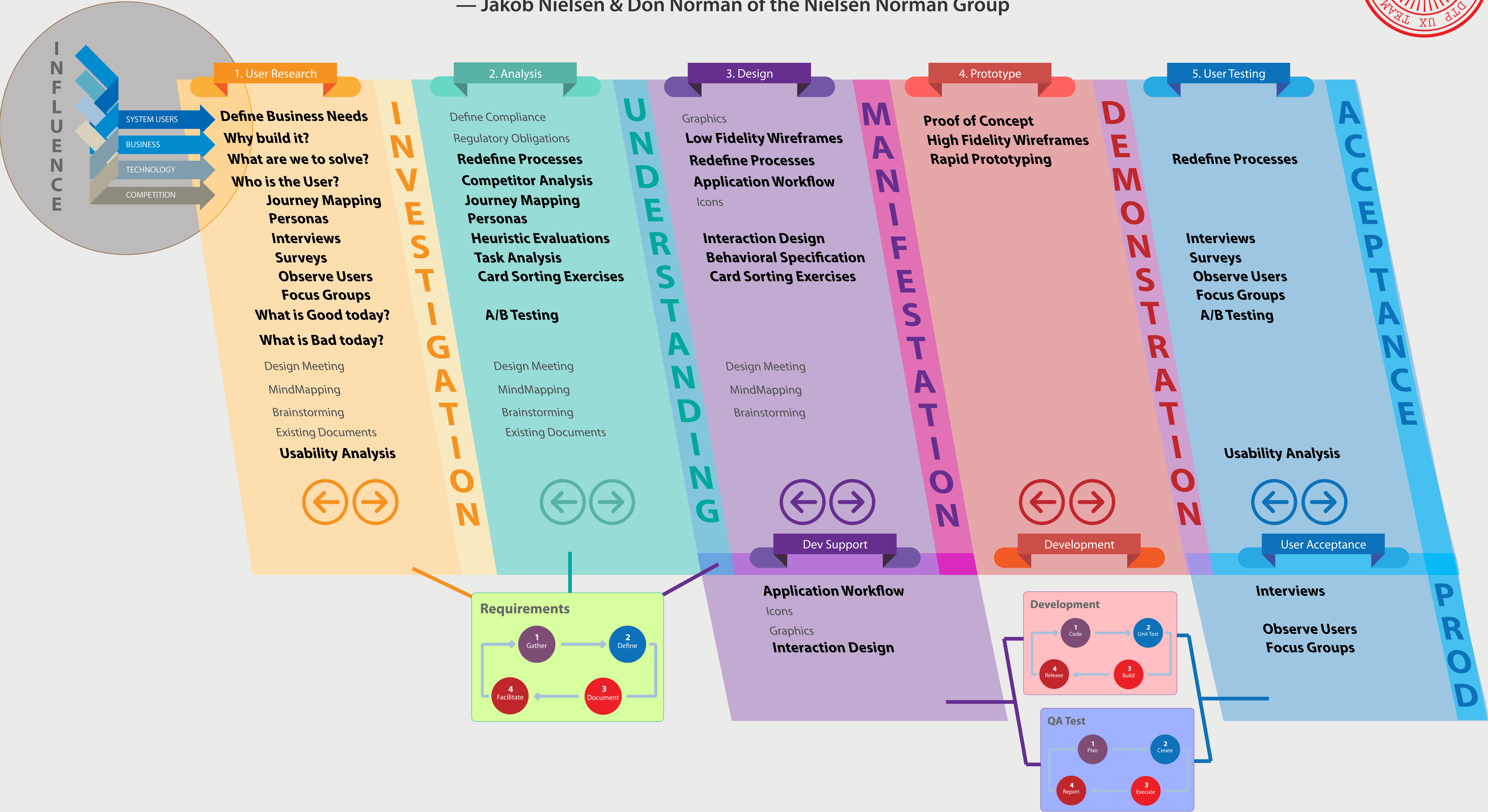


Standard User Experience (UX) Activities

“User experience encompasses all aspects of the end-user’s interaction with the company, its services, and its products.”
— Jakob Nielsen & Don Norman of the Nielsen Norman Group



* Items in **bold** are regarded as having the highest ROI



UX Today and Tomorrow

“Defining product vision is a far better investment of resources up front, because it helps you to avoid massive refactoring downstream.” —Leo Frishberg

Current DTP UX

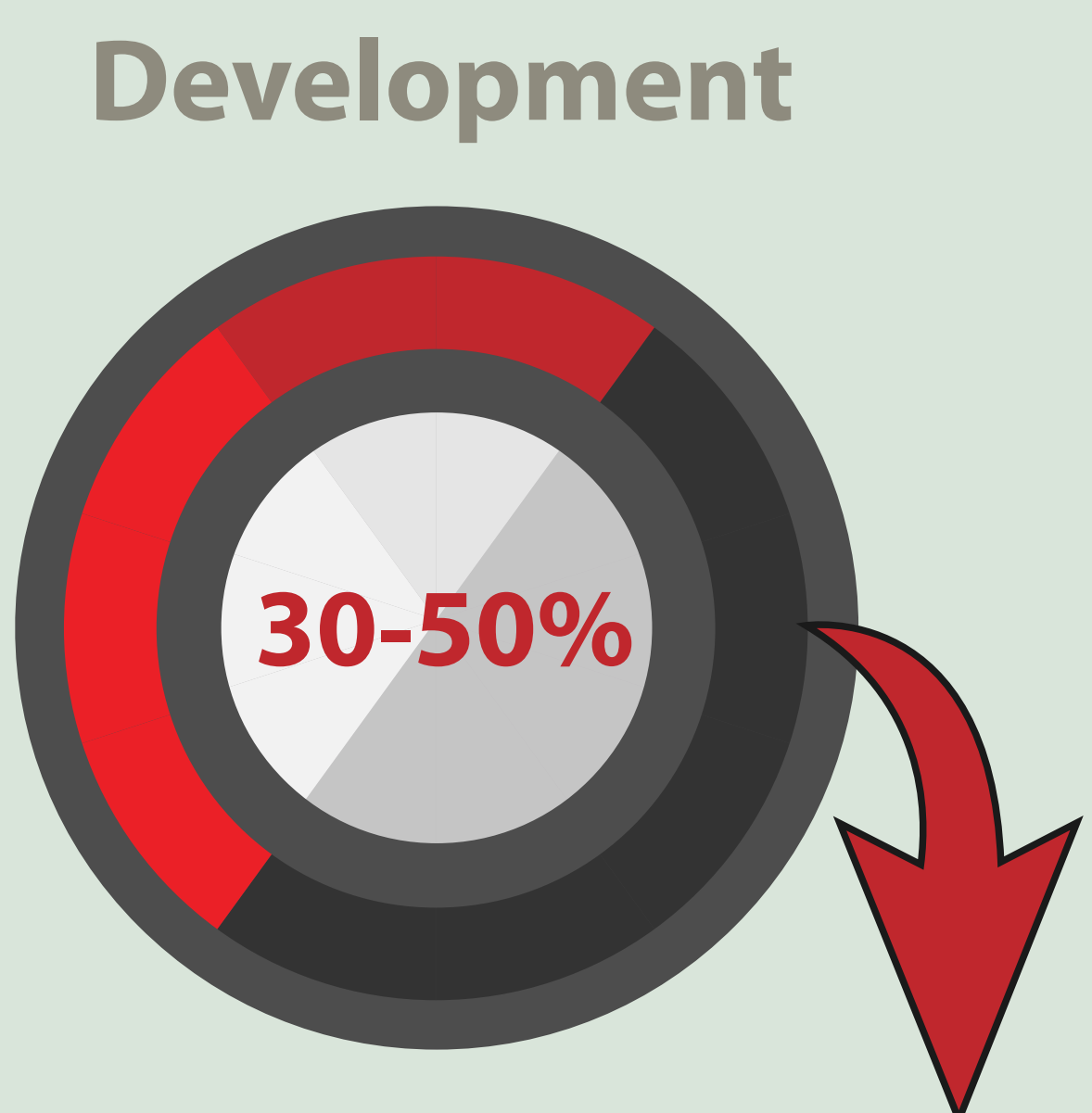
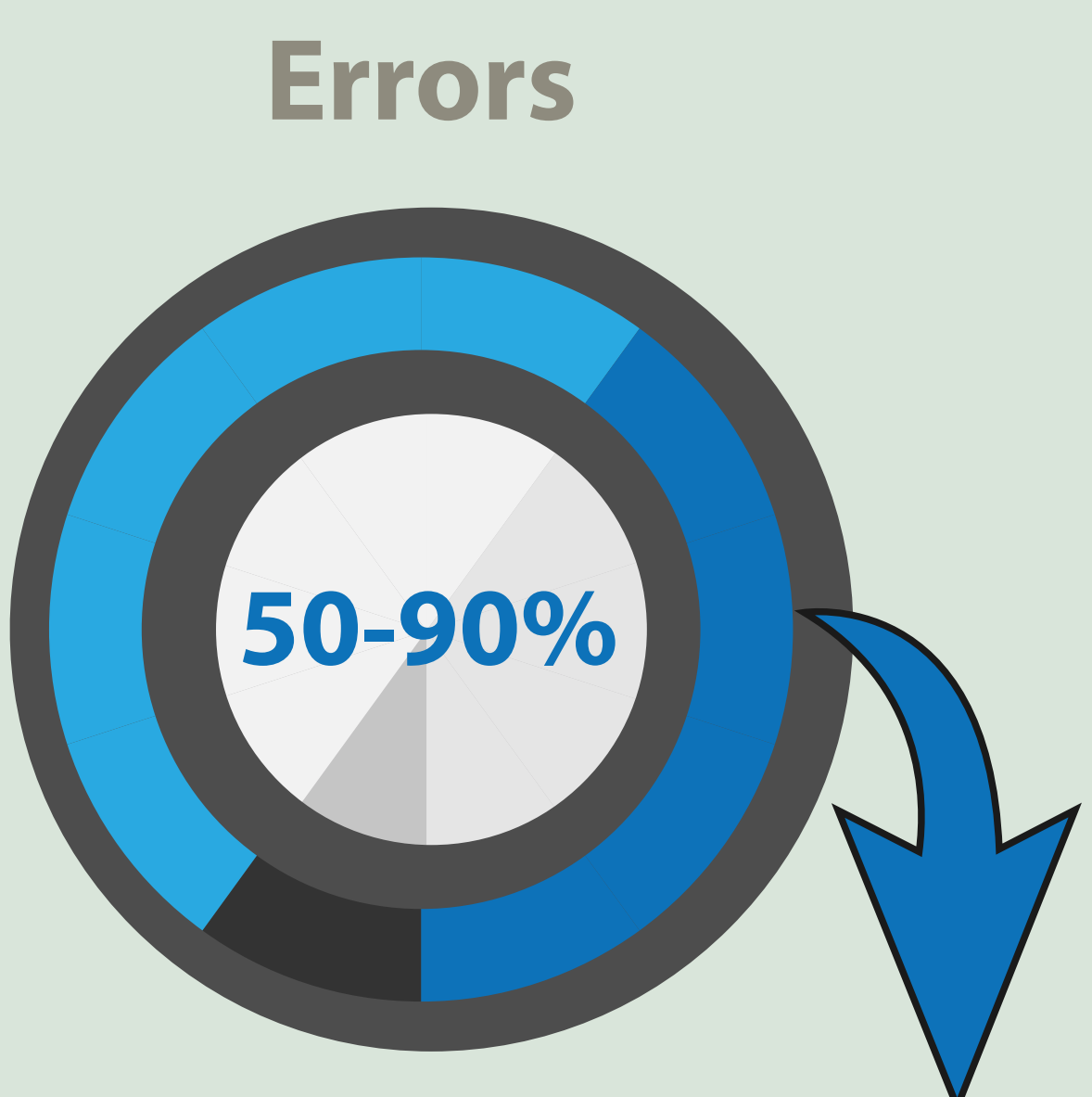
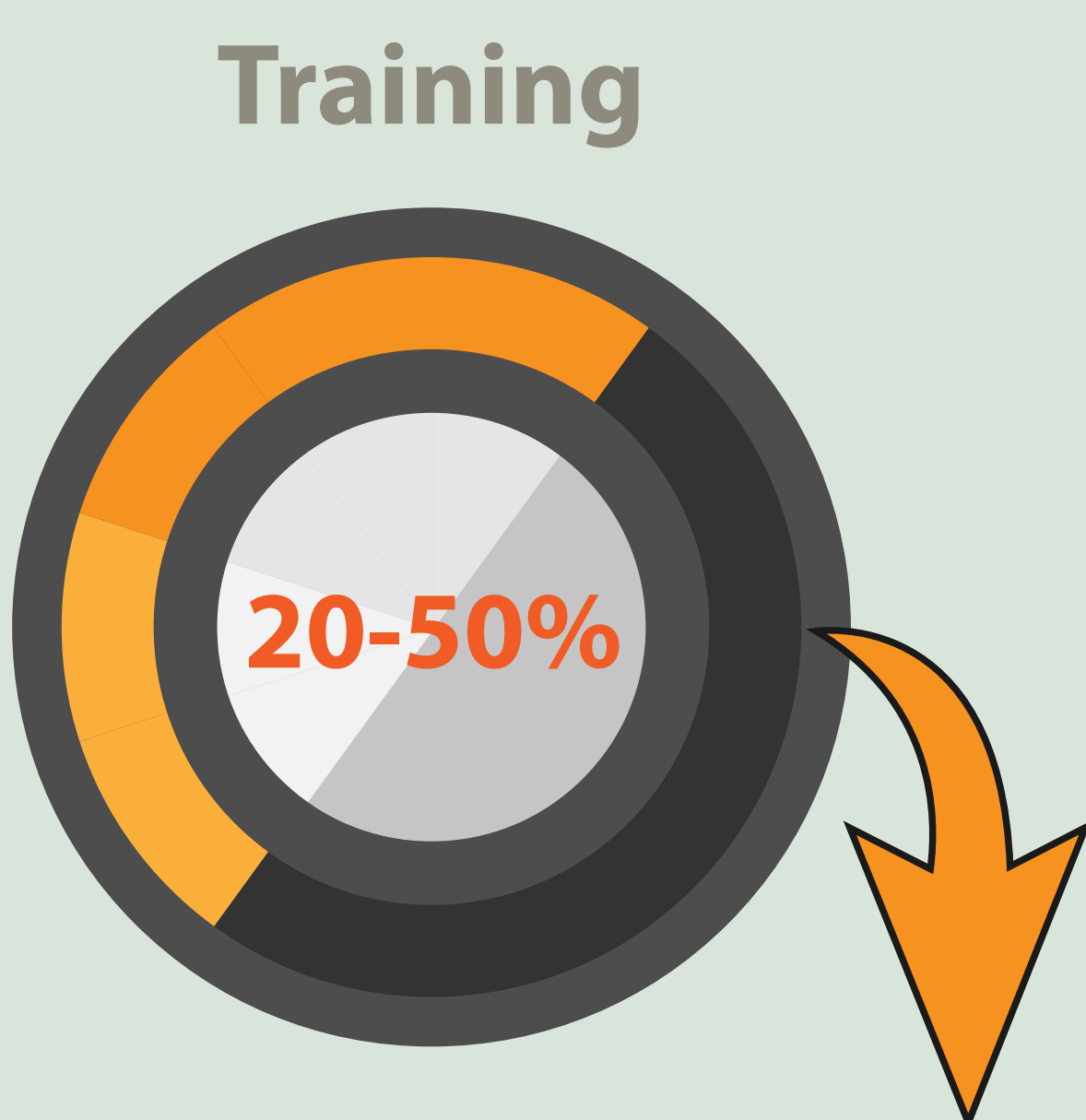
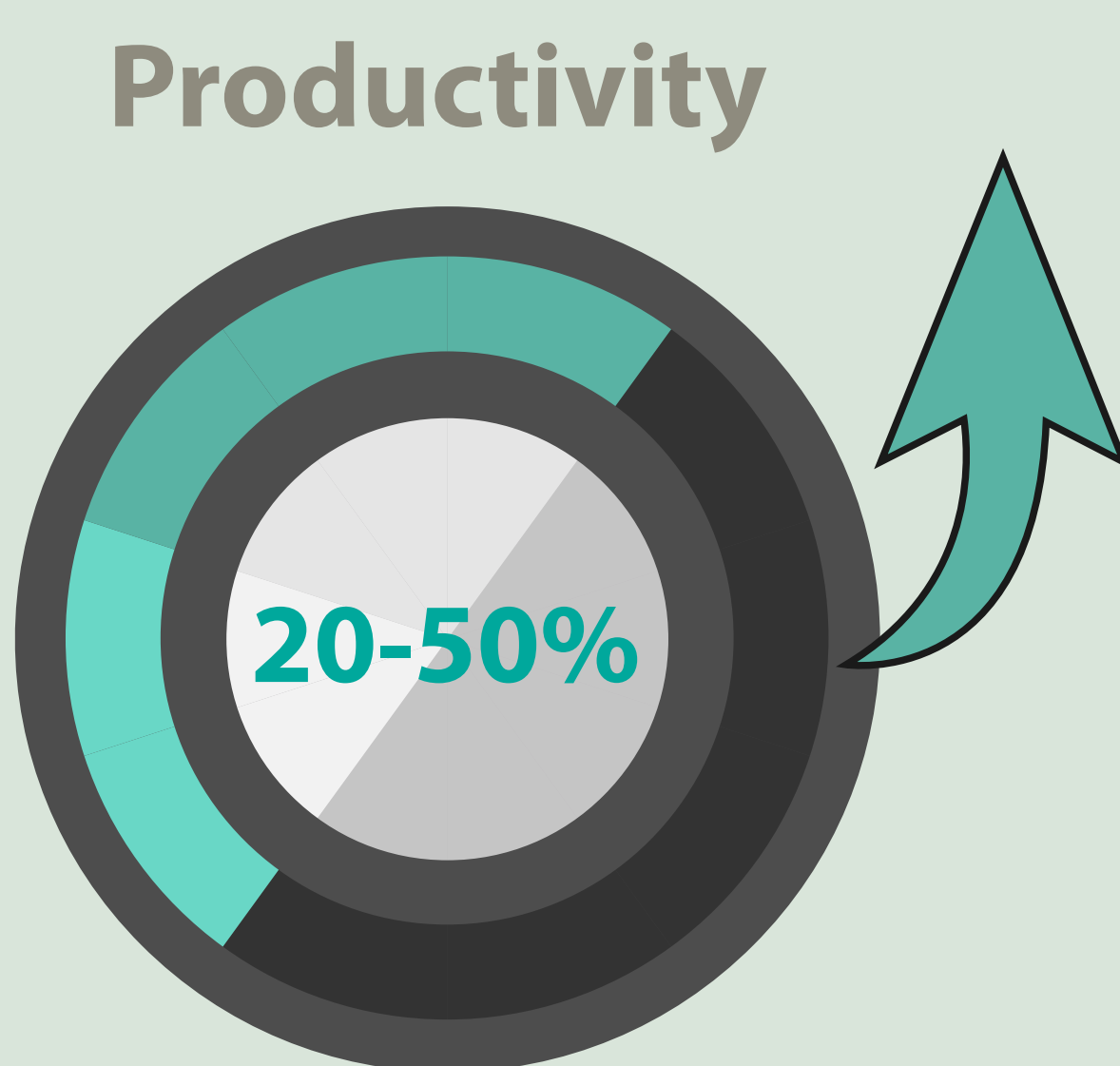
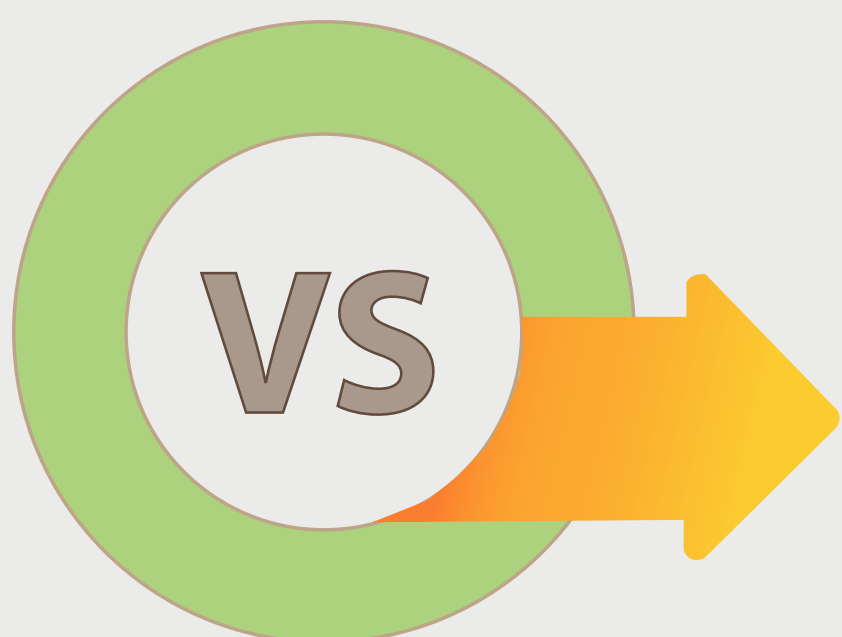
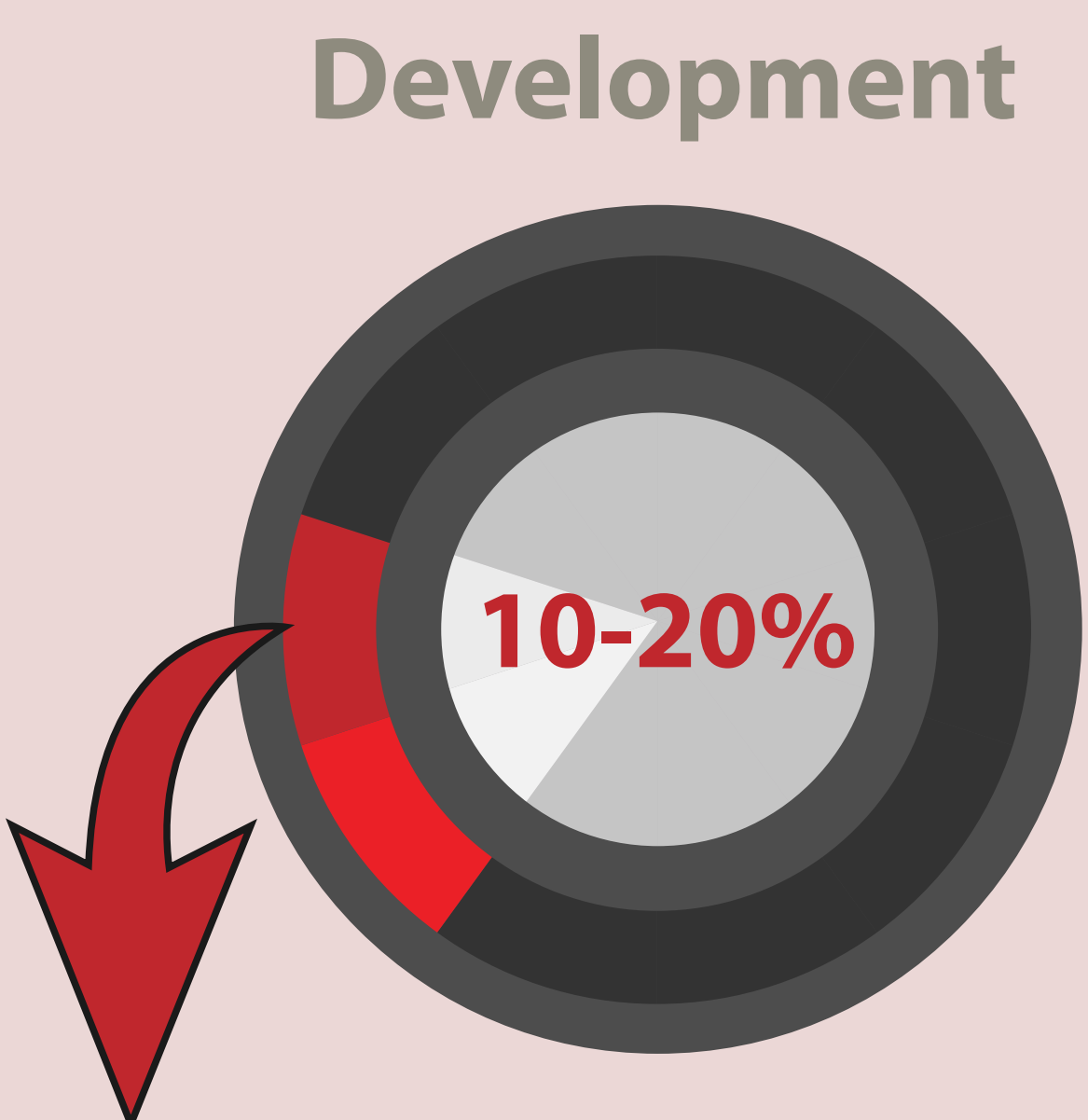
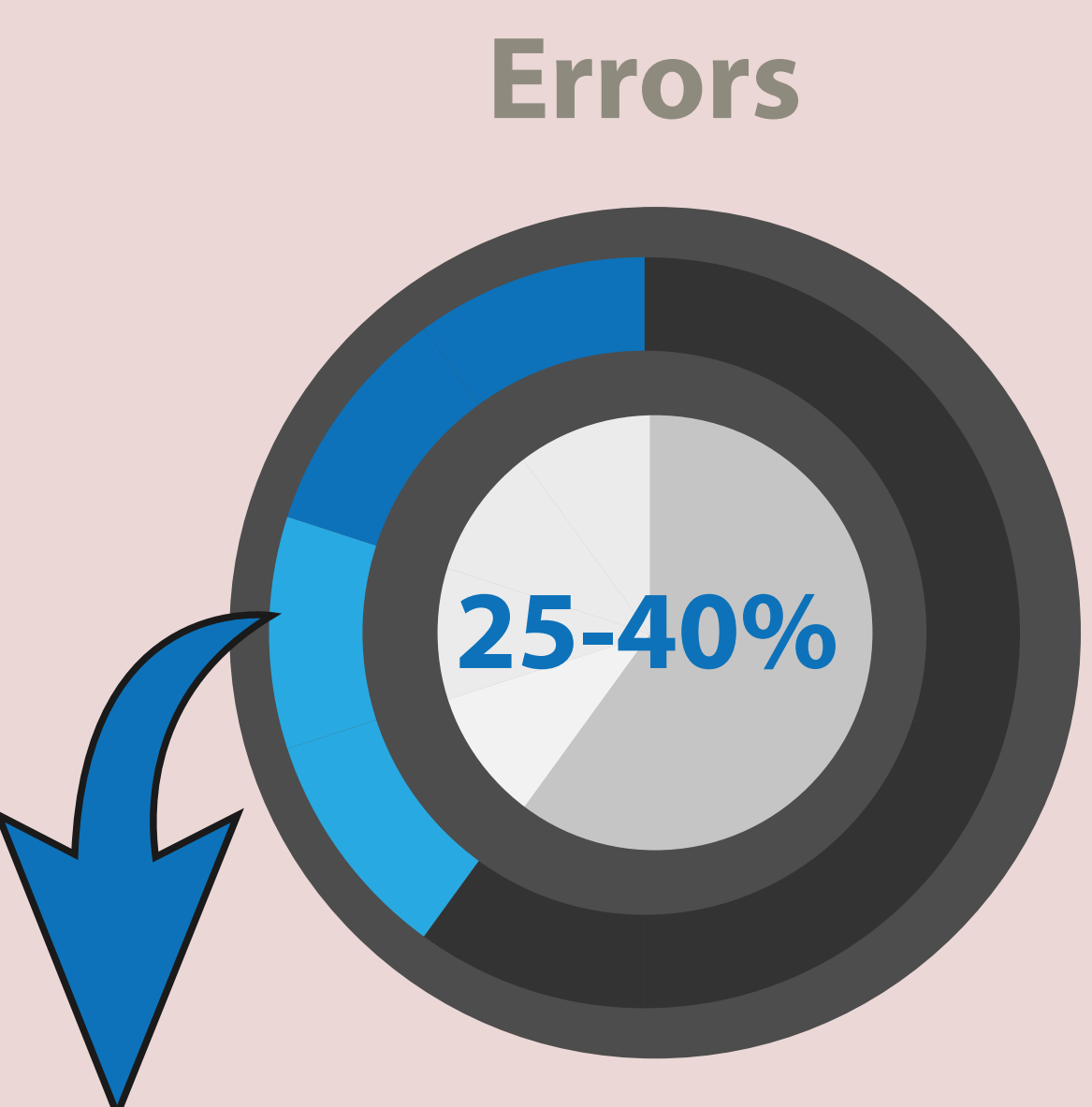
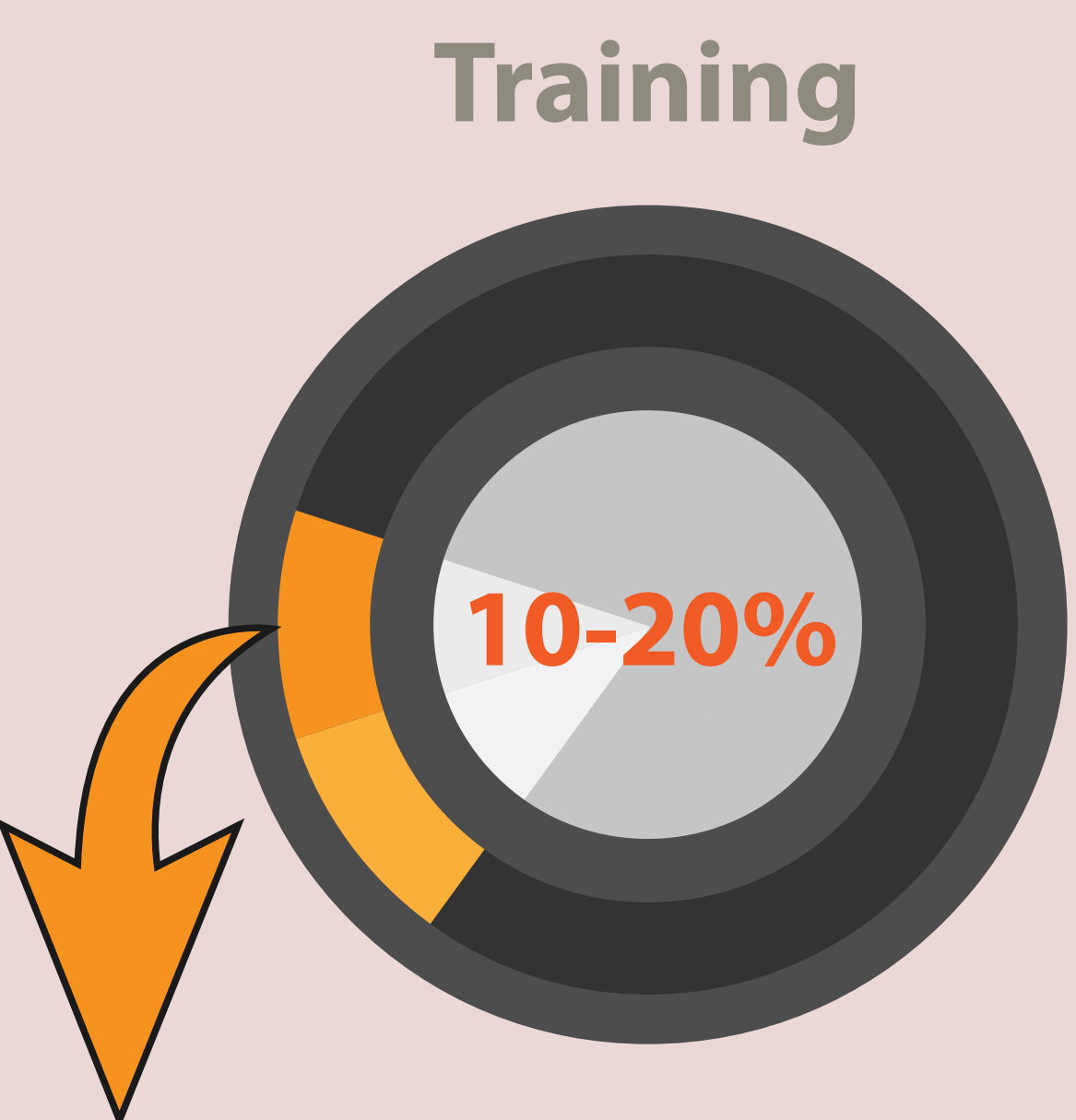
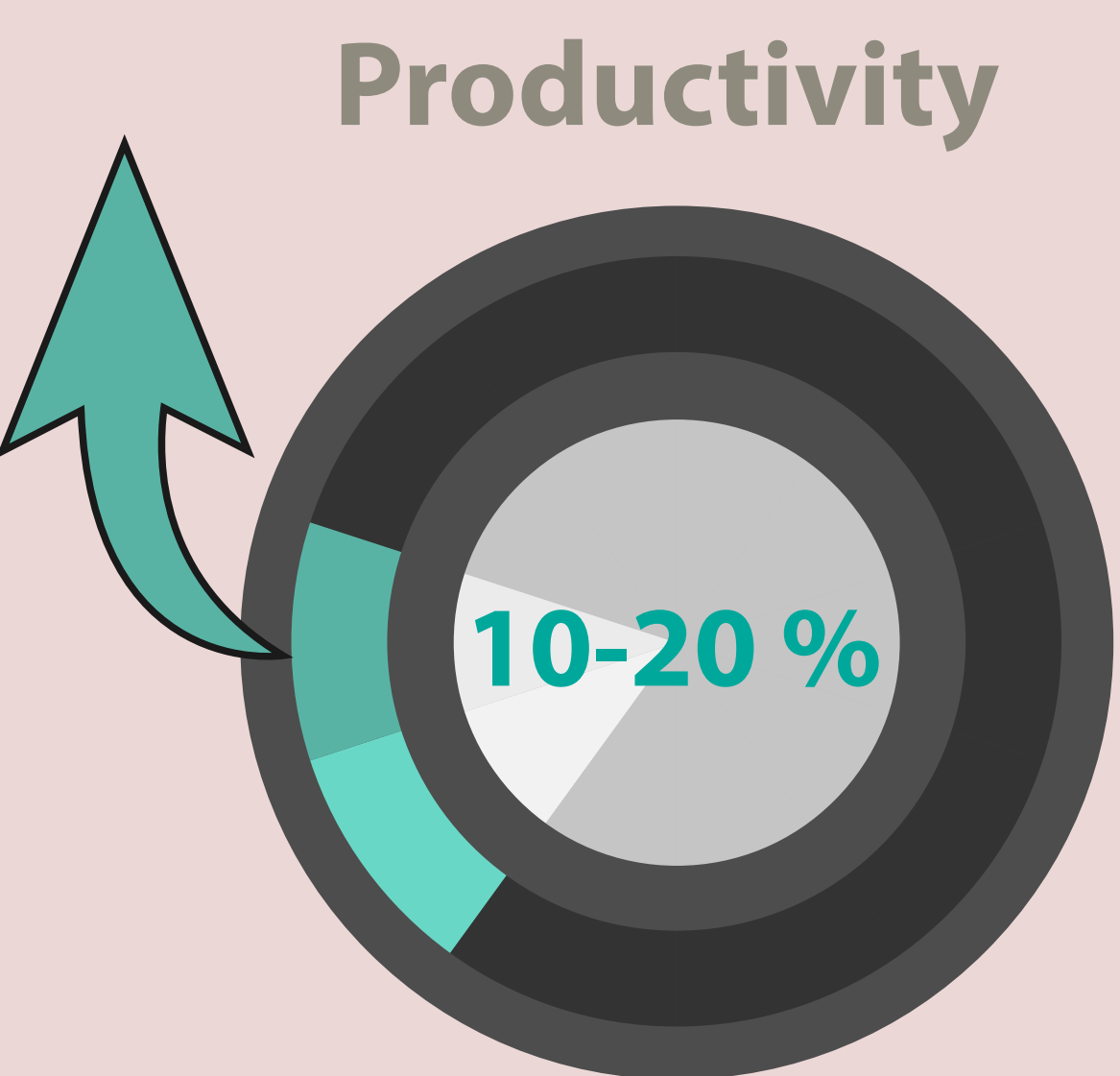
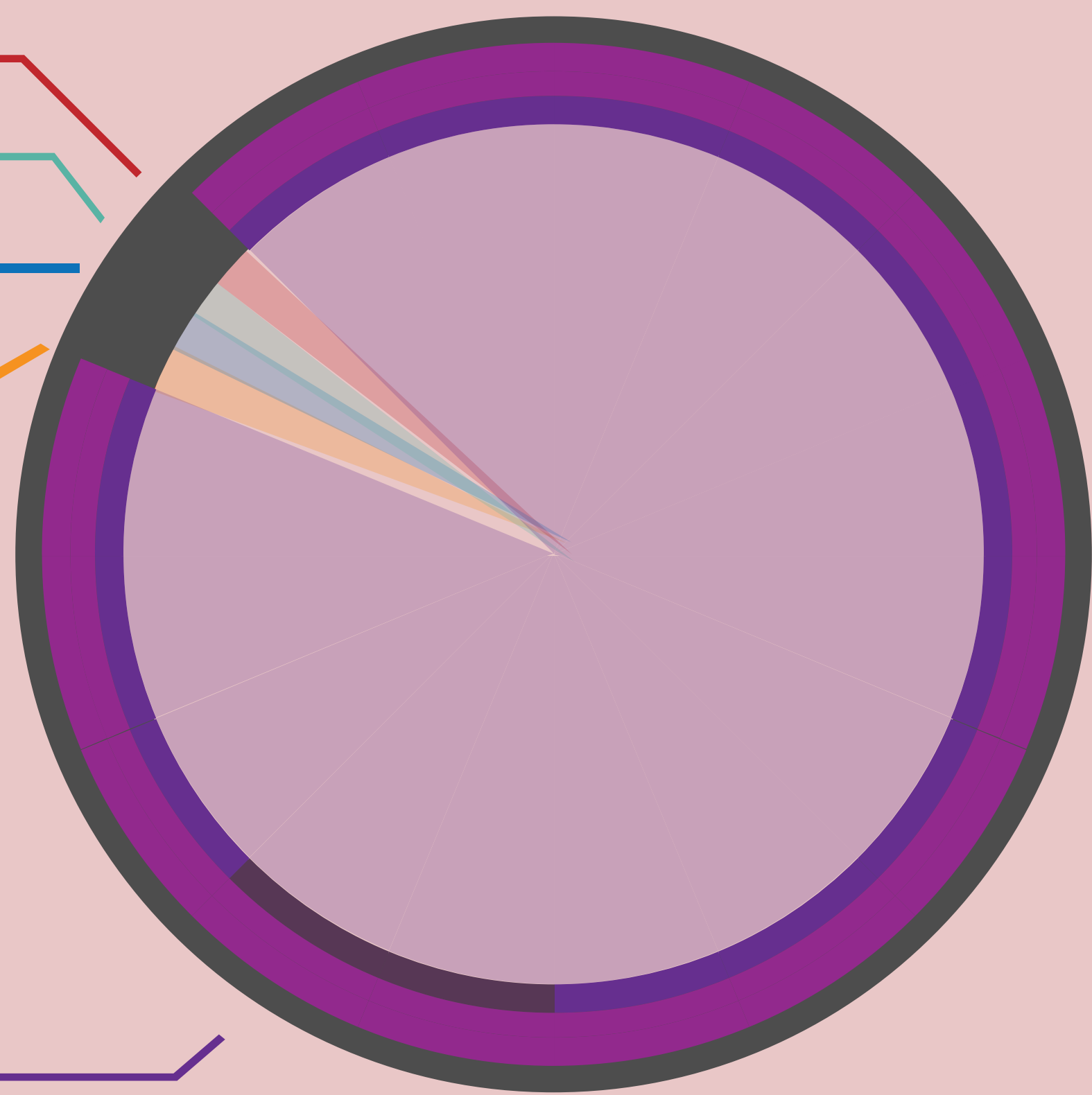
Design Phase User Experience

- Primary UX focus is UI only (wireframes & icons)
- Lack of well defined UX processes
- Frequently deprioritized (after DB, Dev, Test, Reqs)
- Engaged too late in the process
- Process improvement benefits not being realized
- Overall awareness of UX is low
- Outdated and Incongruent toolsets
- Siloed activities
- Unclear acceptance criteria
- Insufficient unity between UX, Dev & Test teams

Current UX Time Allocation

1% Prototyping
1% Analysis
1% User Testing
2% User Research

95% Design

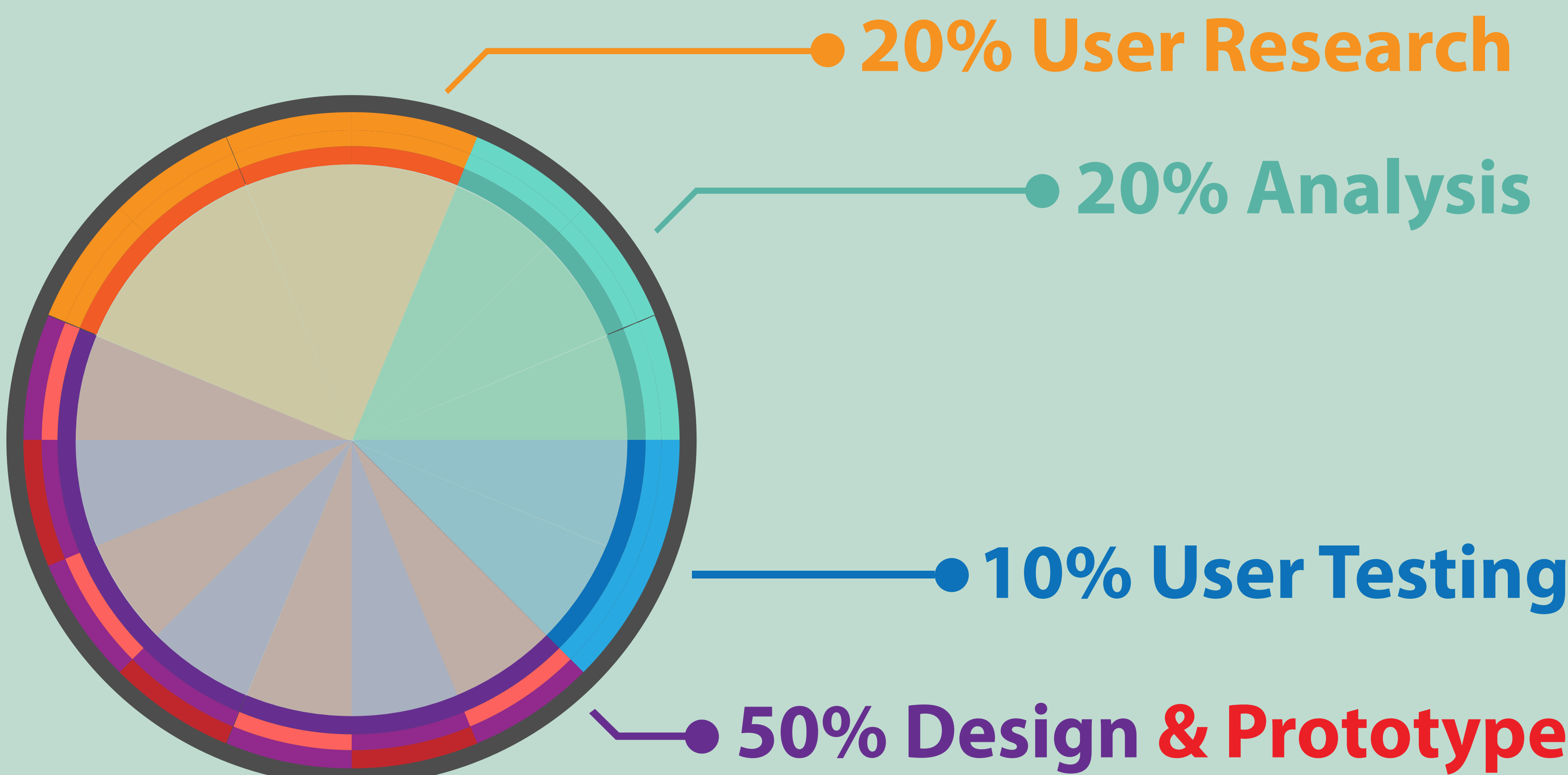


Vision for DTP UX (Release 2↑)

Out in Front User Experience

- Facilitates shared understanding
- Define formal UX processes
- Processes redefined with Informed Solutions
- UX three sprints ahead of Development
- Time allocated for User Research
- Time allocated for Analysis
- Combine Design & Prototype activities
- User Testing and UAT working together
- Mature UX processes clarify acceptance criteria
- UX workshops with RA, Dev, & Test teams

Repurposed UX Time Allocation

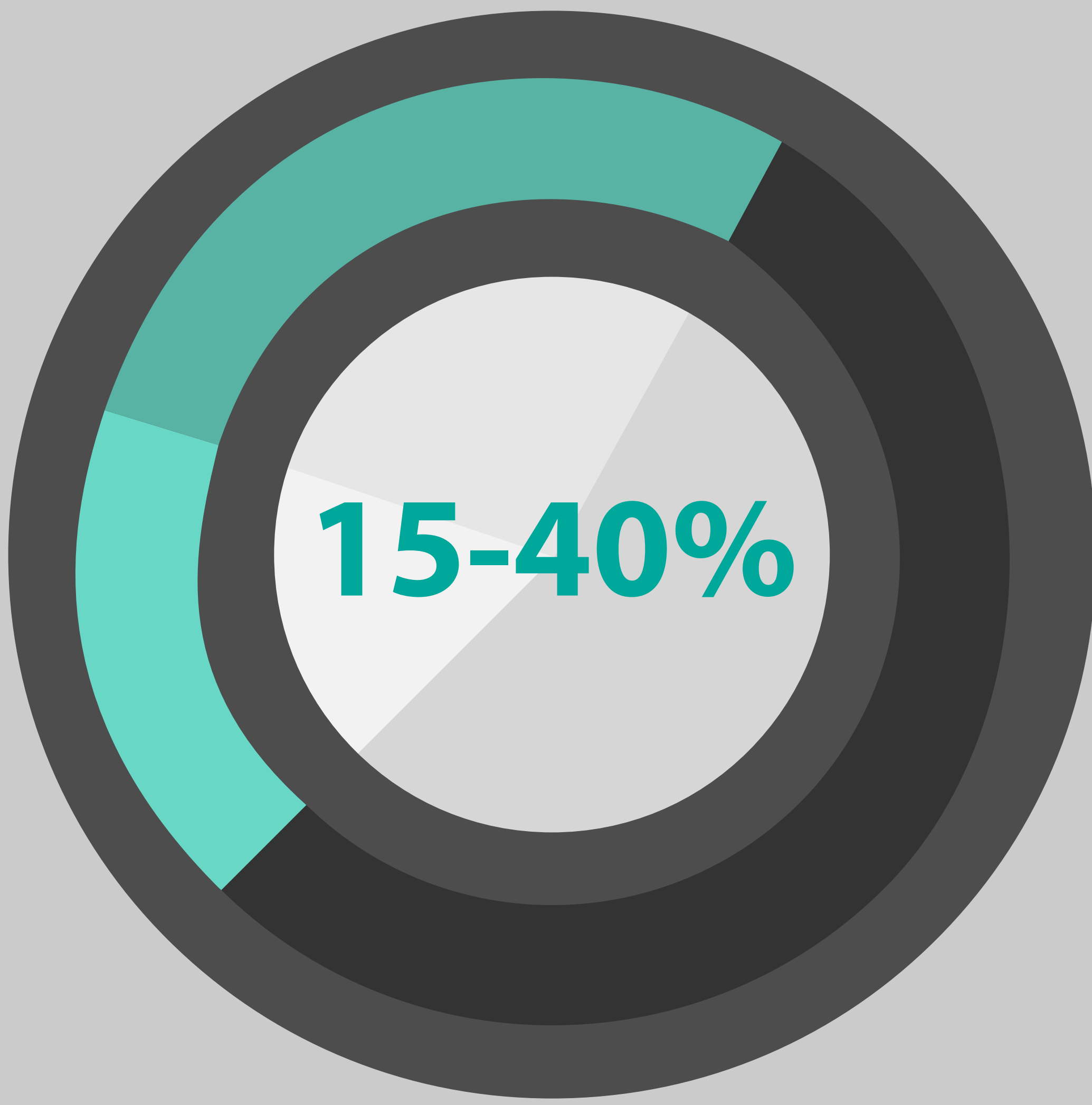




User Experience (UX) Focus in DTP

UX Saves Money

\$2-\$7 Million / Year

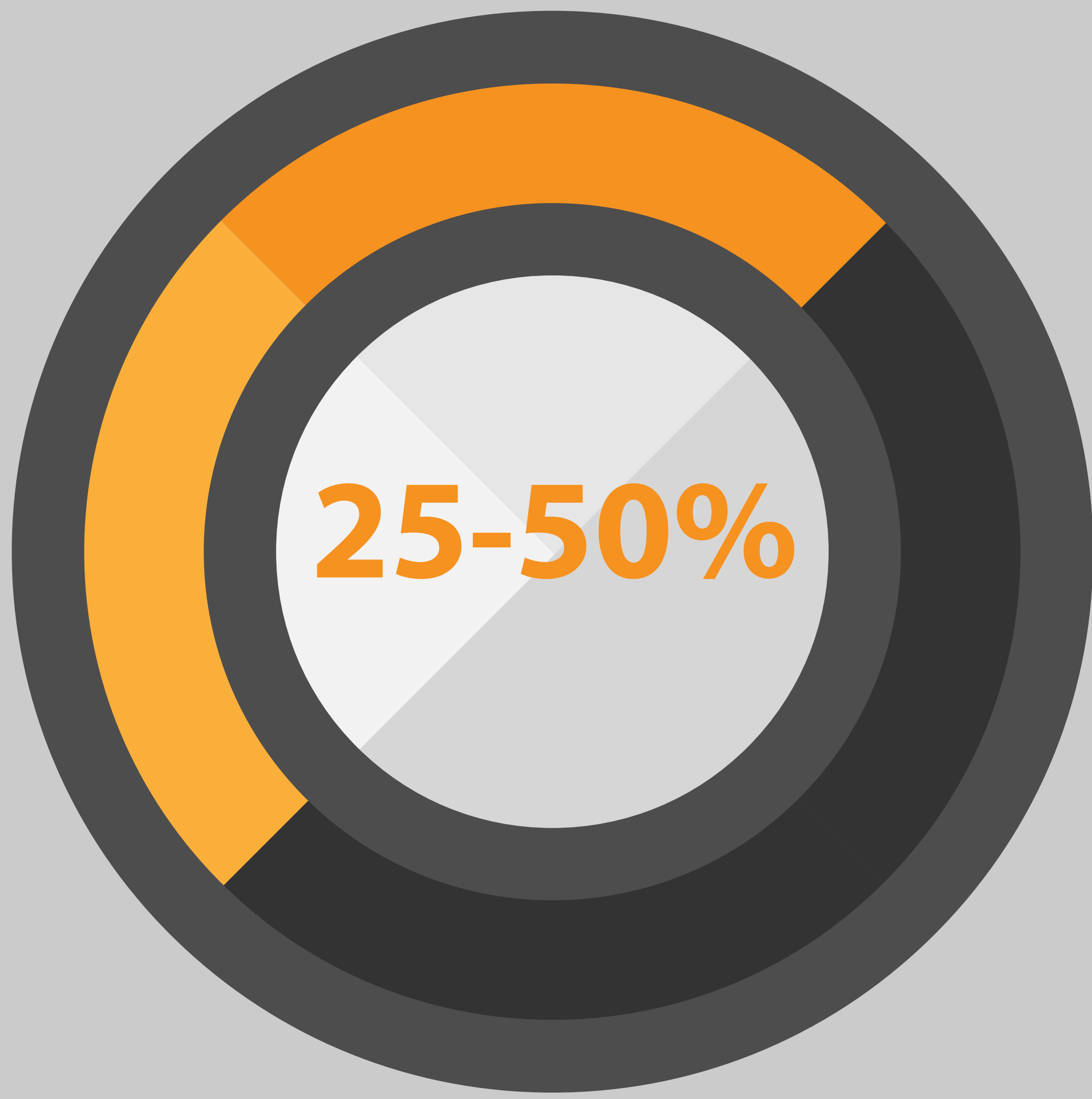


*5% for a better Search & Display

Analyst Productivity

- Streamlined Workflow
- Redefine Processes
- Avoid Duplicate Entry

\$15-\$22 Million 1st Year

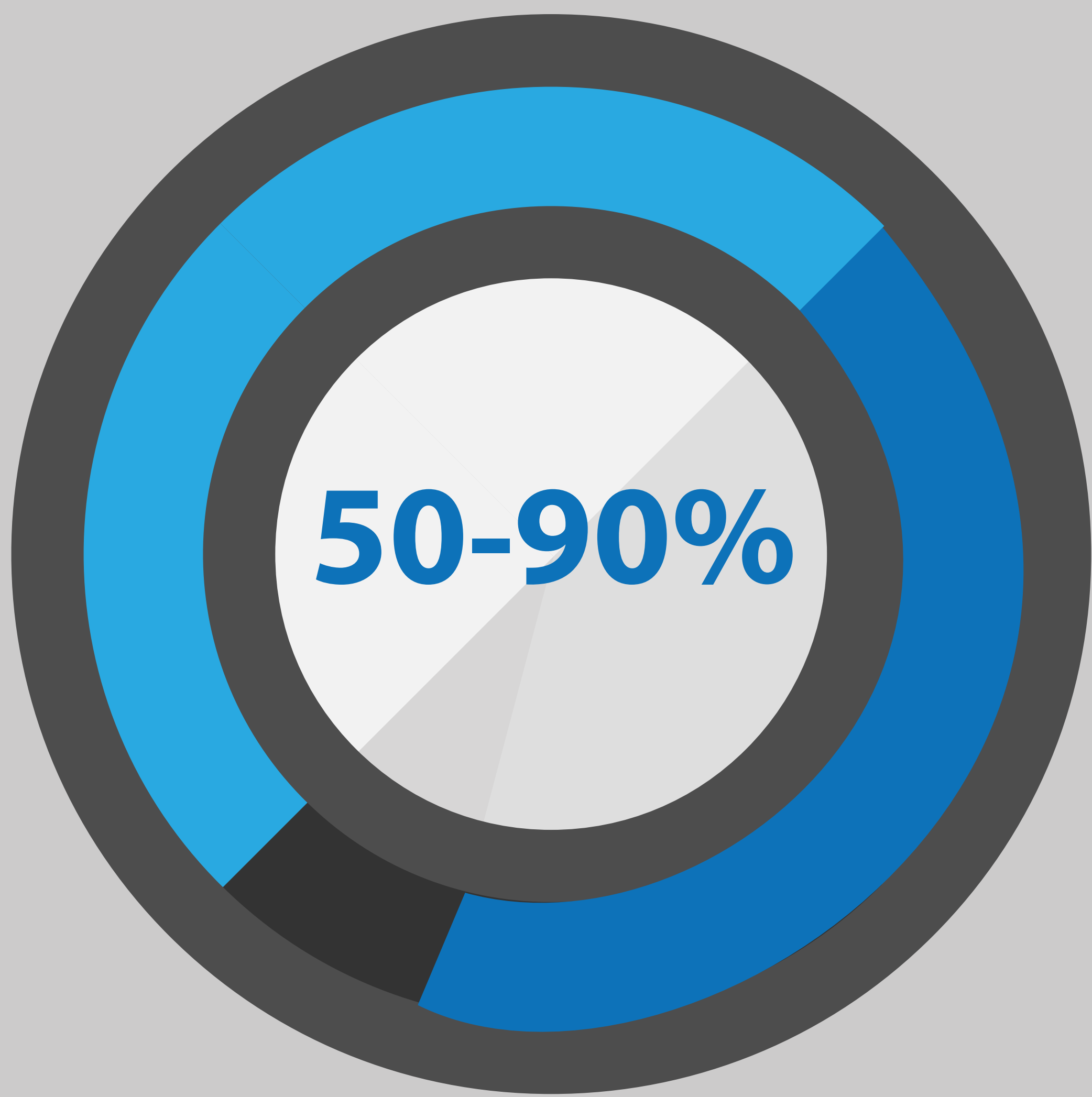


*50% reduction in training is common

Reduced Training

- Increase Ease of Use
- Increase Ease of Learning
- Reduce Learning Curve

\$2-\$4 Million / Year

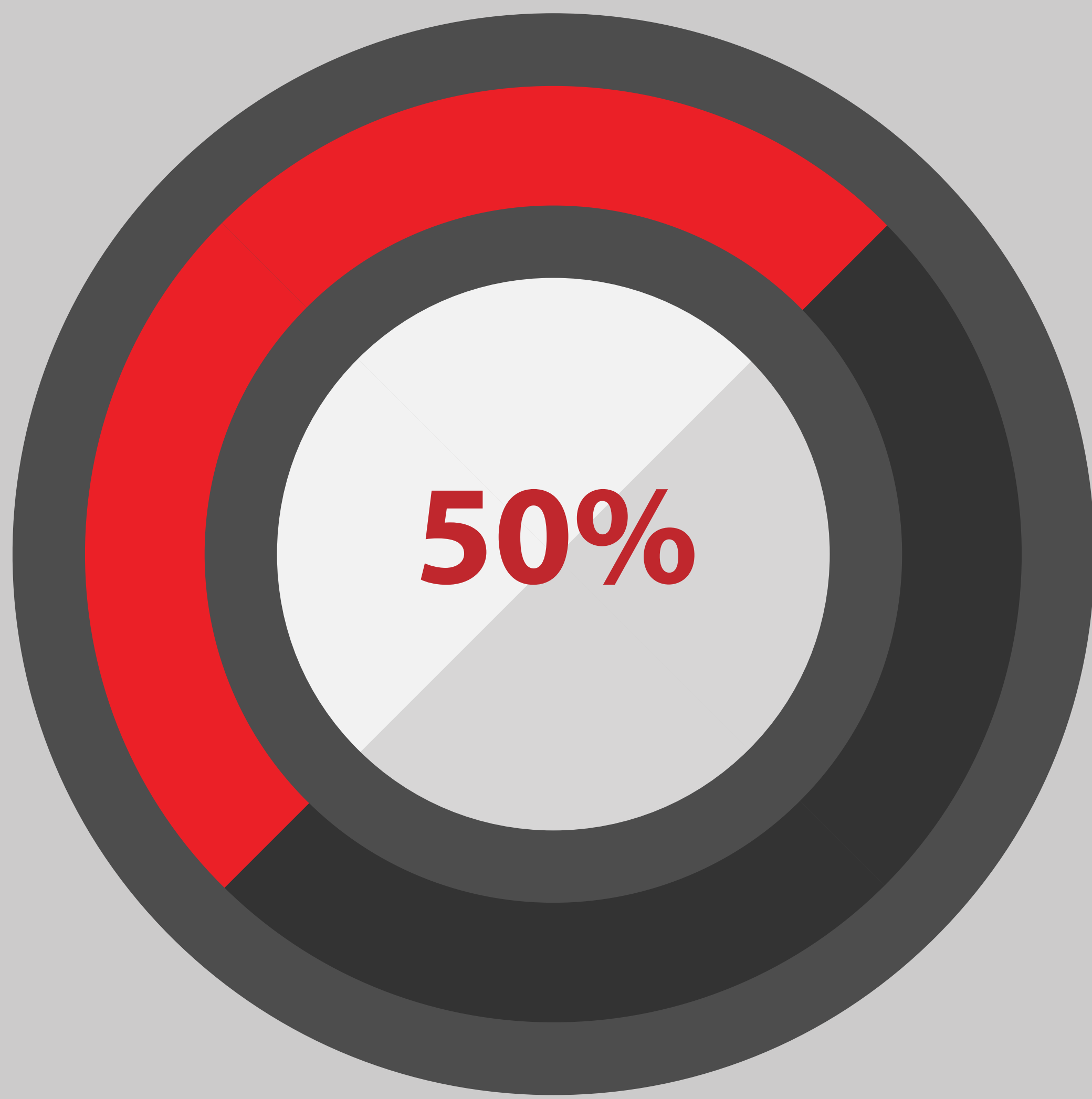


*90% Error Prevention is achievable

Data Error Prevention

- Reduce User Errors
- Reduce Customer Impact
- Reduce Analysis Time

\$1-\$2 Million / Year



*50% usually spent in avoidable rework

Reduced Development Costs

- Reduce Development Time
- Increase Developer Productivity
- Drastically Decrease Rework

$(H / 8) * U * L * (P / 100)$

$(U * L) * (T / 250) + (U * P)$

$(\# \text{ of Errors}) \times (\text{repair time}) \times (\text{Employee Hourly Rate}) \times (\# \text{ of employees}) = \text{savings}$

$(\# \text{ of changes}) \times (\text{avg. hrs/change}) \times (\text{Hourly Dev Rate}) \times (4, \text{ if late}) = \text{savings}$

UX Activities Early Adoption Costs



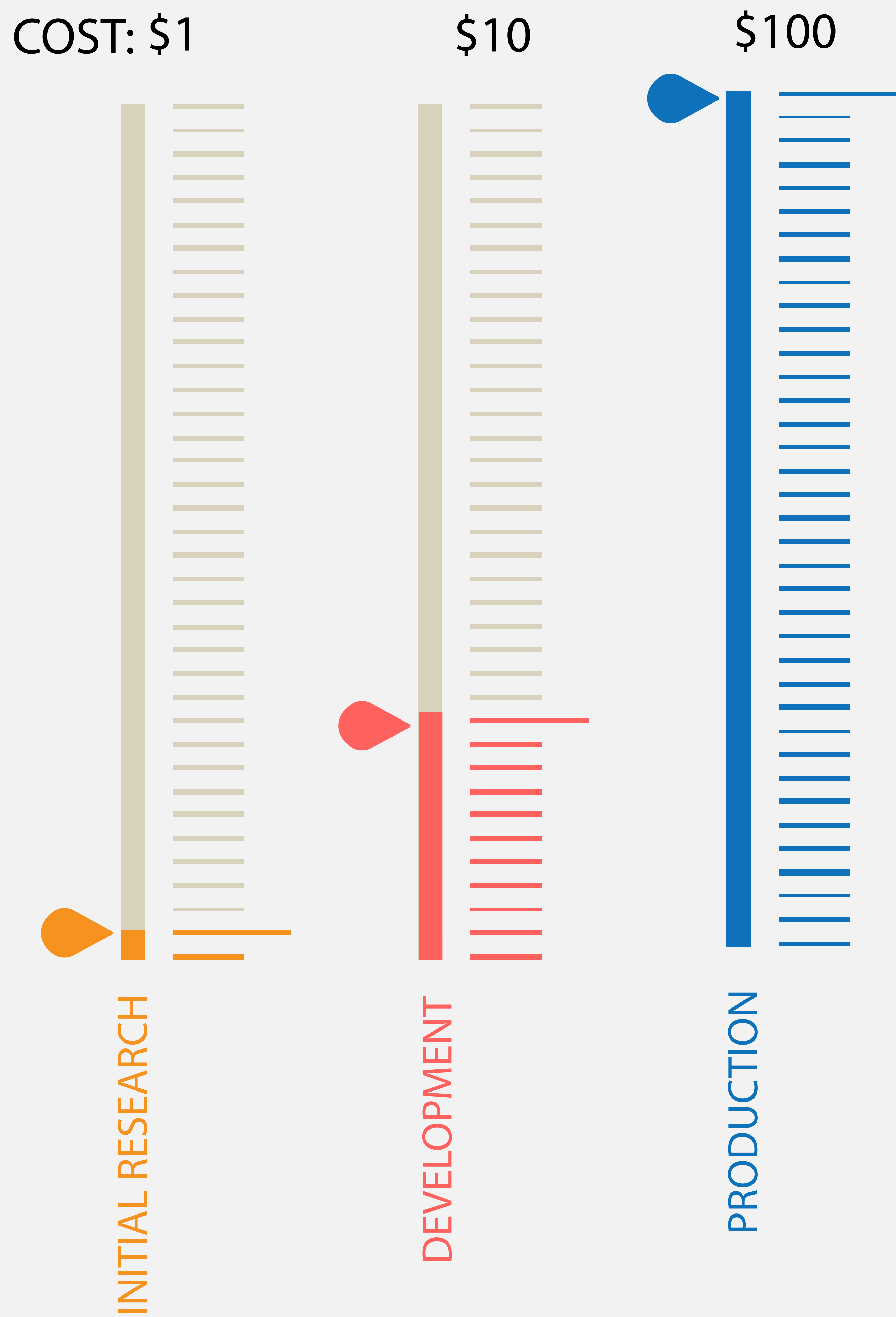
We Already Pay the Cost!

- Increased Development Time
- Loss of Productivity
- Routine Errors
- Market Loss
- Frequent Avoidable Rework
- Increased Training
- Lengthy Ramp-up
- Frustrated Progress

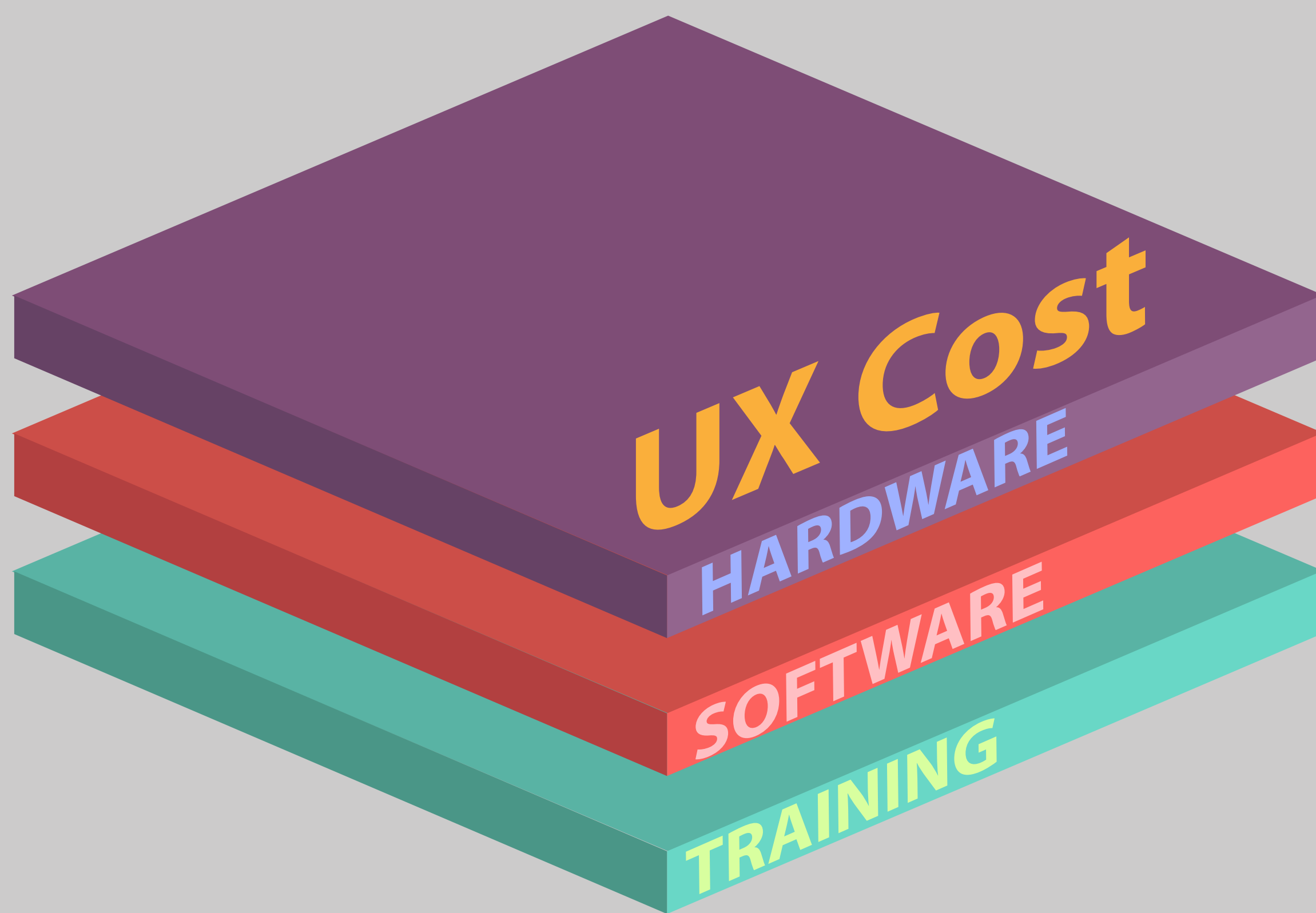
What Do We Change?

- The Mindset that UX is merely Design
- When we engage UX Engineers
- Educate the workforce in UX processes
- Take time to help ourselves
- Repurpose time we already spend
- Define efficient processes
- Procure proper resources and tools
- Increase UX accessibility

When to Pay for UX



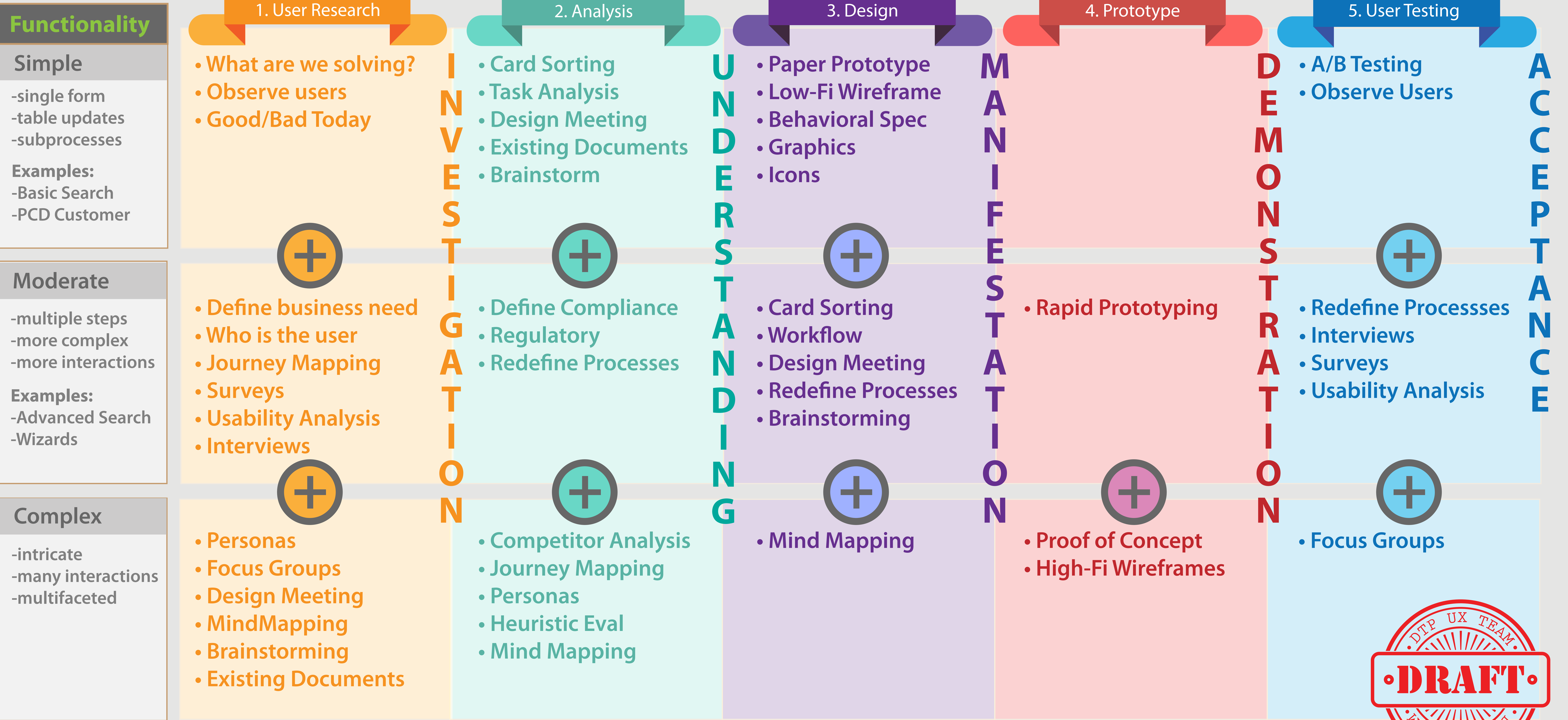
INVEST!



\$3,850
\$1,400 (then \$600/year)
\$3,000/year

\$8,250.00 per UX Employee/1st year
\$3,600 each successive year

Agile UX: Processes Scaled to Fit the Scope



Complex Example:
-Realtime Geospatial visualization during a claimed-work Feature attribute edit in a pre-validated Revision Set following an Advanced Search and Resultset display

