Working Backwards

Alan Cooper
Tool for innovation
Question every assumption
Rushing in the wrong direction
The power of working backwards

Know your user

Overcome blind spots

See the bigger picture
Success is 1% inspiration and 99% perspiration.
Failures take hard work, too
Innovation is a conundrum
You don’t know how to do it
“Doing it the wrong way!”
I always choose "C"
Pretend it’s magic
<table>
<thead>
<tr>
<th>Constraints</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can’t do</td>
<td>Must do</td>
</tr>
</tbody>
</table>
All technical problems solved
All resources are available
Only imagine the possibilities

Scott London
Ask “Why?” instead of “What?” or “How?”
Design is strategy
<table>
<thead>
<tr>
<th>Forwards</th>
<th>Backwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation</td>
<td>Discovery</td>
</tr>
<tr>
<td>Optimization</td>
<td>Opportunity</td>
</tr>
<tr>
<td>Brittle</td>
<td>Adaptable</td>
</tr>
<tr>
<td>Where are we right?</td>
<td>Where are we wrong?</td>
</tr>
</tbody>
</table>
The Goal-Directed Method

Who is your user?
What is their desired end-state?
What motivates them to get there?
“Design is the process used to build products.”
Business

Design

cooper
Omnivorous and non-judgmental
Touch, or sweep?
Start with 30,000 Bonus Miles after you spend $1,000 in the first 3 months

$0 Intro Annual Fee for the first year, then $95†

Get it & You’re in.

+ First Checked Bag Free
+ Priority Boarding
+ New! No Foreign Transaction Fees†

APPLY NOW
Earn—Shopping

The Earn—Shopping screen shares a lot with Dining: offer list, filterable, searchable, and map-able; each offer navigates to an offer detail page.

**Bonus Offers**
Some shopping partners offer bonus offers. These are denoted with a gold tag on the offer card, as with other partner categories.

**Retail Store and/or Online**
MileagePlus Shopping is unique in that some partners have two distinct offers, one for shopping in person at a retail store, and a second for shopping online.

**Shopping detail screen**
If the offer is from an online merchant, the action buttons are: favorite, share, and “Shop Online” (which opens an in-app browser and launches the partner site).

If the offer is from a retail store, the action buttons are: favorite, share, and map.

If the offer is a dual retail/online merchant, as in the example here, all four action buttons appear.
MileagePlus Personas

Neil wants upgrades
Margaret dreams of vacations
Bradley wants merch
50,000 Bonus Miles

Imagine where they’ll take you.
after you spend $2,000 on purchases in the first 3 months your account is open*

$0 Intro Annual Fee for the first year, then $95†

Apply Now
LOYALTY ENGAGEMENT

- He signed up for all of the airline FF programs, but doesn’t have many miles on any one. If he manages to get ~10k, he’ll buy half of a ticket, if he can. He has no particular loyalty to any airline - price is usually his biggest factor.

- Brad has a grocery card for coupons; his Starbucks card gets him free coffee. He checks retailmenot for specific sites before buying anything online.

- His primary credit card is a cash-back credit card from Capital One; he uses it only on big purchases. Otherwise, he uses his debit card.

- Brad buys and forwards Groupon, Living Social, and Slickdeals links deals to his friends once or twice a week. Used to focus on Groupon, but he finds that lately their offers are not interesting (e.g. he doesn’t need a manicure)
United MileagePlus X App

Tap, scan, earn.

Paying with MileagePlus Wallet is simple.

1. Pick the store from a list of nearby retailers
2. Tap the amount to pay
3. Scan the bar code
The lens of the user
Relentless drive makes it real.
Question assumptions to innovate
Your ego gets it built.
Your humility gets it loved.
Overcome your blind spots
“Common sense” is just our cognitive biases speaking.
Working backwards means thinking slowly.
Machines are simple systems
Fracking in Oklahoma
Unintended consequences
Personal echo chamber

The Correspondents, Fear and Delight
See the bigger picture
What should we do here?

What is our goal here?

Whose fault is this?

Whose responsibility is this?
Be a good ancestor
Our Oppenheimer moment
Rife with inequality
Peaceful, just, and fair
Assess the long-term effects
Lily Furedi, 1934
Thank You

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