



# 5X5Z0010\_2223\_1P

## Digital Human and Audiences

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## 1.0 EXEC SUMMARY

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I undertook the role of UX researcher for this project to provide Hilti with a link between the website and the customers who use the site to deliver insights to the Hilti UX team on the motivations, behaviours and needs of their website users.

The first step of the process was to define who the customer is, building a picture of what they want from the product Hilti is offering them. Secondary research was then conducted to gain insights into where and what the user does online and offline. Additionally, primary research techniques were used to observe how users currently use the website and what pain points they encounter whilst trying to fulfil their on-page needs. This research was then analysed and used to compile a set of recommendations for how the Hilti UX team can closer align the product pages on the website to the needs of the chosen end user.

### Top three recommendations for Hilti product pages:

1. Simplify UX across both desktop and mobile
2. Re-organise eCommerce elements / process
3. Introduce trust markers

The above recommendations will lead to a more enjoyable, less confusing online experience for Hilti customers. It will persuade users to spend longer on the product pages, giving the customer answers to their questions with the ultimate goal of increasing online revenue. Without the implementation of the recommendations, Hilti runs the risk of complicating the online experience, adding further layers of functionality / complexity on top of the current offering, leading to a decrease in online revenue.

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## 2.0 UX RESEARCH APPROACH

An empathetic persona, and the subsequent creation of an empathy map, should be the 'first step in design thinking' (Gibbons, 2018). It is a method for visually representing what Hilti knows about a particular user, placing them at the centre of the design process to understand their needs, with the ultimate goal of exceeding them. The empathy map created (**Page 4**) focuses on Steve, an operations manager, collating what he says, thinks, does, and feels. Coupled with the work Hilti undertook in 2021, creating six personas (**Appendix 2a/b**), this empathy map can give the business a single source of truth to aid better decision-making and as a reference for the suggested changes.

PET™ (Human Factors International, n.d.) is a UX theory rooted in social psychology that compliments traditional usability best practices for influencing users using markers of persuasion, emotion and trust. The techniques are used in this proposal to go beyond simply offering visitors to the Hilti website options, motivating them to perform desired actions, and taking them 'from can do to will do and still do' (Weinschenk, 2011).

Other psychological theories have been incorporated into this proposal, such as Lang's Limited Capacity Model (Lang, 2000) and Don Norman's ideas on the role of emotion in design, to give a broader range of techniques for Hilti to utilise in persuading and influencing their website users. These theories were interlaced with multiple UX best practice methodologies to provide a definitive set of recommendations that Hilti should consider to improve the conversion rate on their product pages, ultimately increasing online sales.

# 3.0 UX RECOMMENDATIONS

UNCOMPROMISE WITH NURON  
Check out our new all-in-one cordless battery platform  
Discover Nuron >

NURON  
NURON TE 6-22 CORDLESS ROTARY HAMMER  
Cordless rotary hammer TE 6-22 case #2253058

CONFIGURATOR | RECONFIGURED KITS

Customise your kit

Tool Body  
+ Battery  
+ Charger

£1,135.00  
Ex. VAT  
See fleet price >

How many kits do you want to order?  
1

IF ADD KIT TO CART

Availability of products can be checked in the shopping cart

UNCOMPROMISE WITH NURON  
Check out our new all-in-one cordless battery platform  
Discover Nuron >

NURON  
NURON TE 6-22 CORDLESS ROTARY HAMMER  
Cordless rotary hammer TE 6-22 case #2253058

VERSATILE SDS PLUS CORDLESS ROTARY HAMMER WITH WIDE DRILLING RANGE, CHIPPING FUNCTION AND QUICK-CHARGE CHUCK (NURON BATTERY PLATFORM)

- Weight according to EPTA Procedure 01.0020: 2.84 kg
- Optimum hammer drilling range: 6 - 18 mm
- Hammer drilling diameter range: 4 - 28 mm

More technical data >

Review

Share

Configurator

Customise your kit

Tool Body

1

UNCOMPROMISE WITH NURON  
Check out our new all-in-one cordless battery platform  
Discover Nuron >

NURON TE 6-22 CORDLESS ROTARY HAMMER  
Cordless rotary hammer TE 6-22 case #2253058

★★★★★ 104 Reviews

£1,135.00  
Ex. VAT  
£42.94  
Per month ex. VAT

RECOMMENDED KIT

TOOL BODY ONLY

BUILD YOUR OWN KIT

1 Tool body with case  
Includes 1x HiLl Grease, 1x Tool case TE 6-22 Assy

2 Battery pack B 22-110 Li-Ion

1 Battery charger C 6-22 230V box

IF ADD KIT TO CART

FEATURES APPLICATIONS TECHNICAL DATA

- Performance, versatility and ergonomics in one – the TE 6-22 cordless rotary hammer has a wide drilling range, chiselling function and more comfort for all-day use
- Helps reduce fatigue – now even lighter, helping you power through larger concrete drilling jobs
- Improved handling – better tool balance and contoured grips so you can drill, chip or drive more comfortably in any position
- Comprehensive safety features – includes Active Torque Control (ATC) to better protect you from uncontrolled spinning if the bit sticks, and Active Vibration Reduction (AVR) for increased shielding from vibration
- Nuron battery platform – cordless SDS Plus rotary hammer drills without compromise thanks to longer-lasting batteries, high-performance drill bits and a range of services to keep you productive, today and tomorrow

2

3

FEATURES & APPLICATIONS  
Cordless rotary hammer TE 6-22 case #2253058

Features

- Performance, versatility and ergonomics in one – the TE 6-22 cordless rotary hammer has a wide drilling range, chiselling function and more comfort for all-day use
- Helps reduce fatigue – now even lighter, helping you power through larger concrete drilling jobs
- Improved handling – better tool balance and contoured grips so you can drill, chip or drive more comfortably in any position
- Comprehensive safety features – includes Active Torque Control (ATC) to better protect you from uncontrolled spinning if the bit sticks, and Active Vibration Reduction (AVR) for increased shielding from vibration
- Nuron battery platform – cordless SDS Plus rotary hammer drills without compromise thanks to longer-lasting batteries, high-performance drill bits and a range of services to keep you productive, today and tomorrow

Applications

- Drilling and hammer drilling in concrete and masonry
- Virtually dust-free drilling (TE DRS-4/6 on-board dust removal system or TE DRS-C vacuum cleaner connector required)
- Light-duty chiselling – such as tile scraping, channel cleaning or surface correction
- Occasional drilling in wood and steel (with optional quick-release chuck)
- Setting anchors and drop-in anchors (with optional TE-C bit holder)

RELATED PRODUCTS  
Cordless rotary hammer TE 6-22 case #2253058

AVR ATG+ SDS plus

NEW  
B 22-85 Nuron battery  
VERSATILE 22V Li-ion battery with optimal balance of weight, power and run time for use with Nuron power tools

NEW  
B 22-110 Nuron battery  
LONGER-LASTING 22V Li-ion battery with extended run time and higher power output for use with Nuron power tools

NEW  
B 22-170 Nuron battery  
ULTIMATE 22V Li-ion battery built to boost the performance and run time of heavy-duty Nuron power tools

NEW  
B 22-255 Nuron battery  
TOP-PERFORMANCE 22V Li-ion battery to maximise the output and run time of heavy-duty Nuron hammer drilling and cutting tools

NEW  
C 4-22 Nuron compact charger  
Compact charger for all HiLi Nuron batteries

NEW  
C 6-22 Nuron fast charger  
High-speed charger for all HiLi Nuron batteries

UNCOMPROMISE WITH NURON  
Check out our new all-in-one cordless battery platform  
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NURON  
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RECOMMENDED KIT

1 Tool body with case  
Includes 1x HiLl Grease, 1x Tool case, TE 6-22 Assy

2 Battery pack B 22-110 Li-Ion

1 Battery charger C 6-22 230V box

IF ADD KIT TO CART

Availability of products can be checked in the shopping cart

RELATED PRODUCTS

All Tools Accessories Inserts Batteries and Chargers

B 22-85 Nuron battery  
VERSATILE 22V Li-ion battery with optimal balance of weight, power and run time for use with Nuron power tools

B 22-110 Nuron battery  
LONGER-LASTING 22V Li-ion battery with extended run time and higher power output for use with Nuron power tools

B 22-170 Nuron battery  
ULTIMATE 22V Li-ion battery built to boost the performance and run time of heavy-duty Nuron hammer drilling and cutting tools

B 22-255 Nuron battery  
TOP-PERFORMANCE 22V Li-ion battery to maximise the output and run time of heavy-duty Nuron hammer drilling and cutting tools

C 4-22 Nuron compact charger  
Compact charger for all HiLi Nuron batteries

C 6-22 Nuron fast charger  
High-speed charger for all HiLi Nuron batteries

TE-CP-SM  
Self-sharpening SDS Plus (TE-C) pointed chisel bits for demoulding concrete and masonry

TE-CX Chisel sets  
Mixed sets of SDS Plus (TE-C) chisel bits for breakers and demolition hammers

TE-CX (SDS Plus) Metric hammer drill bit  
Ultimate SDS Plus (TE-C) hammer drill bit for anchoring into reinforced concrete (metric)

TE-CX (SDS Plus) Metric hammer drill bit  
Ultimate SDS Plus (TE-C) hammer drill bits with different bit diameters and lengths (metric)

HRD-TE-CX Setting tool (short)  
Setting tool for short HRD anchors with an integrated SDS Plus (TE-C) stop hammer drill bit

HRD-TE-CX Stop bit  
SDS Plus (TE-C) stop bit for HRD anchors

TE-C (SDS Plus) Metric hammer drill bit  
Ultimate SDS Plus (TE-C) hammer drill bit for virtually dust-free drilling in concrete

TE-C (SDS Plus) Metric hammer drill bit  
Premium SDS Plus (TE-C) hammer drill bit with 2-flute helix for drilling anchor holes into concrete

Battery adapter BA-22 box  
Battery adapter for powering HiLi 22V CPC Li-ion tools using Nuron batteries

Tool case TE 4/6-22 + DRS  
NEW  
NEW  
NEW  
Hard-sided tool case for storage and transport of a single Nuron tool with its accessories

Tool case TE 6-22 empty  
NEW  
NEW  
NEW  
Hard-sided tool case for storage and transport of a single Nuron tool with its accessories

Nuron TE DRS 4/6 Dust removal system  
NEW  
NEW  
NEW  
On-board vacuum system for convenient dust collection when drilling or chiselling with TE 4-22 and TE 6-22 cordless rotary hammers

BEFORE

AFTER

## 3.0 UX RECOMMENDATIONS

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### 1. Redesign the product carousel

Primarily appealing on a behavioural level, this recommendation adheres to the thinking that ‘appearance should match its usage’ (Norman, 2004:44). Re-organising the carousel to match behaviour (Colbourne, 2017:ch 5) will help to elicit an emotional response to the content, in-line with PET™ Theory (HFI, n.d.). Once implemented, this recommendation will help transition users to the visceral level of design (Norman, 2004:39), leading them to spend longer on the page and increasing the chance of a conversion.

### 2. Restructure the eCommerce UX

Whereas ‘no single design will satisfy everyone, (Norman, 2004:39), there are changes that Hilti can implement, bringing the UX closer to what is familiar to users of eCommerce. Jakob’s Law (Nielsen, n.d.) reinforces this when stating, ‘by leveraging existing mental models, we can create superior user experiences in which the users can focus on their tasks rather than on learning new models’. These changes will support the persuasion of customers, leading to more people adding Hilti products to their baskets.

### 3. Simplify the product selection panel

Based on the rationale that ‘our ability to process information is limited’ (Lang, 2000) and reinforced by the recommendations of Hick’s Law (Hick & Hyman, 1952) to ‘avoid overwhelming users by highlighting recommended options’. The simplified organisation of this section, enabling users to ‘focus on what they’re doing’ (Colbourne, 2017:ch 5), will lead to higher on-page conversion rates. Hick’s Law (Hick & Hyman, 1952) also suggests that by decreasing the cognitive load placed on users and breaking down the process into smaller steps, Hilti will sell more products.

### 4. Introduce trust markers

With the persuasion and emotional aspects of PET™ covered, introducing peer advice via product reviews, Hilti can help to remove risk, boxing off the trust aspect of the theory (HFI, n.d.). By visually referencing trust markers, Hilti can expect an increase in conversions by using social proof; ‘when they are uncertain, people will look to the actions and behaviours of others to determine their own’ (Cialdini, 1984).

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## 4.0 CONCLUSION

Understanding what drives human behaviour is vital for Hilti to increase online revenue, complementing its established offline sales channels and direct sales model. In the digital world, Hilti’s competitors are not other power tool manufacturers but eCommerce brands who design their processes and UX to positively influence online revenue.

According to consultancy firm Prophet, ‘brands removing friction and delivering clear, useful and simple experiences are benefitting’ (Prophet, 2017). Many recommendations outlined will require significant development time, but the effort involved in unpicking the page architecture and re-organising the on-page UX will result in higher online revenue.

The benefits of simplifying Hilti’s online processes in line with the expectations of digital humans are already being proven valuable in the form of a guest checkout trial (Appendix 2), which is generating revenue from mobile devices, a previously low-performing platform.

A brand evaluation carried out by Interbrand (2021) stated that, 31% of their customers’ purchase decisions are driven by their perception of Hilti as a brand. Now is the time for Hilti to closer align the online brand experience with it’s perception in the non-digital world.

## EMOTION

- **Trust** over time with a chosen supplier.
- **Heard / Understood** via empathy for the challenges that they are facing.
- **Confident** that it's a trusted brand / product (something that they can put their name to in front of decision makers – 'I believe that this will help our business').
- **Serenity** to be experienced with a high level of service from a reliable supplier.

## SEES / HEARS

- Sees comments / sentiments from their peer group (Connections) on LinkedIn
- Influenced by positive / negative experiences with a brand from both key decision makers and end users in the business
- Sees other tool / construction related manufacturers / software service providers
- Reads industry news: Building News ([www.building.co.uk](http://www.building.co.uk)) and Construction News ([constructionnews.co.uk](http://constructionnews.co.uk))
- Follows #contractors #contractorsofinstagram #civilconstruction #constructionwork #builders #construction #constructionsite #constructionlife #safety #bim #engineering #infrastructure

## UNANSWERED QUESTIONS / POSSIBLE FRUSTRATIONS



## STEVE

Aged 46, he manages equipment for a large construction firm. He is in charge of making sure that the firms' multiple teams have the equipment they need, when they need it.

He juggles lots of different tasks at once, and time poor as a result.

Desires reliable service from his suppliers.

Wants to avoid unnecessary purchases.

Avg. salary for a Construction Operations Manager is £43,989/yr (Glassdoor, 2023).

## EXPECTATION

- **Clear layout of information:** Allows for quick decisions to be made once all information has been taken in.
- **Relevance of information:** Content covers industry topics such as Health & Safety.
- **Transparent pricing:** Wants to see the price as one of the final steps in decision-making.
- **Ease of purchase:** Once a decision has been made based on information, an easy want to be able to place an order easily - 'is the product in stock?' / 'when will I receive the product?'

## POSITIVE TRIGGERS

- **Social proof:** Product reviews are important to gauge how good a product is, 'what have others said about this product?', 'why is this a good choice for me?'
- **Behavioural:** Pleasure and effectiveness of a well-thought-out, easy-to-use website.
- **Design quality:** Trust in a website built upon the foundations of a well-designed online UX.
- **High price equals good:** Price is seen as a good indicator of product quality.

- Time is the biggest barrier - no time to research potential suppliers / shift thinking – large businesses take time to arrive at decisions.
- Lots of noise in the industry – time / ability to cut through the noise.
- Internal loyalty or bias to alternate brands – 'the boss has a great experience with Xxxxxxxx'.
- Bad experience with products in the past – lack of support from previous suppliers? What will the future look like if we as a business engage with this 'new' solution?

# REFERENCE LIST

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## 1. Sparktoro research data: Construction

### Overview

[Export All Data](#) [Track Audience](#) NEW

SparkToro's database has found **297,699** people that talk about **construction**

**i** These are a sample of results only. To unlock all the top results for this query, [upgrade your SparkToro account](#)

**+** Get more [search ideas](#) related to this audience

### Here's what this audience talks about online

#### Top Words in Bios <sup>i</sup>

commercial	7.9%
services	7.0%
management	5.3%
estate	5.3%
contractor	4.4%

#### Top Hashtags Used <sup>i</sup>

#safety	8.6%
#bim	8.2%
#engineering	7.8%
#infrastructure	5.8%
#property	4.8%

#### Frequently Used Phrases <sup>i</sup>

construction projects	5.2%
construction workers	4.5%
construction sector	4.3%
built environment	3.5%
affordable housing	3.1%

[See all text insights](#)

**+** Show [how to apply this data](#) to your campaigns

### Here's what this audience follows, visits, and engages-with

#### Social Accounts They Follow Most

15.4% engage with	<a href="#">Building News</a>
15.2% engage with	<a href="#">Construction News</a>
13.3% engage with	<a href="#">Construction Index</a>

[See all social results](#)

#### And Some High Engagement, Hidden Gems <sup>i</sup>

7.7% engage with	<a href="#">ConstructConnect</a>
7.6% engage with	<a href="#">BAM UK &amp; Ireland</a>
7.6% engage with	<a href="#">Willmott Dixon</a>

[See all hidden gems](#)

#### Websites They Visit Most

3.8% engage with	<a href="#">Constructiondive.com</a>
2.9% engage with	<a href="#">Dezeen.com</a>
2.9% engage with	<a href="#">Constructionenquirer.com</a>

[See all websites](#)

#### And Some Niche, Hidden Gems <sup>i</sup>

0.8% engage with	<a href="#">Equipmentworld.com</a>
0.8% engage with	<a href="#">Citb.co.uk</a>
0.8% engage with	<a href="#">Bimplus.co.uk</a>


[See all hidden gems](#)

**+** Show [how to apply this data](#) to your campaigns

## Here's what this audience watches, listens-to, and reads

### Podcasts They Listen-To

11.5% engage with  [ARCHITECT](#)

10.2% engage with  [USGBC](#)

9.0% engage with  [ConstructorCast](#)

[See all podcast results](#)

### YouTube Channels They Subscribe-to

6.7% engage with  [Construction Index News](#)

6.5% engage with  [Architects' Journal](#)

5.6% engage with  [Balfour Beatty](#)

[See all YouTube results](#)

### Press Accounts They Read

15.4% engage with  [Building News](#)

15.2% engage with  [Construction News](#)

14.3% engage with  [The New York Times](#)

[See all press results](#)

### Subreddits They Read

4.8% engage with  [Make Games with Construct](#)

2.6% engage with  [r/teenagers](#)

2.2% engage with  [gamedev - game development, programming, design, writing, math, art, jams, postmortems, marketing](#)

[See all Reddit results](#)

[+](#) Show [how to apply this data](#) to your campaigns