Fortune teller to scientist

a lean approach to predicting successful products

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ThoughtWorks
Why are we here?
Belief in value of a product over time
Why are we here?
Belief in value of a product over time
Why are we here?

Biz vs. Tech
Lean experimentation helps everyone with what they should be working toward

**Biz**
- Understand the financial value of problems that need solving
- Decide what to fund

**Tech**
- Only build what is useful
- Use data to facilitate decision making

Team awesome: build cohesion, excitement, and energy on delivery teams
Lean Experimentation

1. Define the Problem
2. Determine KPIs
3. Guerilla Research
4. Create a shared map
5. Write a Hypothesis
6. Test your hypothesis
7. Analyze & decide
1. Define the Problem
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Problem statements connect a vision with many potential solutions.
Backing into a better problem statement

“We need an app for waiters to take orders at a restaurant.”
Backing into a better Problem statement

- The Five Whys
- Focus on desired outcomes
- Fill out the “How might we” question

How might we <address a business problem> so that <a measureable outcome happens>?
Backing into a better problem statement

“We need an app for waiters to take orders at a restaurant.”

Why?
How might we help customers with dietary restrictions know what they can and can’t eat on our menu so that waiters spend less time going back and forth clarifying ingredients with the chef?
Your turn Back into a better problem statement

Split into partners and identify better problem statements based on:

“We need an ipad in fitting rooms for customers to request clothing.”
[Retailer example]

Remember...

- End up with a GENERATIVE “How Might We” question: “How might we <address a business problem> so that <a measurable desired outcome happens>?”
- Try using The Five Whys
Business and technology want different things from KPIs

Biz

Tech

Actual desired value ($!)

Trackable & quickly actionable
KPIs examples

Too businessy: Average monthly revenue

Too technical: # questions asked to waiters

Just right: Waiter labor hours saved
KPIs examples

**Too businessy:** Average lifetime value of a user
While highly important, it is a lagging indicator that is hardly directly affected by a single change.

**Too technical:** # of bugs per release
It doesn't relate to business value. You can have bug free software that doesn't provide any value.

**Just right:** % increase in completed orders per product view
It ties directly back to business outcome (more orders is more money).
It is measurable in a short time frame (assuming you get a reasonable amount of orders a day).
It is compoundable so that even if our business is doing well, we're looking for doing better.
Learning in the real world: Guerilla research

External research

Interviews

Observation
Guerilla research example

How might we help customers with dietary restrictions know what they can and can’t eat on our menu so that waiters don’t have to spend time going back and forth clarifying ingredients with the chef?
Your turn  Guerilla research

Within your table, talk about how you might learn about this problem space. Make sure to include external research, interviews, and observations.

How might we improve the clothing store fitting room experience so that more customers end up using the fitting room?
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Create a shared experience map for understanding with high value focus areas

MAP THE CUSTOMER EXPERIENCE TO THE CUSTOMER JOURNEY

Source: The art of opportunity - Mark Sniukas, Parker Lee, Matt Morasky
1) Draw the user journey

2) Overlay the pain points and opportunities you discovered from guerilla research on it

3) Prioritize the parts that seem to hold the most value or potential risk -- the parts that you need to learn more about.
Shipments Processing

- No visibility to specific units (style/color) in shipment
- No Stock Supervisor role
- Late driver/delivery

Same units in multiple cartons. Also mixed items/divisional types in same box
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Writing a hypothesis

If <we had this capability>, then <we would see this measurable outcome>.
Example hypothesis

If customers had access to meal allergen information, then waiters would have to ask the chef fewer questions.
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Testing a hypothesis: How low can you go?

If customers had access to meal allergen information, then waiters would have to ask the chef fewer questions.
Your turn How low can you go?

If **fitting rooms provided entertainment**, then **more customers would use the fitting room**.

With a partner, take turns coming up with ways you could test this, each test idea being cheaper and faster to implement than the last. Come up with a total of 4 test ideas.
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### Analyzing results & deciding what comes next

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need more data</td>
<td>→ Learn more about this</td>
</tr>
<tr>
<td>Hypothesis needs to be modified</td>
<td></td>
</tr>
<tr>
<td>Hypothesis was incorrect</td>
<td>→ Learn about something else</td>
</tr>
<tr>
<td>Hypothesis was correct</td>
<td></td>
</tr>
</tbody>
</table>
Analyzing & what comes next

If customers had access to meal allergen information, then waiters wouldn't need to ask the chef questions.

| The stickers fell off and nobody saw them (Need more data) | → Learn more about this |
| People didn’t understand the icons and the legend was difficult to find (Hypothesis needs to be modified) | |
| People still asked a lot of questions because they wanted to know about fat content, not just allergen information (Hypothesis was incorrect) | → Learn about something else |
| No customers asked any questions that the stickers couldn’t answer (Hypothesis was correct) | |
What comes next: More!
Lean Experimentation

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Questions & Discussion

Thank you!

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