

Applying Design Thinking Principles in Product Management

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center for
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Design Has Value

Evidence from the Corporate Design Foundation



► BusinessWeek IDEA Design Award winners outperform those who didn't win in stock performance

Evidence from Academic Studies

- ▶ “High design” companies outperformed “low design” companies over seven years in:
 - ▶ Earnings (EBIDTA)
 - ▶ Net income
 - ▶ Cash flow
 - ▶ Stock market return
- ▶ But, growth rates were the same between the two groups
 - ▶ Percent change in net sales
 - ▶ Percent change in net income
 - ▶ Percent change in net cash flow

Hertenstein et al., “The Impact of Industrial Design Effectiveness on Corporate Financial Performance”, *The Journal of Product Innovation Management*, Vol. 22, No. 1 January 2005.
Note: This was one of two special issues focused on the topic of design and business.

- ▶ The data doesn’t ALWAYS go our way!

Evidence from the UK Design Council

Chart 1: Ten-year performance 1995-2004



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- Firms with “design portfolios” outperform those without them in the stock market

Other Interesting Data from UK Design Council

	Design-led Companies	Average UK Companies
Percentage that has introduced new products or services in the past three years	80%	40%
Percentage that has seen market share increases	83%	46%
Percentage that has opened new markets	80%	42%

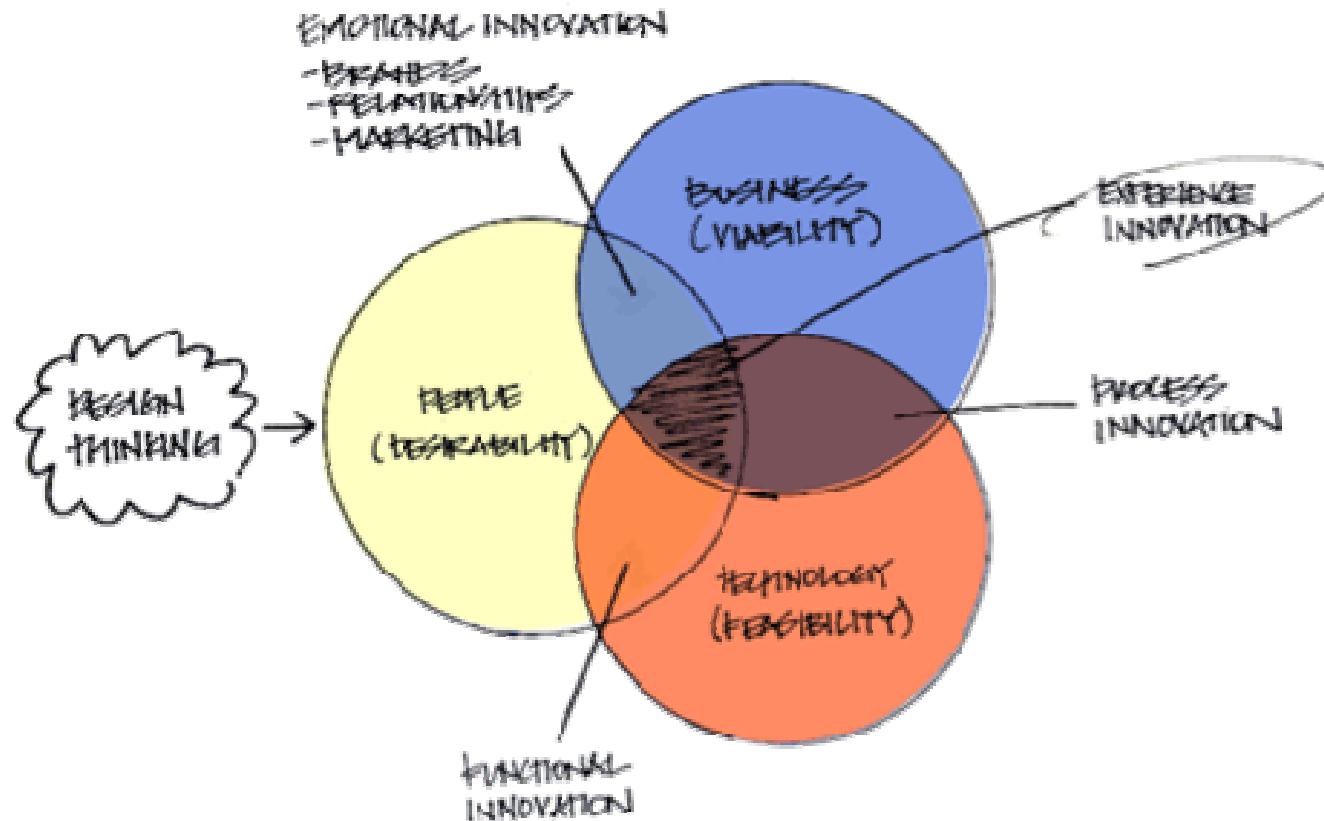
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- It is likely you can find general research data to support whatever goal you wish to support.



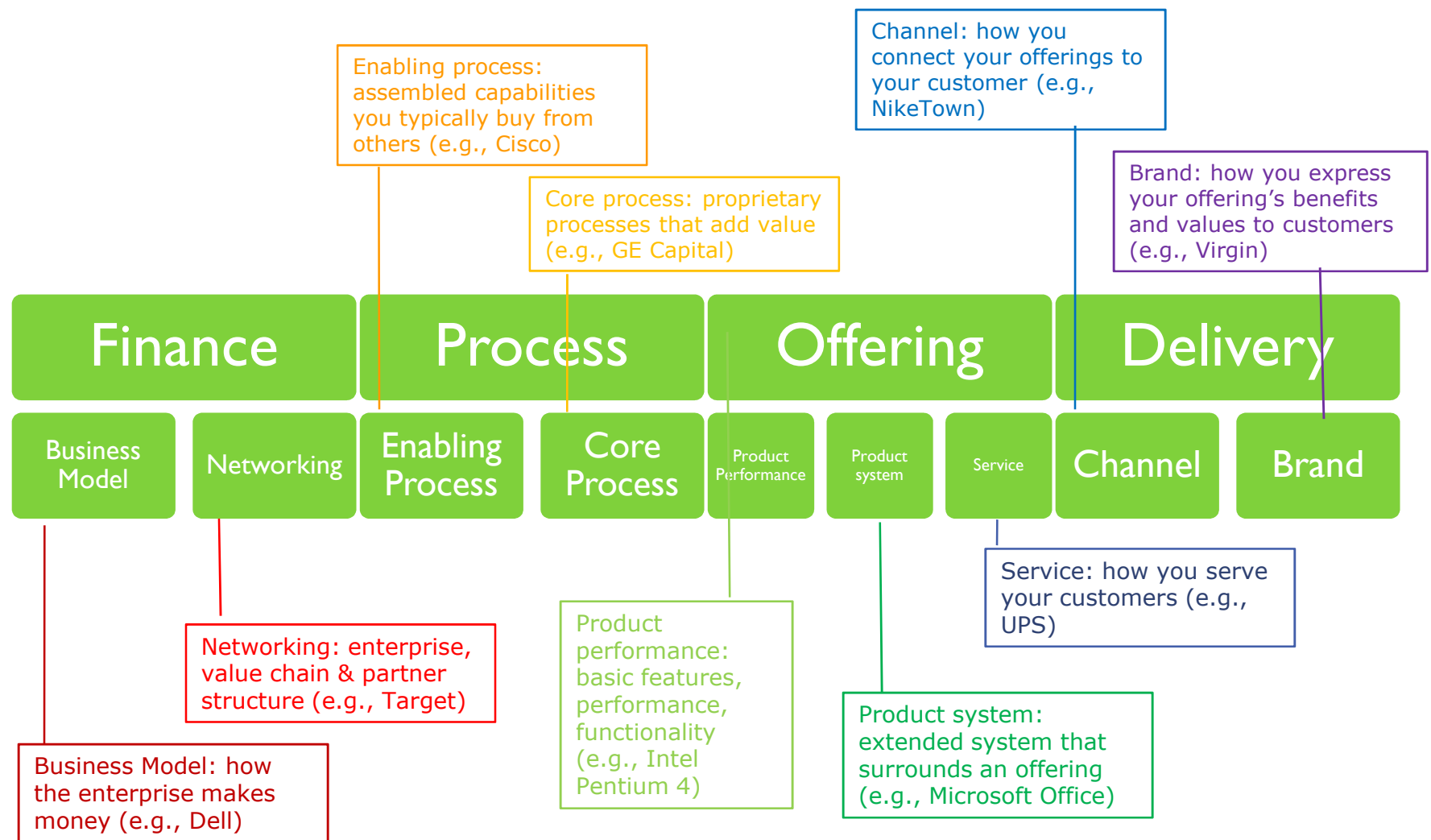
But, what is design?

At a high level, design focuses on creating customer experiences

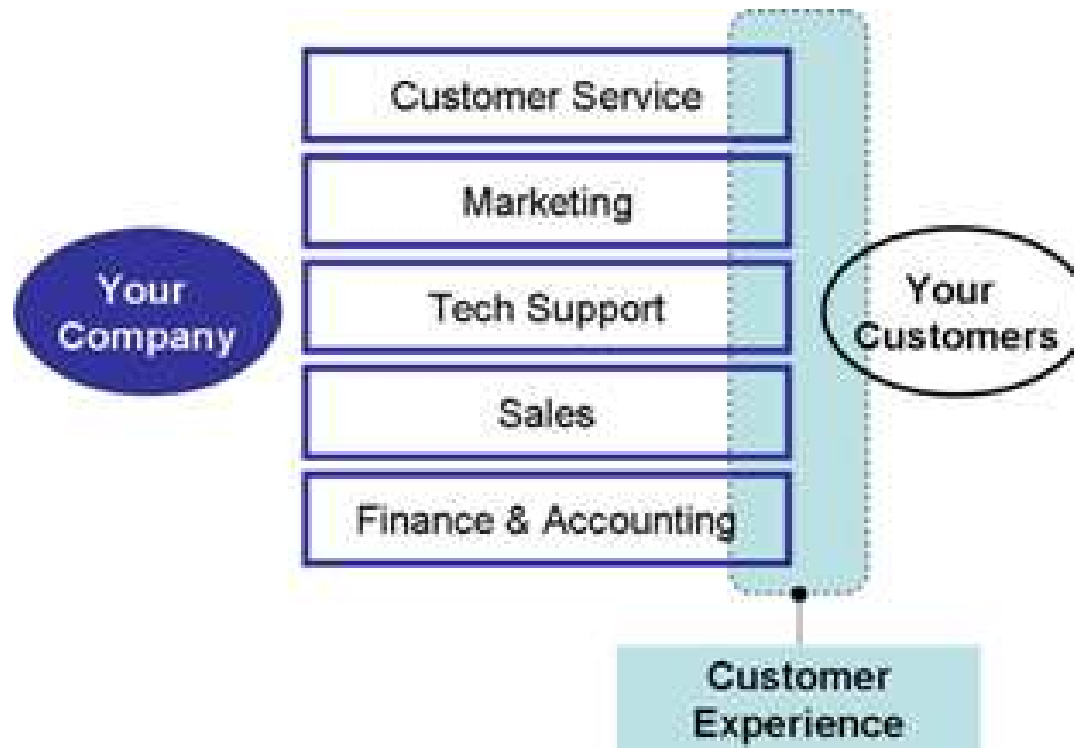
Design Thinking Integrates People, Business and Technology to Create New User Experiences



Design Thinking Looks Across the Value Chain to Create New User Experiences



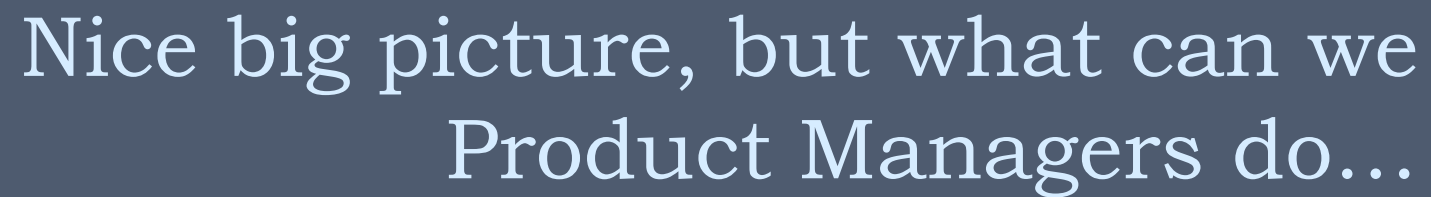
This Implies a Cross-Functional View in the Firm



But, does customer experience really matter during a recession?

- ▶ In a survey of 90 customer experience decision-makers from large North American firms:
 - ▶ 89% felt that customer experience as either very important or critical to their firm's strategy in 2009.
 - ▶ 80% said that their executive teams aimed to differentiate their firm's customer experience.
 - ▶ 65% described their approach to customer experience as either disciplined or very disciplined (up from 58% last year).
 - ▶ 57% have a senior executive in charge on improving customer experience across products and channels (up from 45% last year).
 - ▶ More than half picked lack of budget and lack of cooperation across organizations as major obstacles to their customer experience efforts.
 - ▶ What do they expect from a continued recession? 48% expect spending on customer experience to get cut less than in other places, while only 12% expect it to get cut at a higher rate.

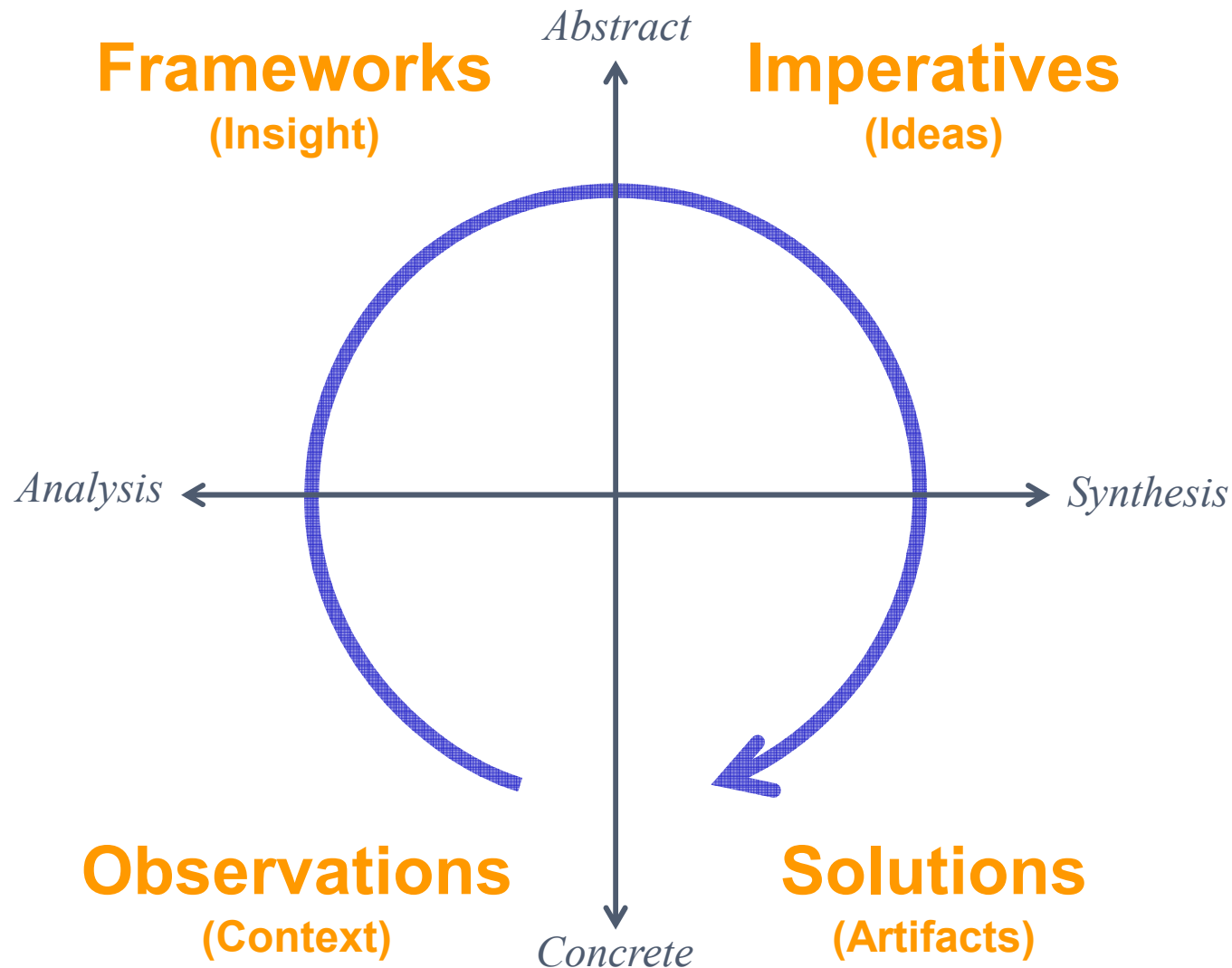




Nice big picture, but what can we
Product Managers do...

Core principles of customer-focused design

Basic Design Thinking Framework and Activities



Remain focused on your customers needs, deeply understanding them



Abstract

You have to forget
about **your problems**
and worry about
their lives

Analysis

Synthesis

Observations
(Context)

Concrete



Understand needs in
terms of use,
usability and
meaning



A small, but meaningful story...

- ▶ Kim says to Eric:
 - ▶ “You sent an evite to our wedding!”



What are the needs?



What went wrong?

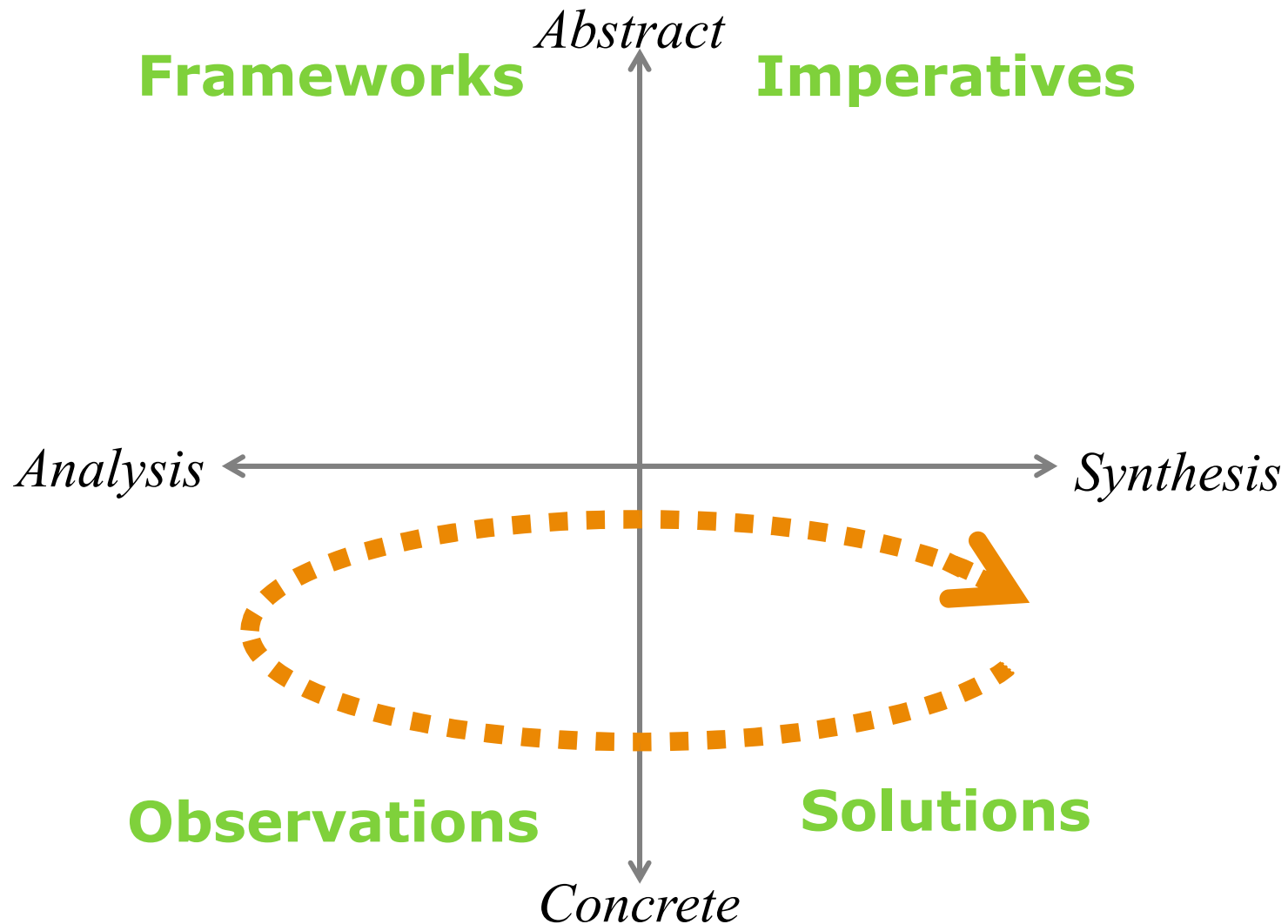


More than ever in these turbulent times,

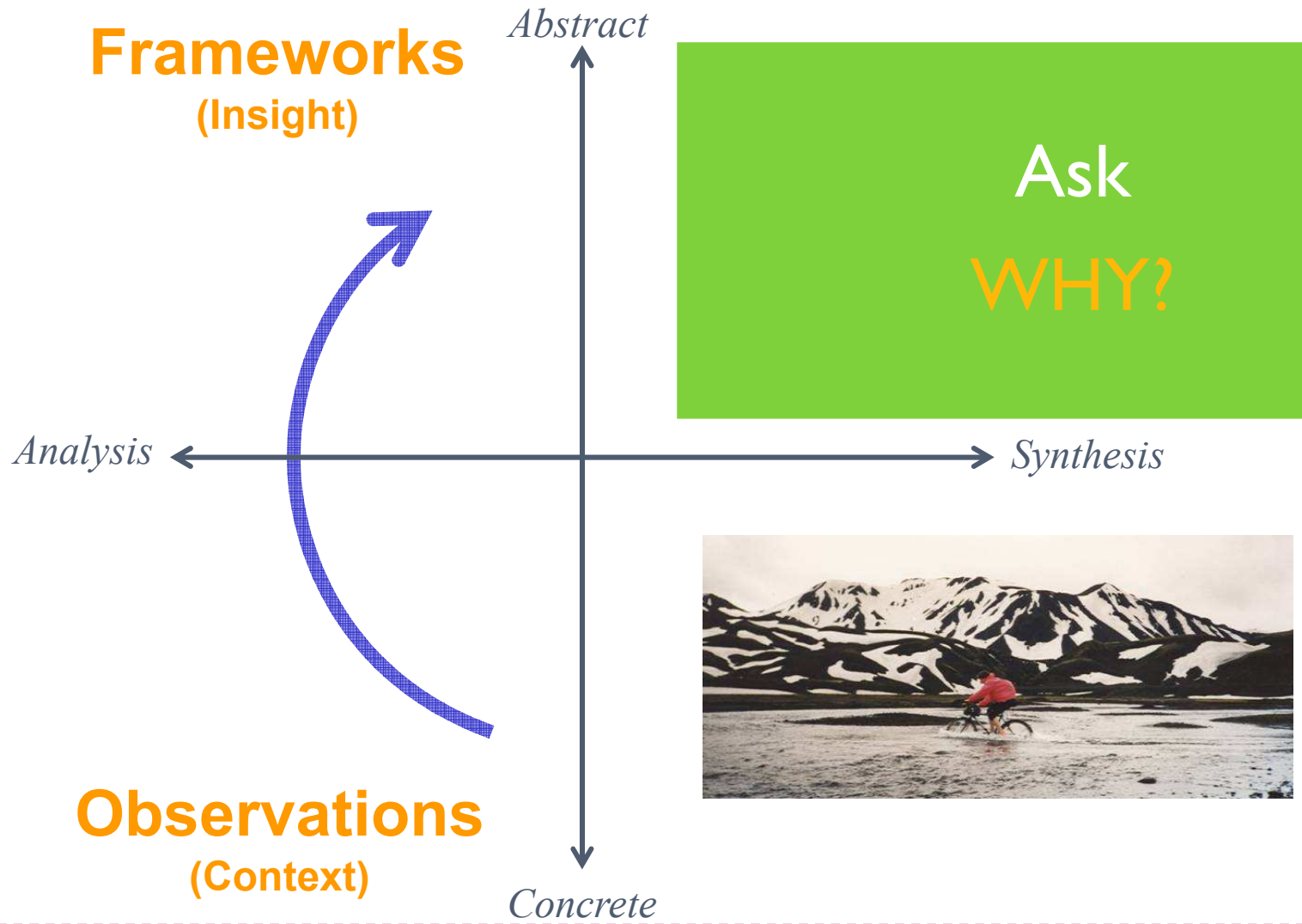
“Pay attention to how your customers might like to interact with your products or services, and a remarkable change takes place. You can do more than simply satisfy their immediate needs. **You might actually make your customers feel like heroes.**”



While tempted, you can't afford to get caught in the
“express test cycle”



Taking the time to frame and reframe may be particularly difficult, but is really important



Framing is about decoding the stories you hear

Story



Decode

Aha!

Discontinuity

Contradiction

Success

Failure

Insight

Why!

Make sense
of this

Hypothesis

What's
missing?

Needs

Common

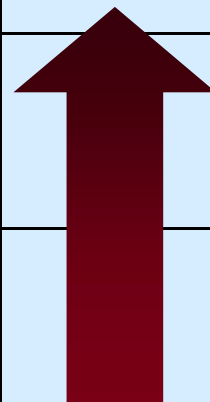
Context

Activity

Interaction

Solutions

Making things
better



Making better
things



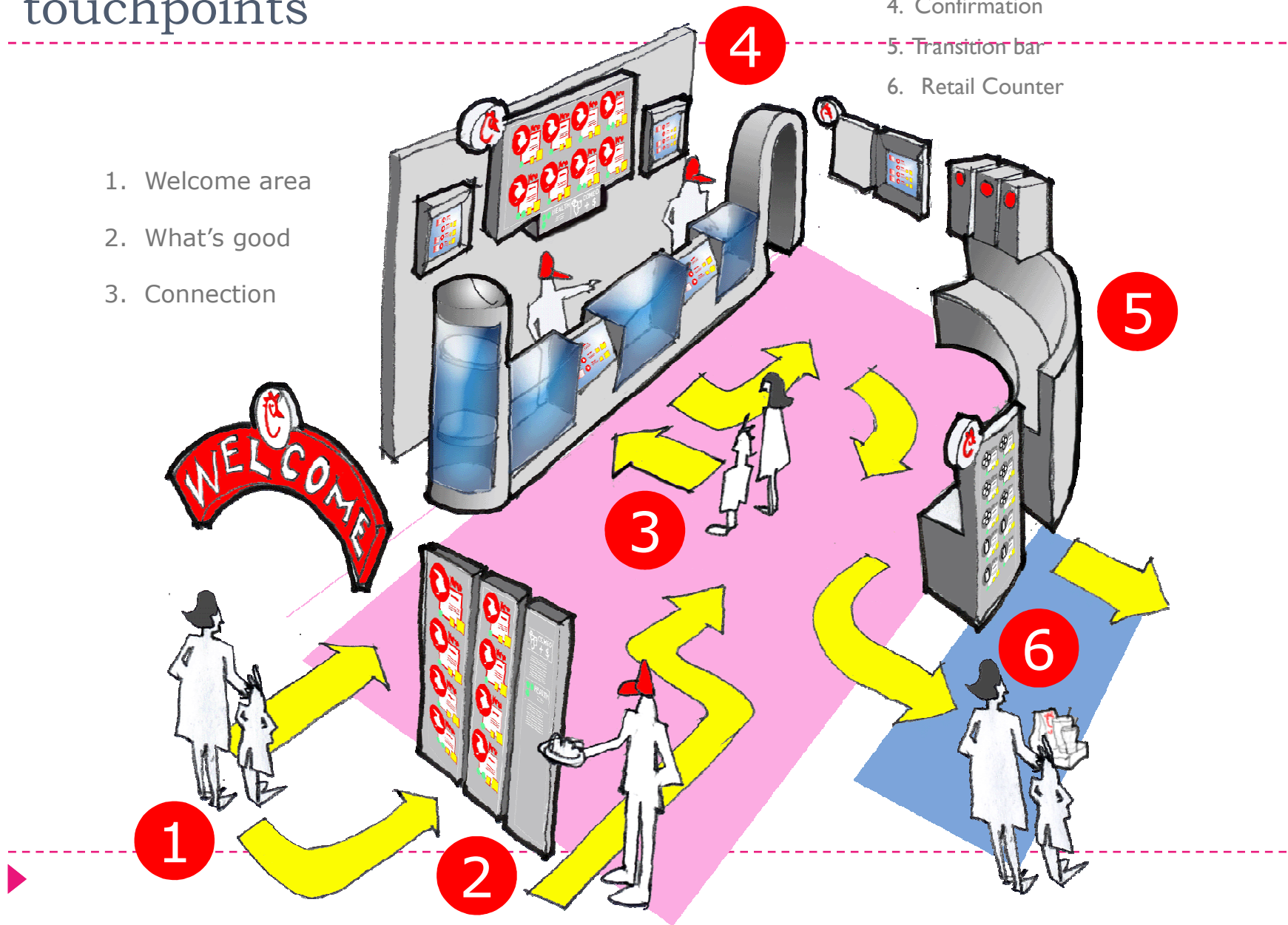




Framing is about understanding all the customer touchpoints

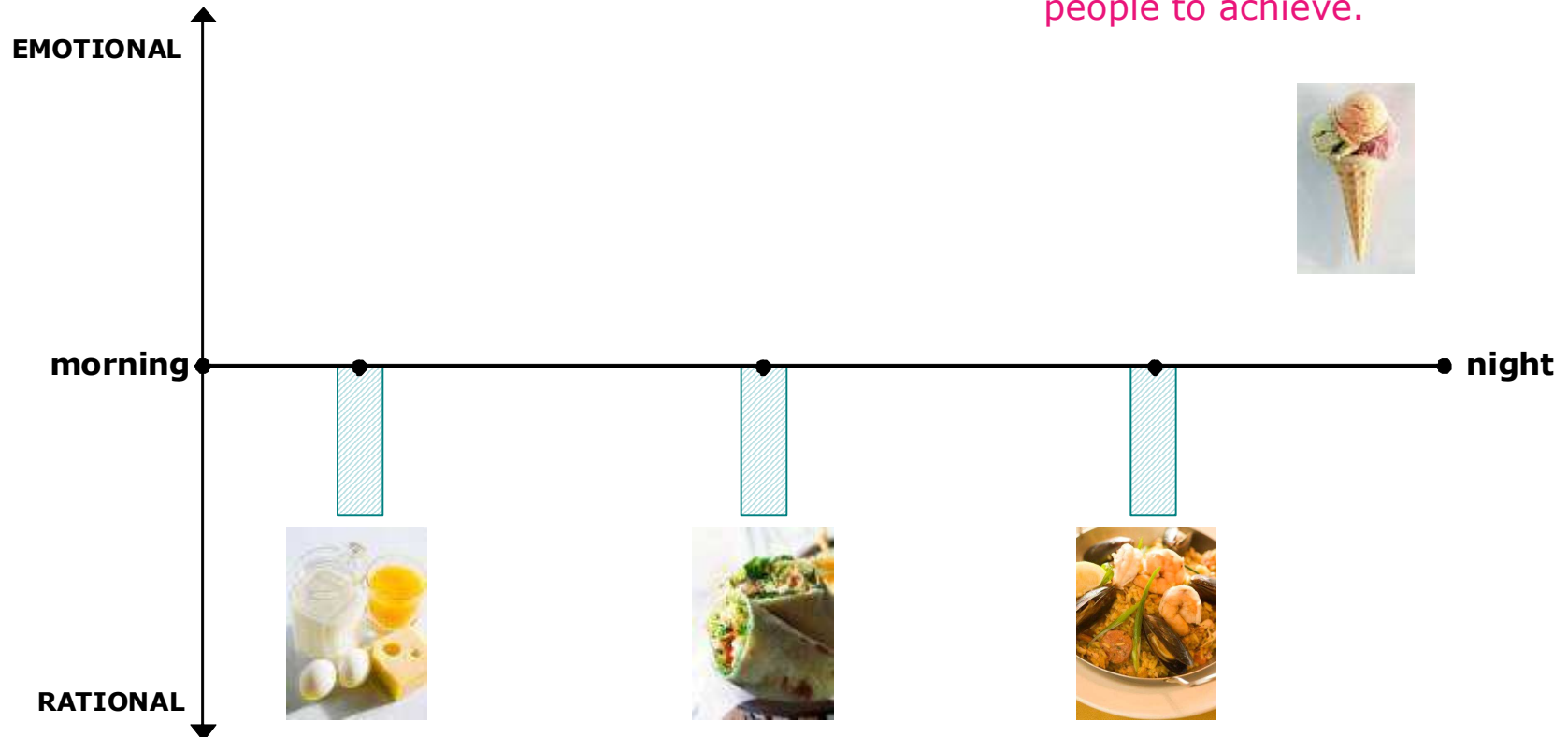
1. Welcome area
2. What's good
3. Connection

4. Confirmation
5. Transition bar
6. Retail Counter



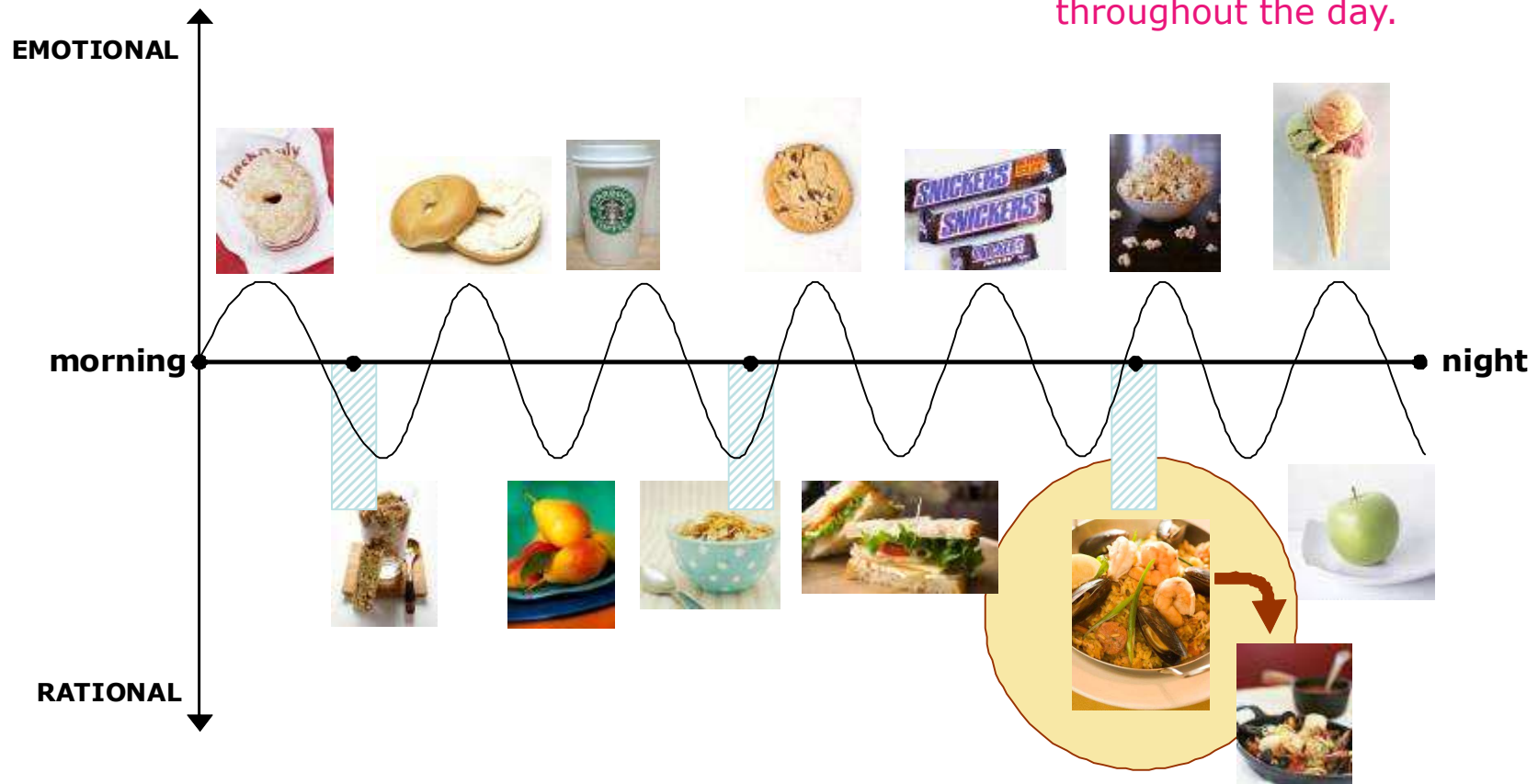
Framing considers broader market trends

Consumers want a balance of both Emotional and Rational foods. “Three square meals” is virtuous but increasingly difficult for people to achieve.

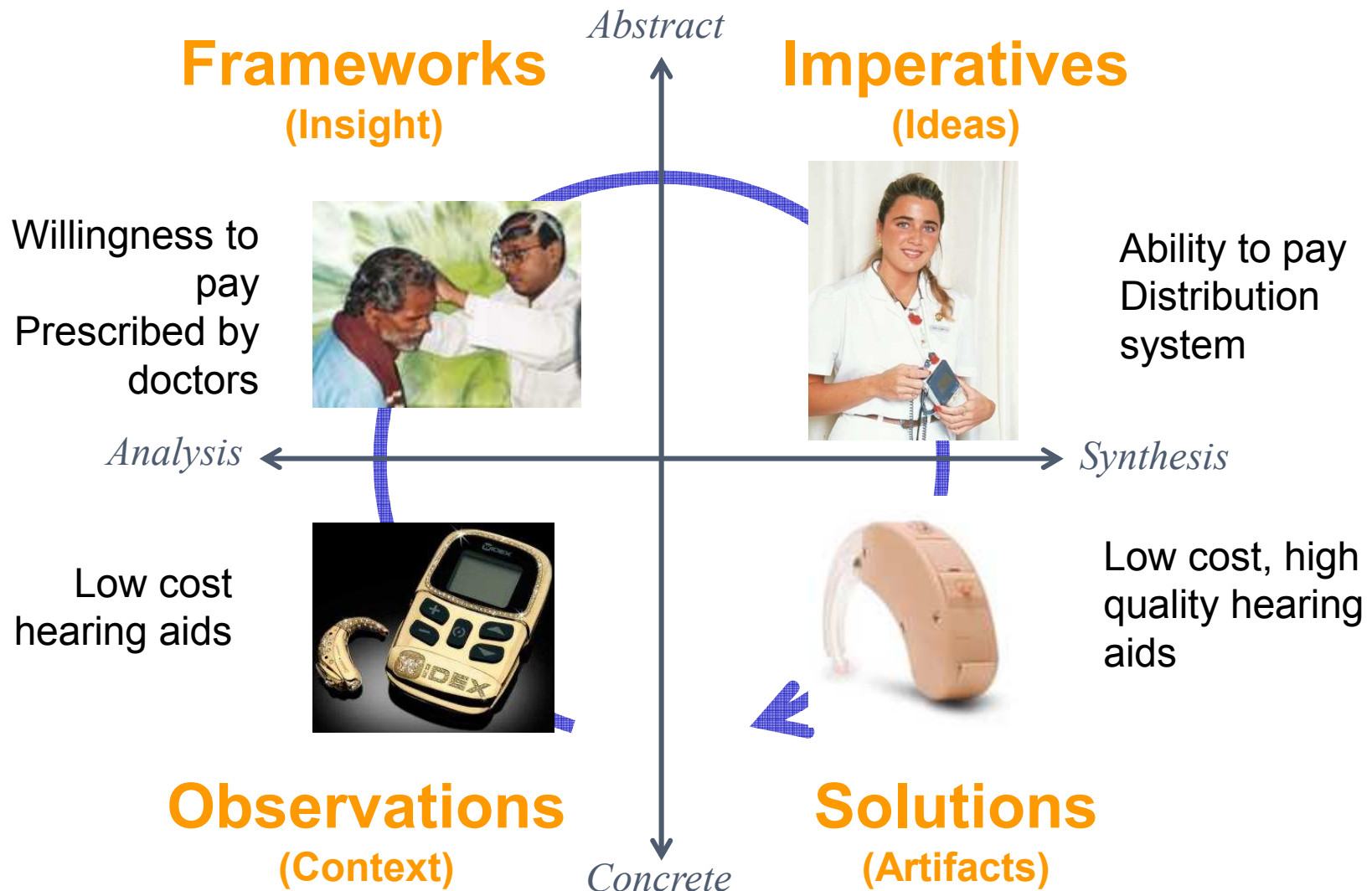


Framing considers broader market trends

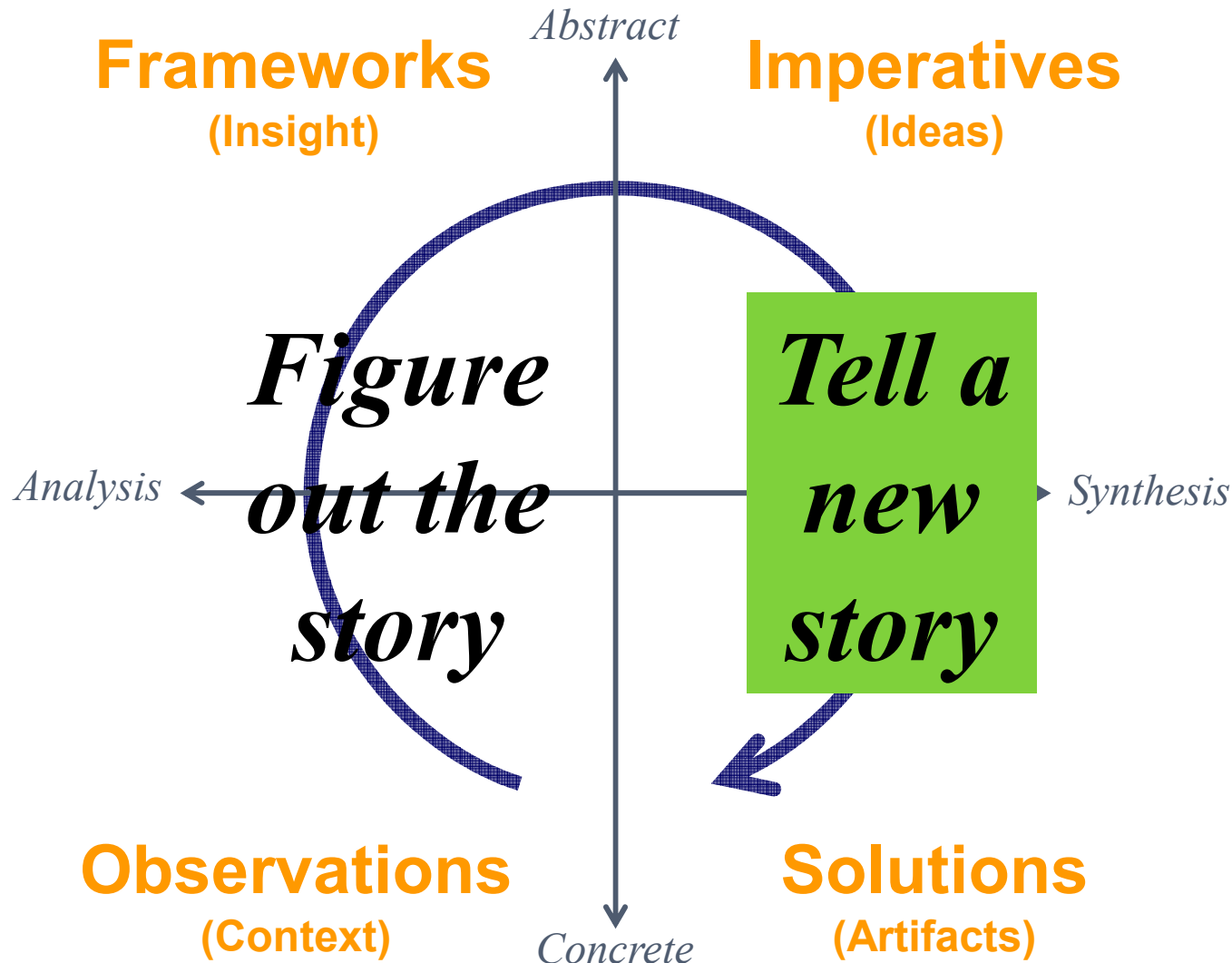
Traditional Meals are now blurred, being replaced by snack events (both emotional and rational) throughout the day.



Framing examines industry orthodoxies



Once you've figured out the old story, you have to tell a compelling new one – through imperatives



Stories drive change in organizations

- ▶ **Stories are powerful** -- the most effective way to convey complex, multi-dimensional ideas supporting innovation and organizational change.*
 - ▶ **Share norms and values** deriving from an organization's past but potentially describing its future
 - ▶ **Develop trust and commitment** communicating the competencies and commitments of oneself and others
 - ▶ **Share tacit knowledge** an efficient exchange “that detonates understanding in the mind of the listener”
 - ▶ **Facilitate unlearning** reshape perspectives in order to rethink the how and why of new opportunities
 - ▶ **Generate emotional connection** to make knowledge “sticky”



So make your (imperatives) story compelling

- ▶ Companies build features
- ▶ Customers seek benefits
- ▶ Your story clearly describes the benefits and allows them to be connected to the features

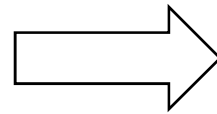


Imperatives may be in the form of design principles

- A sustainable product works as an integrated system, and tells a convincing story about its life cycle.
- A sustainable product symbolizes being “in” while still allowing for individuality and personal expression.
- A sustainable product conveys the sense of being part of a larger movement.
- A sustainable product competes favorably with mainstream products by being elegant and of high quality.



In the form of metaphors...



Taking a shower ... is like ... hitting the reset button



Or as a simple story...

- ▶ What is the story you are telling now?
- ▶ What story could you be telling?
- ▶ Does the story hang together?
 - ▶ Reliability
 - ▶ Validity

Acela's proposed story:

- ▶ “It's not about the time it takes you to get somewhere; it's all about how you use your time.”



It has to inspire the design team...

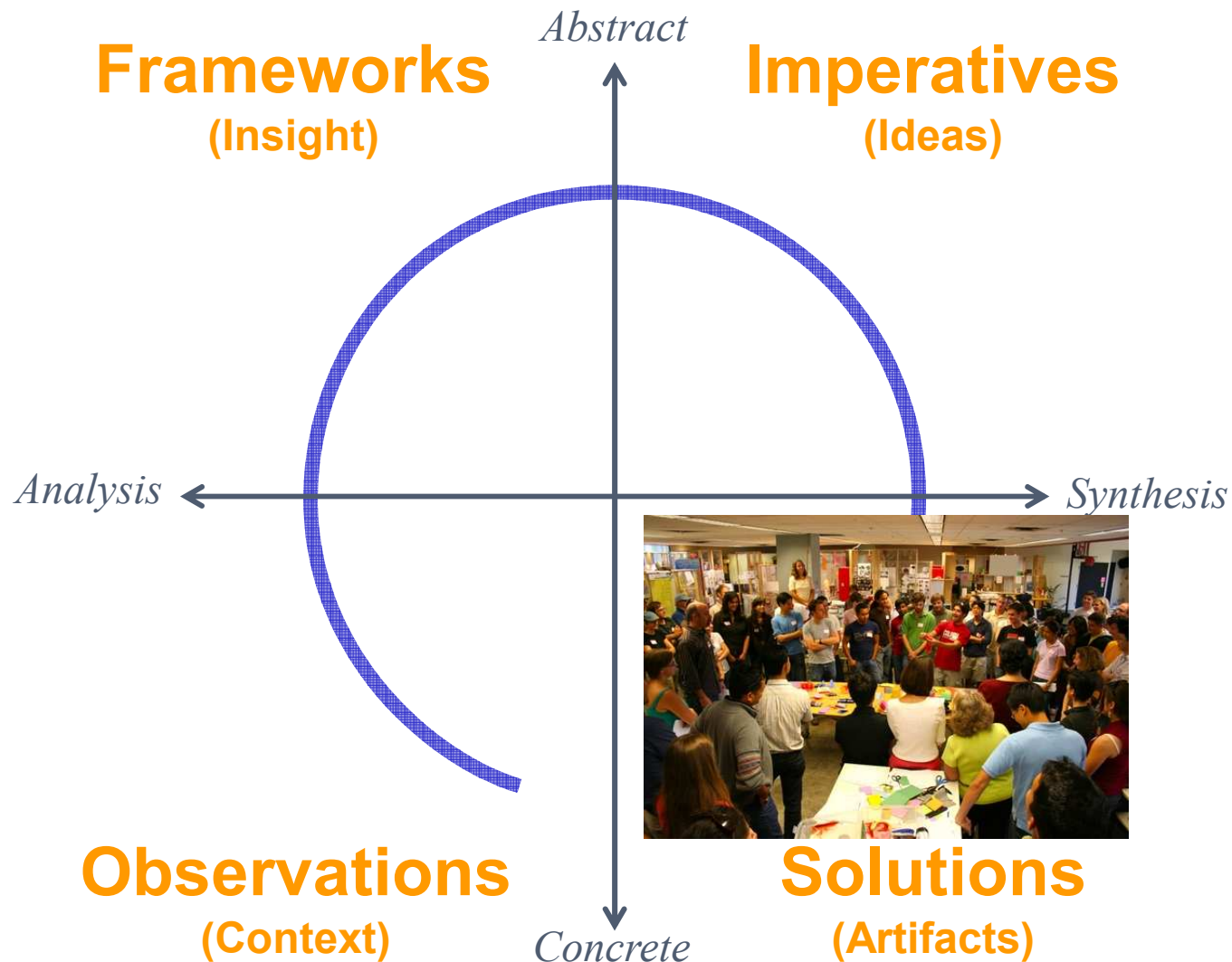


Share more chicken...

Or a typical MRD?

►	Table of Contents	
►	1.0 Strategy and Overview	3
►	1.1 Goals and Objectives	3
►	1.2 Strategic Road Map	3
►	1.3 Customer Categories (User Profiles)	3
►	1.4 Competitive Strengths and Weaknesses	4
►	1.5 External Positioning	4
►	1.6 Microsoft	4
►	2.0 Business Model	4
►	2.1 Value Proposition	4
►	2.2 Market Segment	5
►	2.3 Value Chain Structure	5
►	2.4 Cost Structure	5
►	2.5 Position within the Value Network	5
►	2.6 Competitive Strategy	5
►	3.0 Affected Groups	6
►	3.1 Development	6
►	3.2 Marketing	6
►	3.3 Support	6
►	3.4 Operations	6
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►	4.0 Bill of Materials	6
►	5.0 Internally Committed Requirements	7
►	5.1 Elimination of Top 5 High-Priority Bugs	7
►	5.2 Internal Performance Improvements	7
►	5.3 Backward Compatibility	7
►	5.4 Next-Generation Architectural Changes	8
►	5.5 Platforms and Protocols	8
►	5.6 End-of-Life for Older Versions	8
►	5.7 Uptime and Quality of Service	8
►	6.0 Externally Committed Requirements	8
►	6.1 Molecular Transmittal	9
►	6.2 Voice-Activated Debris Mode	9

Design uses play – rapid and frequent prototyping – to learn quickly about alternative concepts



Prototypes can be used throughout the design process...



Prototype Early and Often

Inspire → Evolve → Validate (IDEO)

Successful innovation depends on testing lots of ideas (both good and bad) but it takes courage to risk putting a new idea forward.

Lower the barrier to innovation by using “low resolution” prototypes (crude, inexpensive) to test concepts quickly, safely and with less anxiety of failure.

Get in the habit of playing with ideas, even in simple settings (Get up out of your chair and draw!).



For different purposes

► Learning

- answering questions about performance or feasibility
- e.g., proof-of-concept model

► Communication

- demonstration of product for feedback: visual, tactile, functional
- e.g., 3D physical models of style or function

► Integration

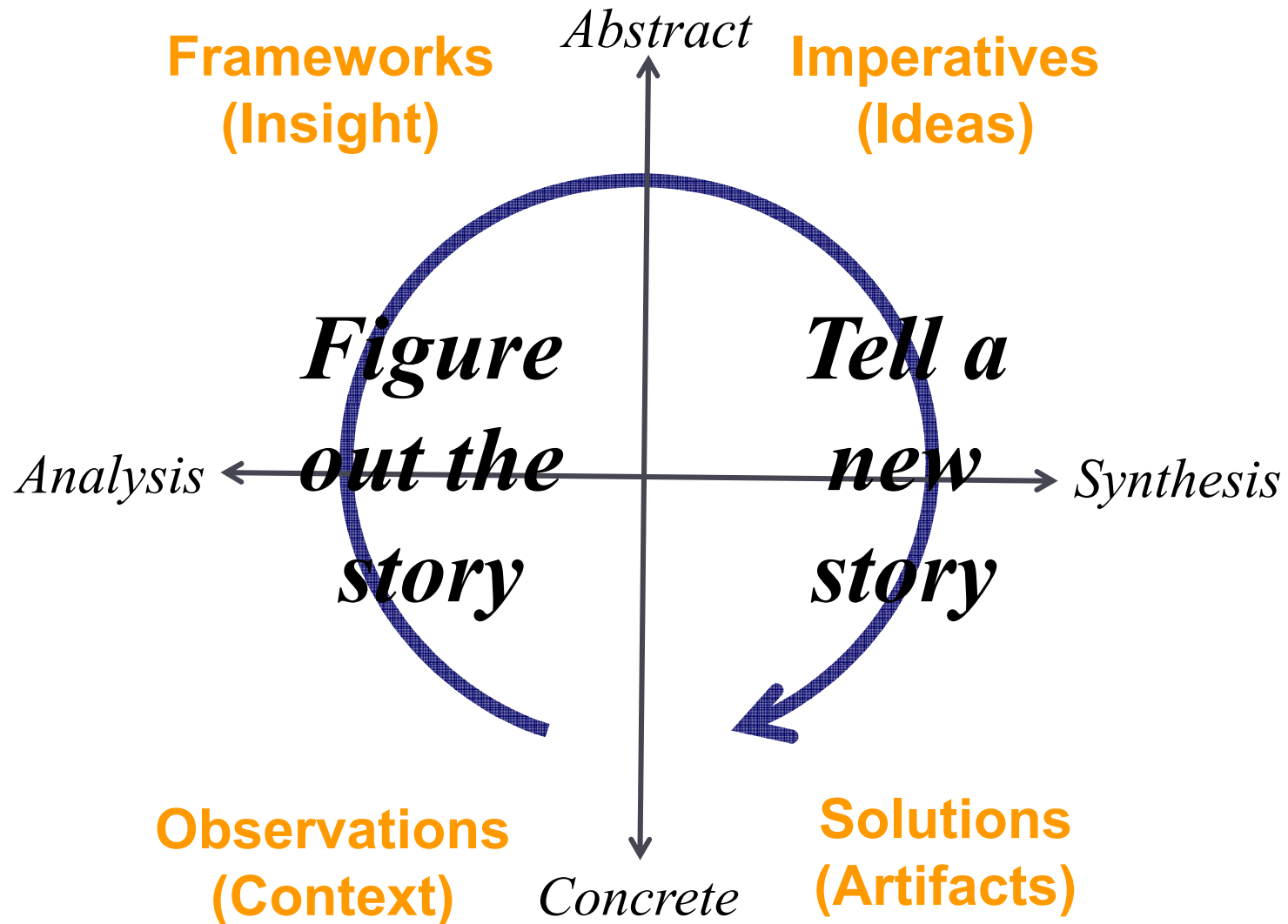
- combination of sub-systems into system model
- e.g., alpha or beta test models

► Milestones

- goal for development team's schedule
- e.g., first testable hardware



In short, design thinking is about...

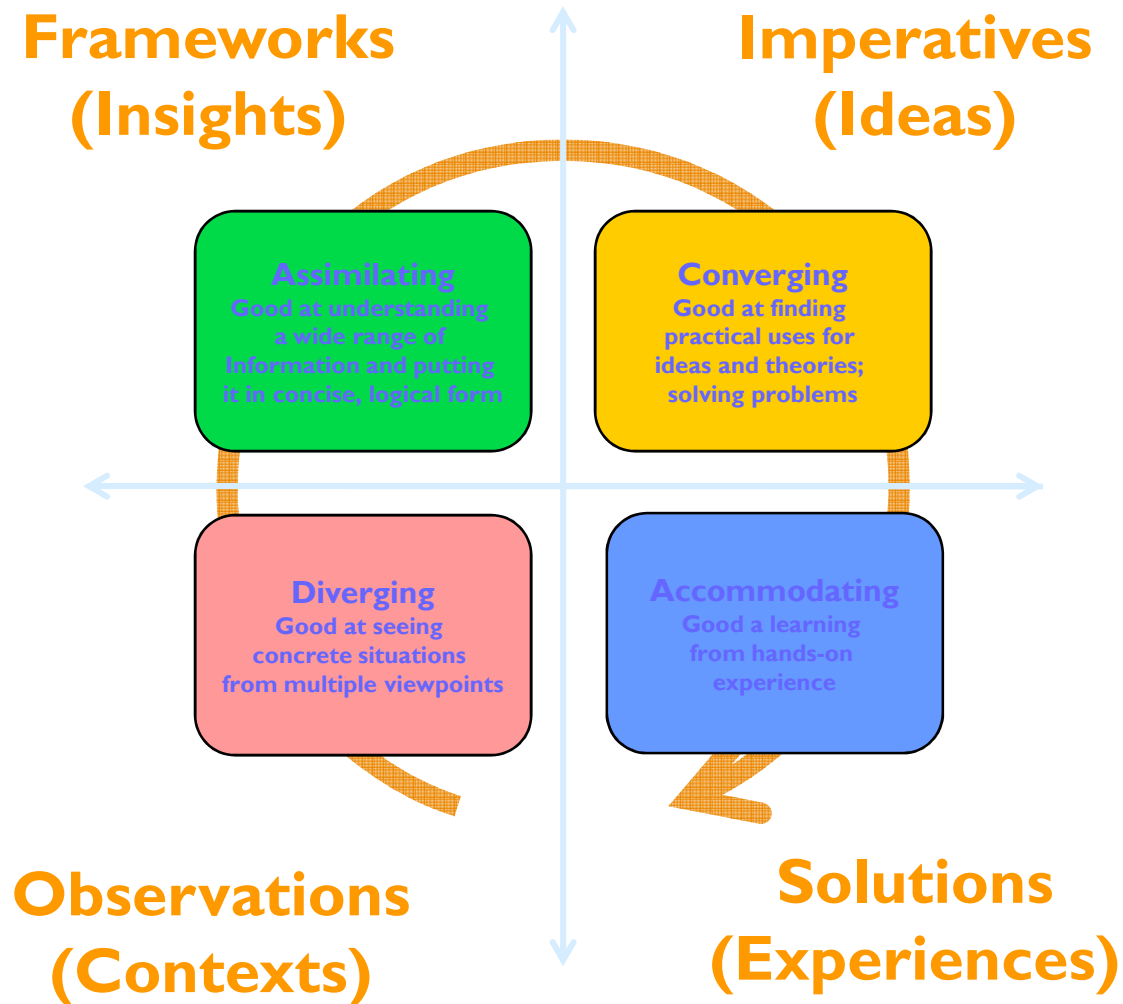




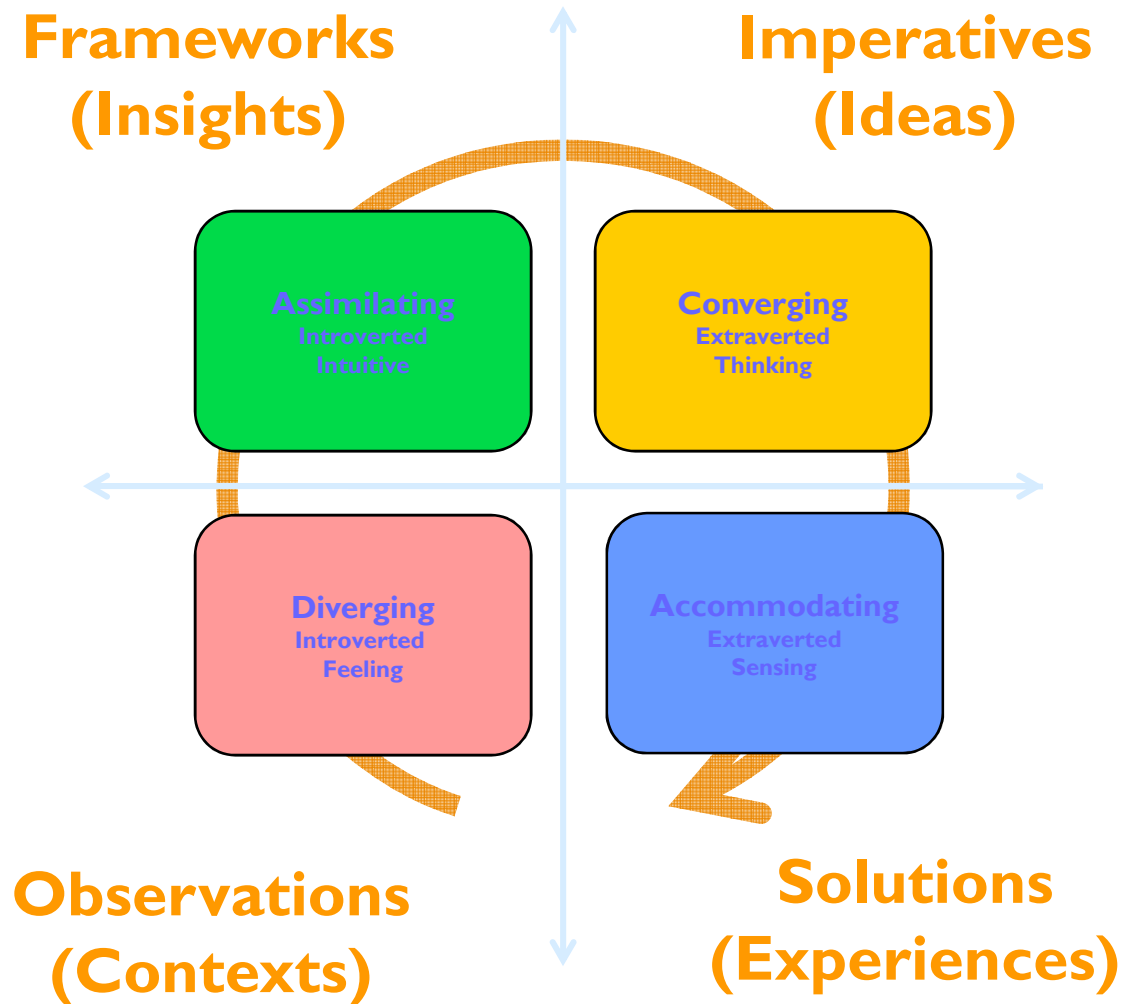
Can I do it alone?

Types of people needs for a good design team experience

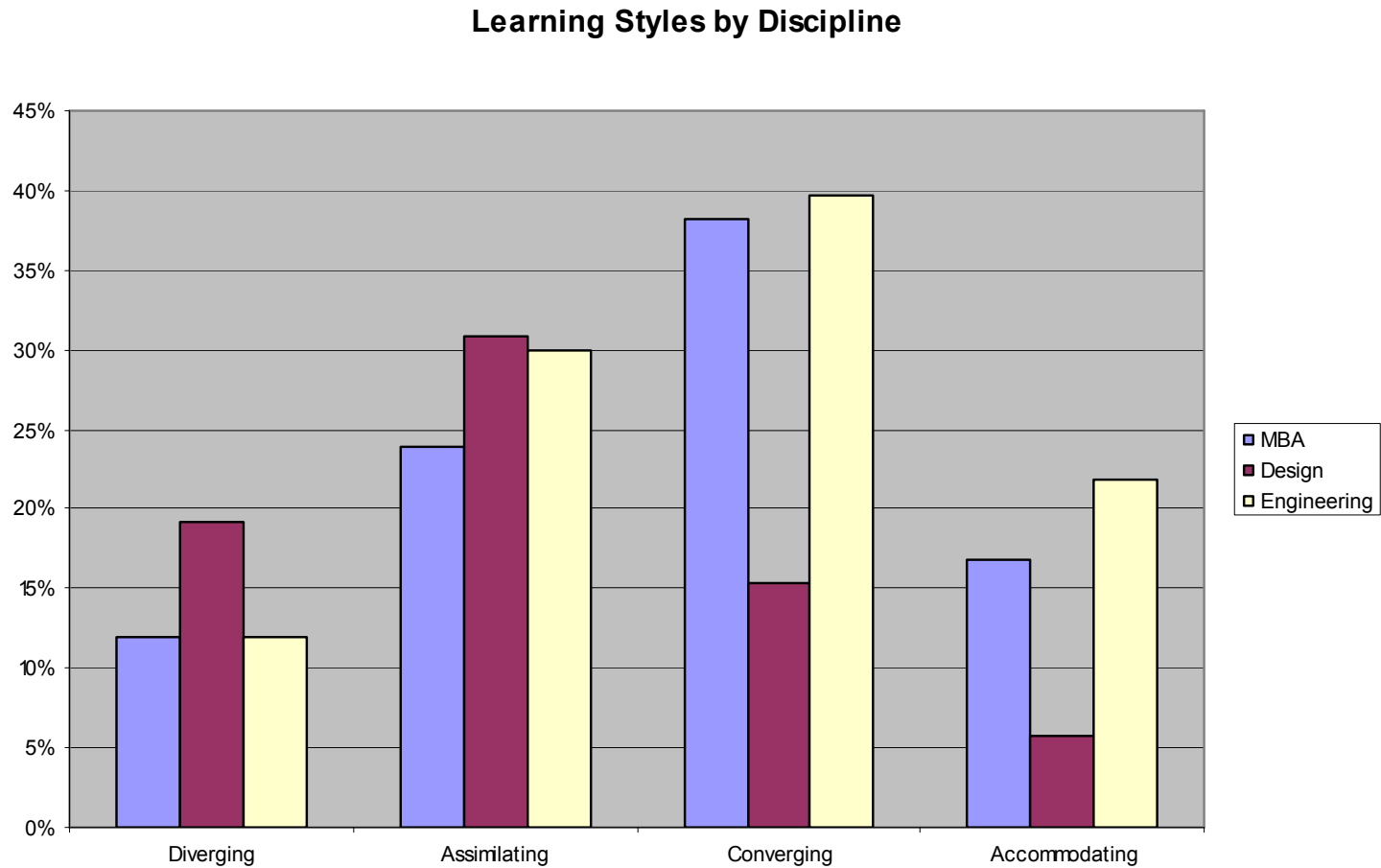
Innovation requires a diversity of (learning) styles



Learning styles are related to Myers Briggs styles



It appears that styles vary by discipline...



Product Managers, even in these times, must (continue to):

- ▶ Deeply understand customer and user needs
 - ▶ Use
 - ▶ Usability
 - ▶ Meaning
- ▶ Understand the “why” underneath those needs
 - ▶ Context
 - ▶ Full customer experience
 - ▶ Market trends and industry orthodoxies
- ▶ Tell a new and compelling story that motivates the design team as well as the customer
- ▶ Experiment – play – with alternative solutions to find the “right” ones
- ▶ And convene the right people around the table to do all of that

