Insights & Strategy

19 Uses for AI in Product Development (1/3)

Impact to Process ("so what?")

Research

AI Use Case

Opportunities

AI Task Optimization

THOUGHT STARTERS

Collaborate with Al to get a starting point and discover new research angles that were not previously considered

BRAINSTORM COLLABORATOR

Create starting points for idea exploration

DATA COLLECTION

More sophisticated methods for user research data collection that not only analyze words but facial expression and tone of voice that help build a nuanced picture of our end user

Depending on its

Process efficiency

Additional breadth and depth of information

May help to more easily uncover hidden opportunities or information

Provide expanded and varied idea generation

Offer unexpected design inspiration by merging disparate ideas training data AI could have bias but, on the flipside, could also make researchers aware of biases they hold to help mitigate risk of it impacting research & results

Data Analysis

RESEARCH SYNTHESIS

Compile findings

Summarize large data sets and identify any important highlights

Condense information

PATTERN

More sophisticated methods for user research data collection that not only analyze words but facial expression and tone of voice that help build a nuanced picture of our end user

Depending on its training data Al could have bias but, on the flipside, could also make researchers aware of biases they hold to help mitigate risk of it impacting research and results Process efficiency

Al offloads repetitive and/or time-intensive "routine" tasks

Improved data

Insight quality

Transcription

CONVERSION

Convert speech to text through transcripts of all the research audio/ video files used

ANALYSIS

Al can help identify highlights and capture snippets for presentation playback Process efficiency

Writing/Editing

CREATION

Content generation

Summarize or condense information

ADJUSTMENT

Alternate phrasings or verbiage options

Controlling for tone/ readability output

Customized content starter material

Multi-Language Translation

POINTS OF VIEW

Real-time user research translations with greater access to diverse demographic viewpoints

Research translations when designing for global markets/ specific user populations Inclusivity in research

Eliminating process barriers

Process efficiency



Design

19 Uses for AI in Product Development (2/3)

AI Use Case Opportunities

AI Task Optimization

Research

THOUGHT STARTERS

Topic overviews:

User Online Analysis help spot user patterns, relationships and other areas of opportunity

Help prioritize the product feature sets

Gather info to help down select and prioritize ideas during the ideation stage

Impact to Process ("so what?")

Process efficiency

Al offloads repetitive and/ or time-intensive "routine" tasks

Improved quality of data insight

Additional breadth and depth of information

Ideation

BRAINSTORM COLLABORATOR

Create starting points for idea exploration

Provide expanded and varied idea generation

Offer unexpected design inspiration by merging disparate ideas

Document & Presentation

MULTIPLE MEDIUMS

Video generation

Voice-overs

Create more dynamic visuals for stakeholder presentations

3D Modeling/ Renderings

MATERIALS

Create unique textures for product renderings

Enriched ideas

May help to more easily uncover hidden opportunities or newer information

Process efficiency

Higher quality visuals

Process efficiency

Higher quality visuals

UX/UI

INFORMATIVE

Accelerated front end prototyping tool

Help identify user preferences

Learn more at delve.com



Engineering

AI Use Case Opportunities

Human Factors

Engineering

AI Task Optimization

IMPROVING ERGONOMICS

Help identify if design is optimized ergonomically for the target user group

MANAGEMENT

Data Management

Automate complex tasks, so engineers can focus on analytical work

OPTIMIZING DESIGN

Recommendations regarding weight, material reduction, improved durability, and sustainability

Optimizing to meet project parameters



19 Uses for AI in Product Development (3/3)

Usability testing; identify areas for ergonomic and safety improvements

ITERATIONS

Proposing alternative engineering solutions

Impact to Process ("so what?")

Improved process efficiencies

Improved safety and human factors; reduced risk of product recalls

More seamless integration from design to manufacturing

Help reduce time for trial & error

Reduce production risk

Accelerated, streamlined timeline and speed to market