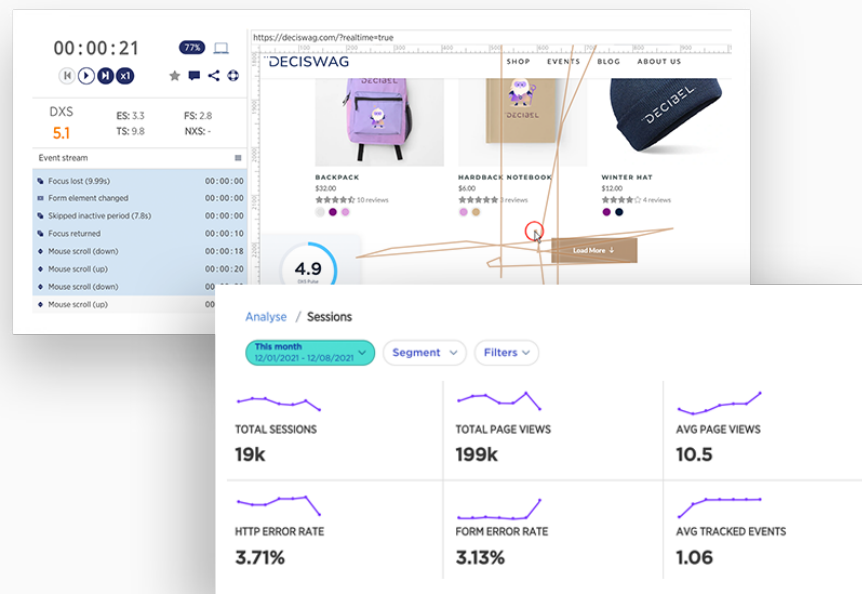
07 Watch back replays linked to form analytics data that reflects poor form experiences.

08 Use segmentation to narrow analysis for targeted investigations on various journey types.

Buyer's Guide for Session Replay

There are a lot of session replay tools available, but not all cut down on the manual and tedious analysis typically required by this type of tool. The best tools have:

- ✓ **Automated analysis to pinpoint the most important session replays and timestamps.**

- ✓ **Segmentation between high- and low-quality experiences based on scores.**

- ✓ **Behavior detection — automated alerts for sessions with high frustration or engagement.**

- ✓ **Detailed user journey mapping between devices, channels, and browsers.**

- ✓ **Heatmap integrations to contextualize and guide session replay analysis.**

- ✓ **In-app filtering, tagging, and commenting for team collaboration within session replays.**

- ✓ **Tech-stack integrations to pair external data with related session replays.**

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Form Analytics

Defining Form Analytics

Form analytics is a tool used to measure the experiences and outcomes on any form-based submission page with input fields for users to fill out — and it's commonly found as a part of digital experience analytics solutions. Form analytics measure granular, form-specific metrics at the field level, which reflect the experience quality for every form on a website or app. It allows you to make sense of broader engagement and abandonment trends on all sorts of forms, including account sign-up and login screens, checkout processes with address and payment fields, content download pages, demo requests and contact forms, and others alike.
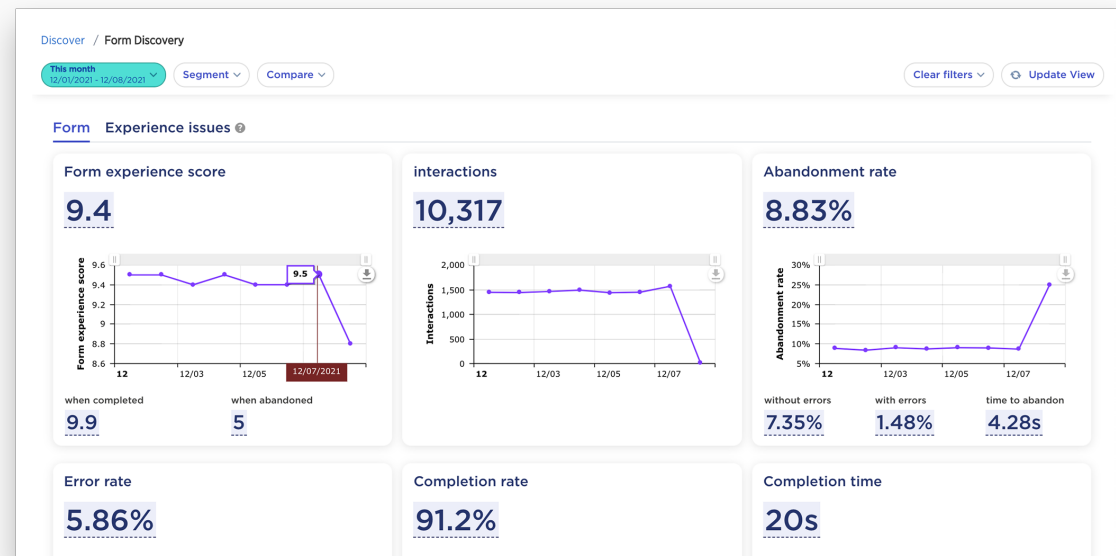
Decibel by Medallia's Form Experience Score (FXS)

One of the most unique and powerful form analytics capabilities, FXS allows you to measure online form quality at a glance. As a pillar of Medallia's DXS®, FXS automatically scores form-based experiences on websites and apps on a scale of 0–10, with 10 indicating an intuitive, easy-to-use, friction-free form. It's ideal for benchmarking experiences and quickly diagnosing the quality of forms.

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The Use Case for Form Analytics

Most online customers loathe interacting with forms, as they commonly foster clunky, error-prone digital experiences.[8] In fact, only 49% of users add details to an online form after viewing it — and only 16.5% actually complete it.[9] Form analytics help identify those high-friction forms that spark frustrating experiences, which directly jeopardize conversion and revenue. With a wide array of metrics such as error rate, completion rate, and completion time, form analytics removes tedious guessing games behind rises in abandonment and drop-offs in conversion.

More mature form analytics tools automatically rate every form-based experience, so you can instantly determine the experience quality of specific forms. More advanced tools, however, provide robust segmentation by user criteria and experience traits along with behavior detection, which allows for targeted form improvements. This means less time spent investigating forms on your website or app, easier efforts fixing form issues, and a more seamless conversion experience.
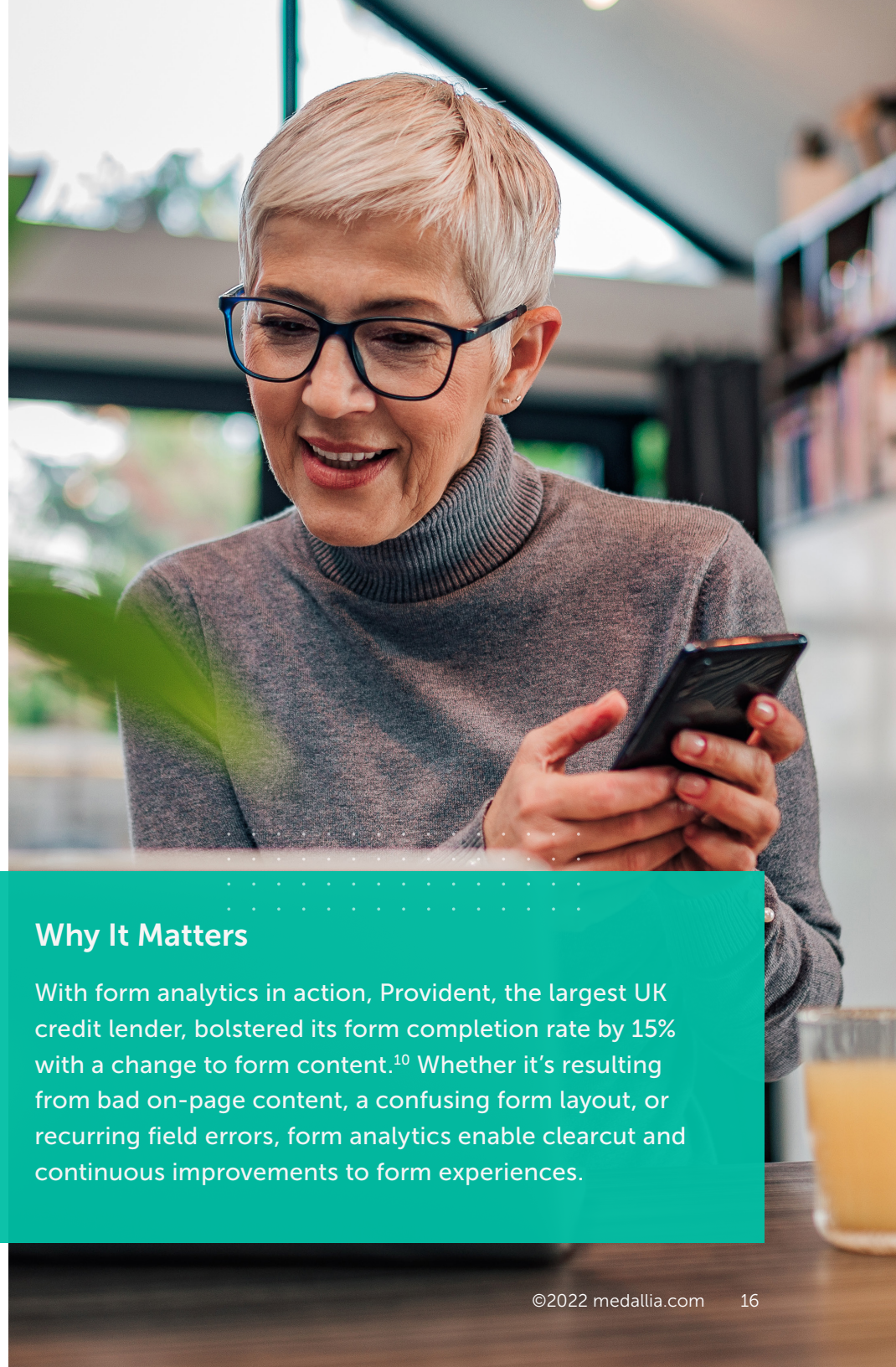
Why It Matters

With form analytics in action, Provident, the largest UK credit lender, bolstered its form completion rate by 15% with a change to form content.[10] Whether it's resulting from bad on-page content, a confusing form layout, or recurring field errors, form analytics enable clearcut and continuous improvements to form experiences.

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Best Practices for Using Form Analytics

While form analytics may seem like another dashboard of data and metrics, there are a few key tips and tricks to making the most of this tool.

01 Identify poor form experiences via declining web and app analytics metrics.

02 Identify and investigate form metrics indicating new instances of form friction.

03 Check experience issues reflected by frustrated behaviors tracked on forms.

04 Use segmentation to separate forms by quality, behaviors, and user groups.
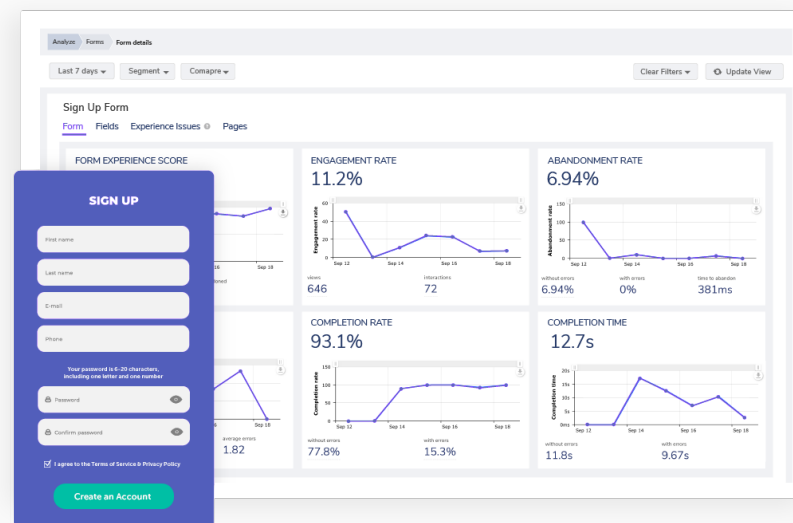
05 Leverage session replay and heatmap tools to investigate and fix poor form experiences.

06 Rely on a Form Experience Score to benchmark and monitor form experience quality.

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Buyer's Guide for Form Analytics

There's no shortage of form analytics tools available. The best form analytics help cut down on manual analysis and simplify how teams spot and fix poor form experiences with these features:
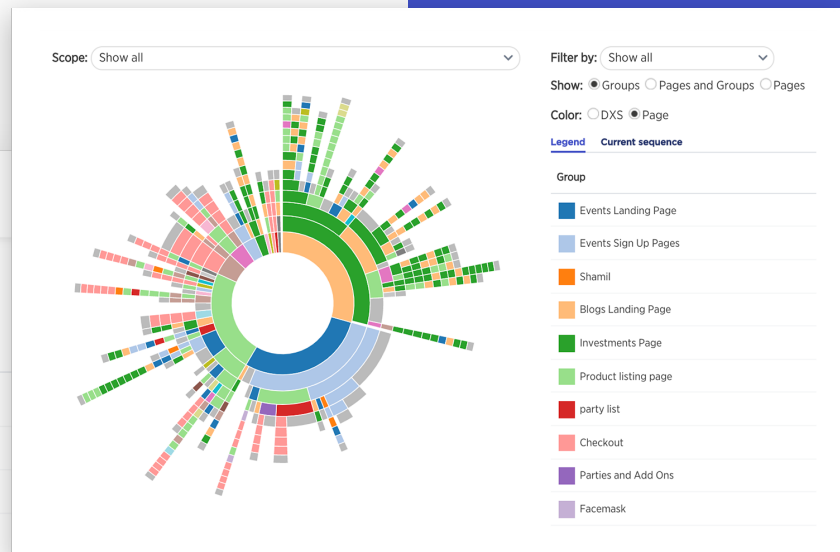
✓ **A dashboard of form-specific metrics measuring errors, completion, and interactions.**

✓ **A Form Experience Score for simplified benchmarking and tracking experience quality.**

✓ **Behavior detection alerts to pinpoint clearcut experience issues worth investigating.**

✓ **Segmentation to easily filter through forms with specific criteria to analyze specific data.**

✓ **Compatibility with session replay and heatmaps to spearhead in-depth investigations.**

✓ **Extensive integrations with external solutions like widely trusted web and app analytics.**

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Journey Visualizations

Defining Journey Visualizations

A journey visualization tool identifies and visualizes the exact paths users take on a website or app. Journey visualizations automatically track and map out every web page or app screen that makes up a customer's online journey. The primary way this tool makes sense of these journeys comes via sunburst visualizations, which show every unique path followed by users with an array of journey segments graphed in a circular display. Beyond that, these tools often include standard conversion funnels to analyze dropoff and engagement across pivotal online customer journeys.

The Use Case for Journey Visualizations

Optimizing online customer journeys has become business critical: 93% of leading customer experience organizations consider a journey-based approach a high priority.[11] And journey visualizations easily simplify large, complex data sets in an easy-to-digest format to quickly pinpoint bottlenecks or the fastest path to conversion. By automatically tracking and mapping out those journeys, it cuts down on the tedious, imprecise, and resource-draining efforts of manual online customer journey mapping.

The beauty of a journey visualization tool comes from its ability to help determine specific areas worth improving. Pairing this with a digital experience score, you can even distinguish between high-performing versus low-performing journeys instantly. And with behavior detection and segmentation built-in, you can quickly identify lackluster areas eliciting instances of frustration and confusion while managing analysis by specific pages, journeys, and user criteria. It's the ideal tool for delivering a more seamless online customer journey from start to finish.

Why It Matters

Due to new industry regulations, Constellation Energy added a new enrollment step to its submission process, which led to drop-off across various metrics. Using journey visualizations, the energy provider uncovered which pages sparked confusion and bottlenecks, and those insights allowed for page improvements that boosted mobile conversions by 45%.[12]

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Best Practices for Journey Visualizations

Although journey visualizations simplify online customer journey mapping, you shouldn't jump into the analysis without a plan.

01 Monitor web and app analytics metrics to discover when friction arises in online journeys.

02 Review sunburst visualizations to determine journeys worth investigating and optimizing.

03 Identify good versus bad journeys with a digital experience score rating each path.

04 Pinpoint specific paths and pages generating frustration and confusion with behavior detection.

05 Use segmentation filters to narrow insights around specific journey criteria and experiences.
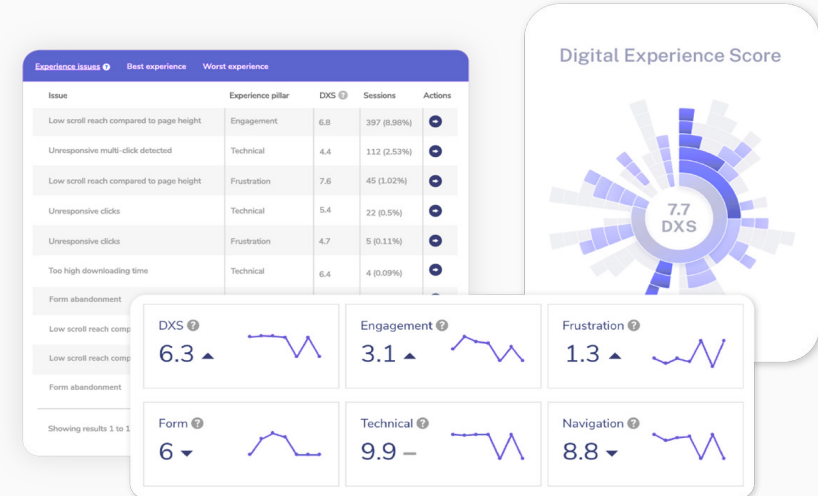
06 Check funnels to uncover dropoff in paths designed to lead to conversion pages.

07 Determine the "golden path to conversion" by identifying paths that lead to the most positive outcomes.

08 Investigate high-friction journeys by using tools like heatmaps and session replay.

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Buyer's Guide for Journey Visualizations

As journey mapping becomes pivotal for delivering exceptional digital experiences at every point on a website or app, these features will become more important:

✓ **Sunburst visualizations to automatically show user paths for easy journey mapping on websites and apps.**

✓ **Funnels to track dropoff and engagement at various stages of conversion journeys.**

✓ **A digital experience score to automatically determine experience quality of every journey.**

✓ **Behavior detection to instantly pinpoint journeys and pages causing experience issues.**

✓ **Segmentation to customize path analysis and focus on specific journeys of interest.**

✓ **Forensic tools integrations like session replay and heatmaps for granular experience investigations.**

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Maximize Results from Your Digital Strategy

Ready to partner with our team of digital experts and upgrade to Medallia Digital Suite? You'll be able to turn every online customer experience across your website or app into a seamless, personalized digital experience that keeps customers coming back.

→ **Contact Medallia today for an expert digital consultation**

[1] https://www.intechnic.com/blog/100-ux-statistics-every-user-experience-professional-needs-to-know/
[2] https://decibel.com/resources/reports/tui-dxs-predict-conversion-revenue-growth/
[3] https://decibel.com/resources/reports/econsultancy-state-conversion-digital-experience-2020/
[4] https://www.medallia.com/resource/amadeus-case-study/
[5] https://decibel.com/resources/reports/econsultancy-state-conversion-digital-experience-2020/
[6] https://www.decibelinsight.com/blog/6-cro-experts-on-why-session-replay-is-essential-to-improving-digital-experiences

[7] https://www.medallia.com/resource/vodafone-uk-case-study/
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[12] https://www.medallia.com/resource/digital-constellation-energy/

About Medallia

Medallia is the pioneer and market leader in Experience Management. Medallia's award-winning SaaS platform, the Medallia Experience Cloud, leads the market in the understanding and management of experience for customers, employees and citizens. Medallia captures experience signals created on daily journeys in person, digital and IoT interactions and applies proprietary AI technology to reveal personalized and predictive insights that can drive action with tremendous business results. Using Medallia Experience Cloud, customers can reduce churn, turn detractors into promoters and buyers and create in-the-moment cross-sell and up-sell opportunities, providing clear and potent returns on investment. www.medallia.com

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