

Overview

1. What is Peace Innovation—and why should you care?
2. Peace Tech Overview
3. Peace for Profit (?!)

Part 1. What *is* Peace Innovation? The Academic view

“At Stanford Peace Innovation Lab, we develop **quantitative, predictive, computational** methods and systems to sense engagement levels and interaction quality across group boundaries. We then provide design frameworks, principles, and methodologies for Behavior Design and Persuasive Technology interventions, to **measurably increase positive engagement, at scale.**

This approach to global risk management is **primarily preventive, positive, and generative**, rather than remedial or punitive. In addition it can be rapidly scaled and optimized. Most important, it is **fundamentally profitable to both sides** of potential conflicts, enabling global capital markets to reallocate assets towards the solutions we develop.”

Put more simply? Peace Innovation is...

“...designing technology that
**increases people’s ability
to be good to each other.”**

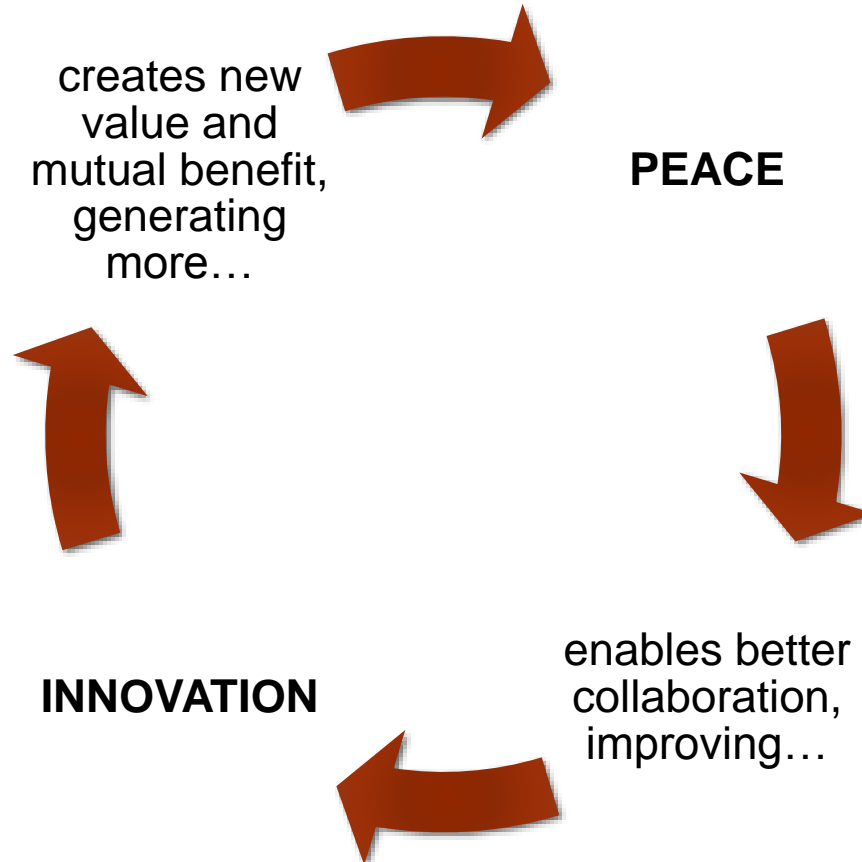
Why should you care?

People's ability to **create new wealth** directly depends on how good they can be to each other

So what is peace technology?

“PeaceTech is *mediating technology* that measurably *augments* people’s ability to positively engage with each other—and especially to create new wealth together.”

Is there a relationship between Peace and Innovation? Yes.



Because specialization (which creates individual differences that cause conflict) is *necessary for innovation*.

The raw inputs of both violence and innovation are the same: differences between individuals.

So...why Peace Technology? The big problem:

FIVE DEEP HUMAN TRENDS. THE FUTURE WILL BE:

1. Urban...
2. Dense...
3. Coastal...
4. Networked.

Result?

5. Most human conflict will be with irregular, non-state actors, in these urban environments (Kilcullen, 2012)

Implications: Innovation engine --or disaster

In the next three decades, between 3 and 5 *billion* more of us must learn to get along much better in these dense environments.

“Get along better” =

- trade better
- create and distribute new value better
- be better customers and suppliers for each other.

Why Peace *Technology*? Solutions that weren't previously possible

For the first time in human history we are measuring and recording inter-personal (and inter-group) engagement, at very high resolution, in real-time.

Social software and mobile devices passively record more interaction behavior every day.

Now that we can measure social behavior, we can begin to design technology to increase and augment the behaviors we all want increased.

Our Research Question:

HOW GOOD CAN HUMANS BE TO EACH OTHER?

THIS IS PRIMARILY A **BUSINESS** QUESTION, BUT IT'S ALSO AN ORGANIZATIONAL QUESTION THAT DIRECTLY DRIVES PERFORMANCE IN THE NON-BUSINESS SECTORS.

How do we measure it? The Quanta of Peace

Individual *episodes of human engagement between two people*, enabled by any *mediating technology*

1. Episodes we can observe and record (for the first time in history!)
2. Episodes we can record passively, in real-time
3. Episodes where we can see group identities of both people

Engagement Episode Model of Peace (see whiteboard diagrams)

1. OLD ENGAGEMENT CHARACTERISTICS

- PHYSICALLY PRESENT
- FULLY EMBODIED
- ALL FIVE SENSES (ONLY)
- LIMITED IN TIME
- LIMITED IN SPACE
- LIMITED RECORD & MEMORY
- LIMITED COMPUTATION
- BASIC GROUP ID VISIBILITY

2. NEW ENGAGEMENT CHARACTERISTICS

- TECHNOLOGY MEDIATED
- MAY BE FAR APART
- AUGMENTED—EITHER:
 - Improved ability, or
 - Previously impossible
- DETAILED RECORD
- INCREASING SENSOR ACUITY
- COMPUTABLE
- REACH ACROSS TIME AND SPACE
- DEEP GROUP ID KNOWLEDGE

Engagement Framework



Engagement Framework

Quality of Engagement
0
↓
1

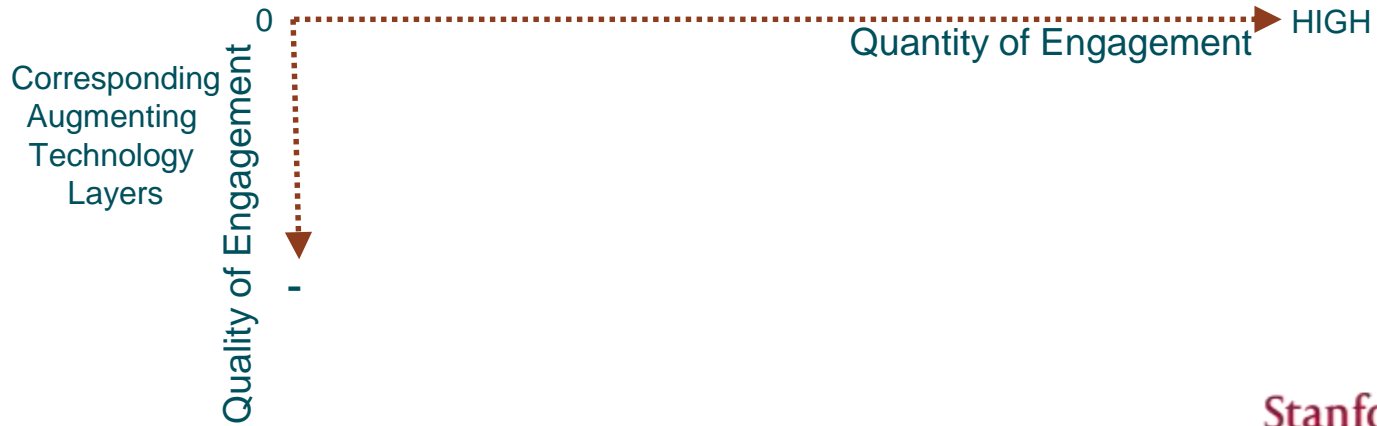
Engagement Framework



Engagement Framework



Engagement Framework



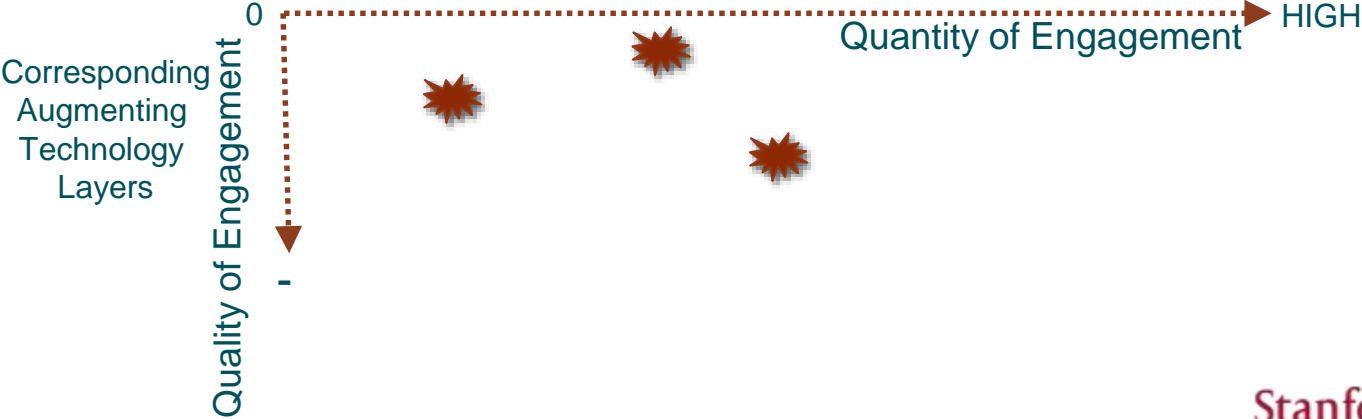
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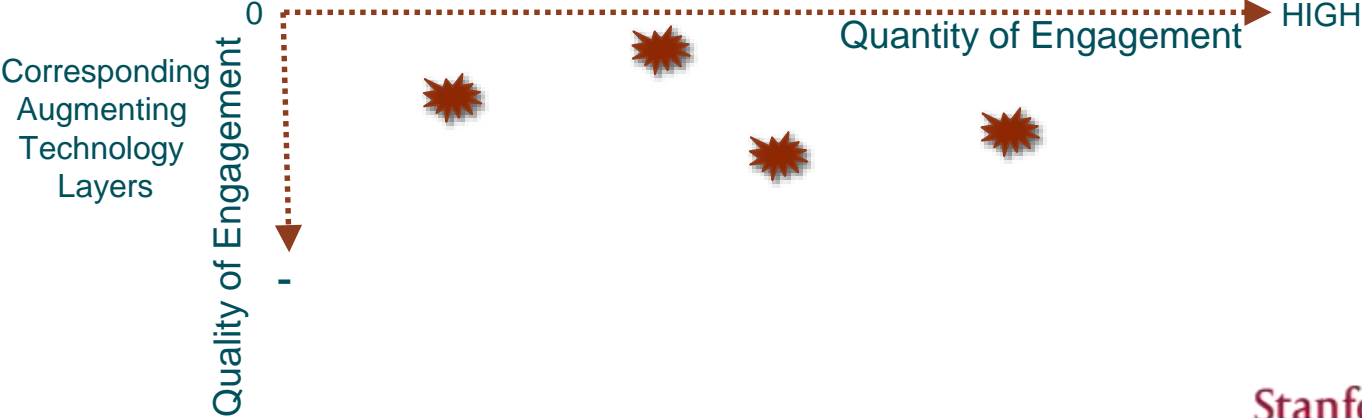
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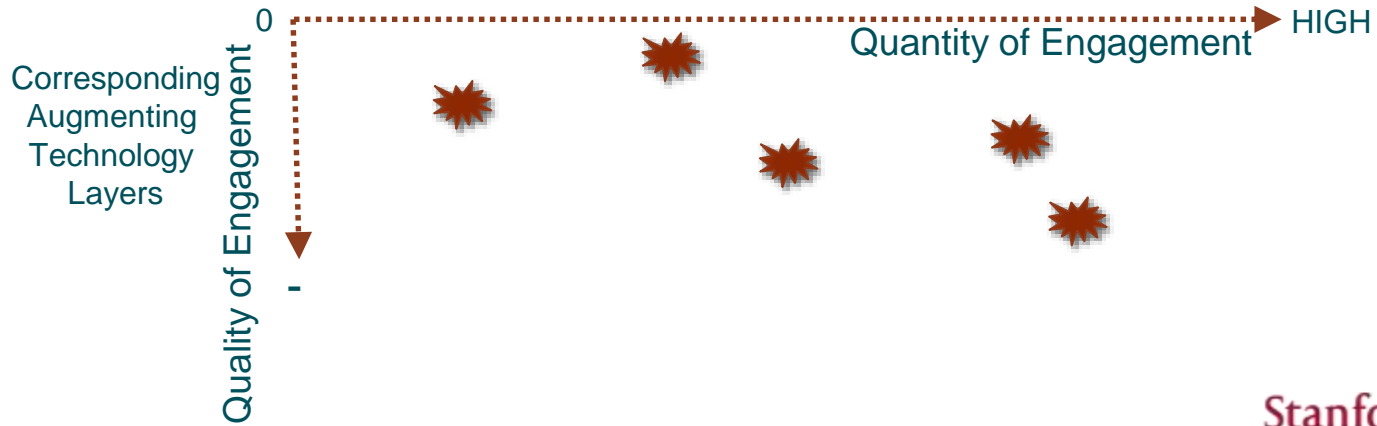
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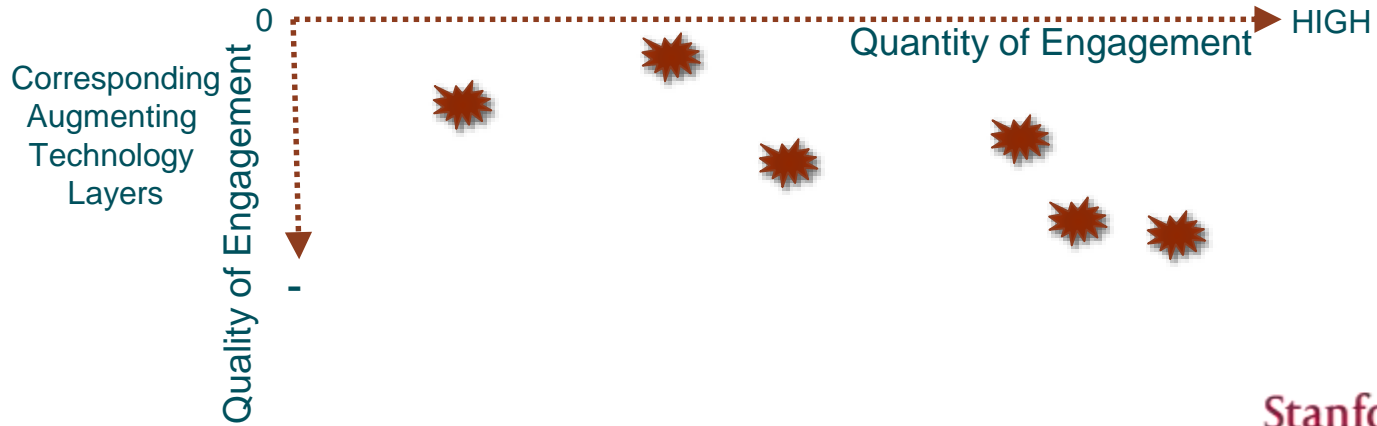
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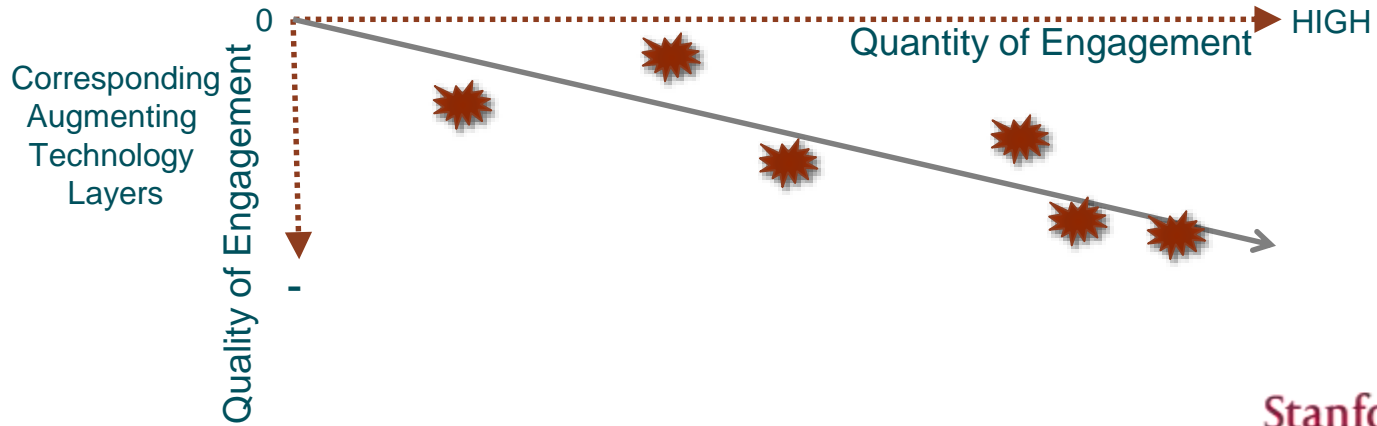
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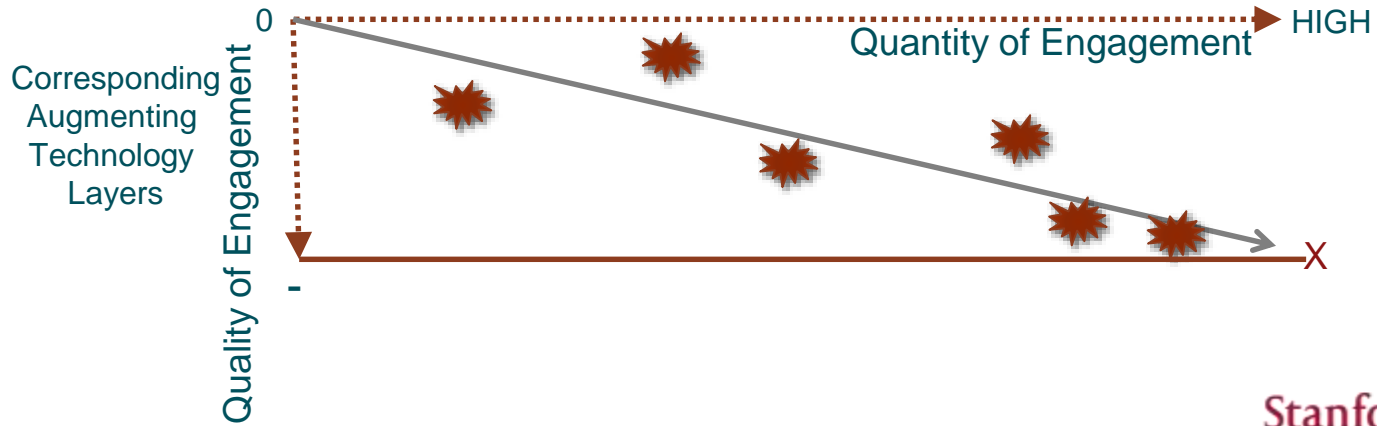
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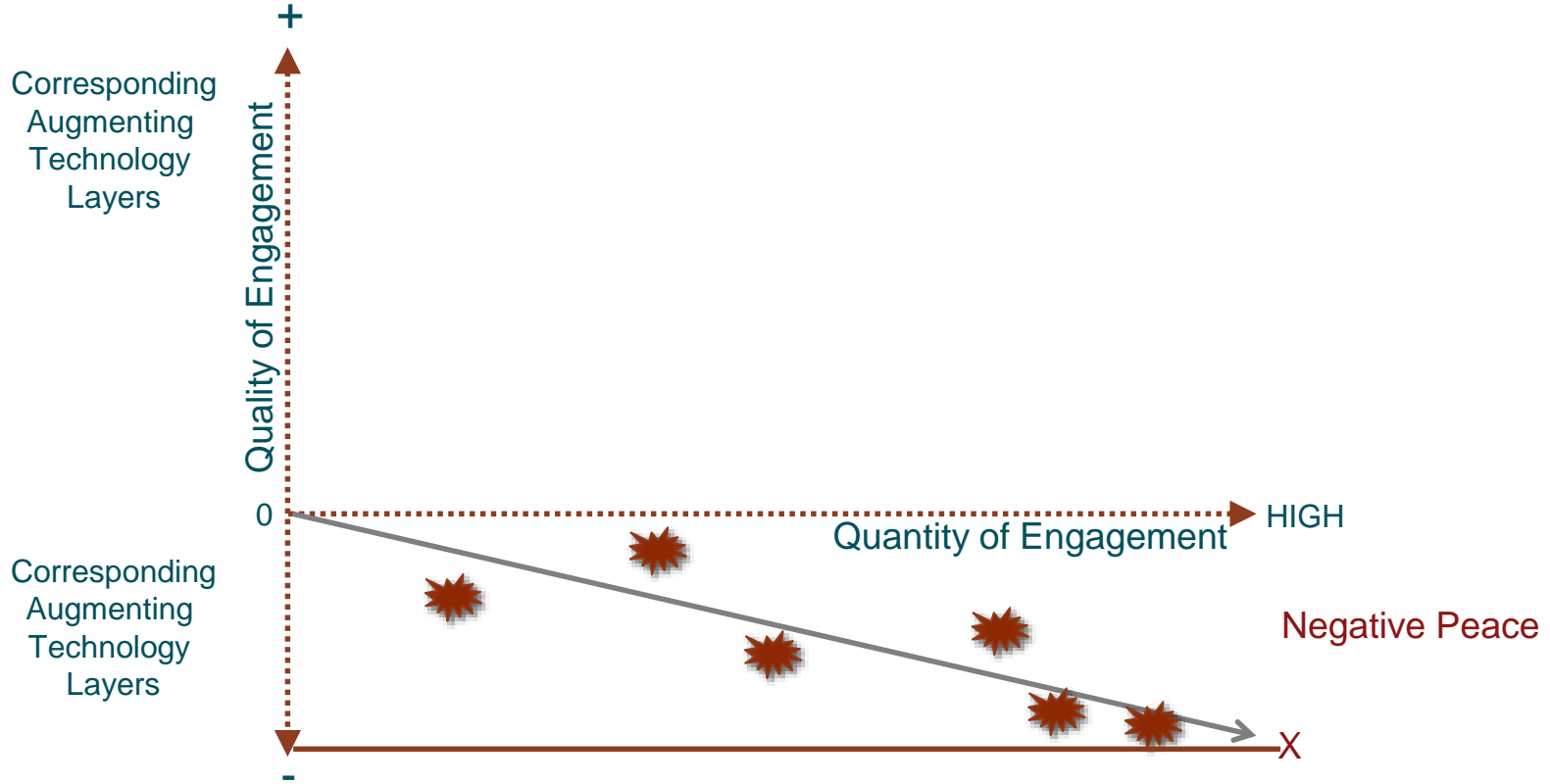
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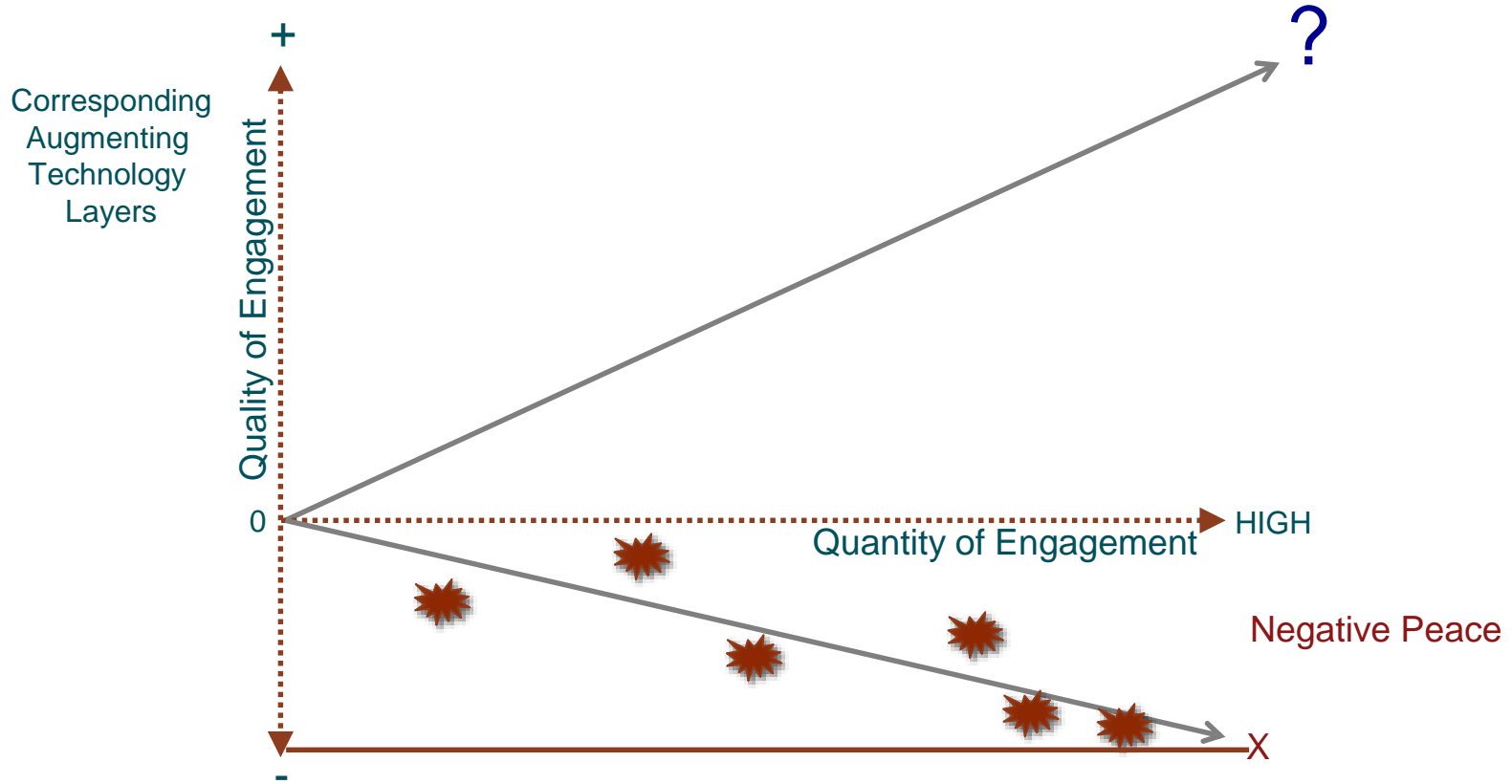
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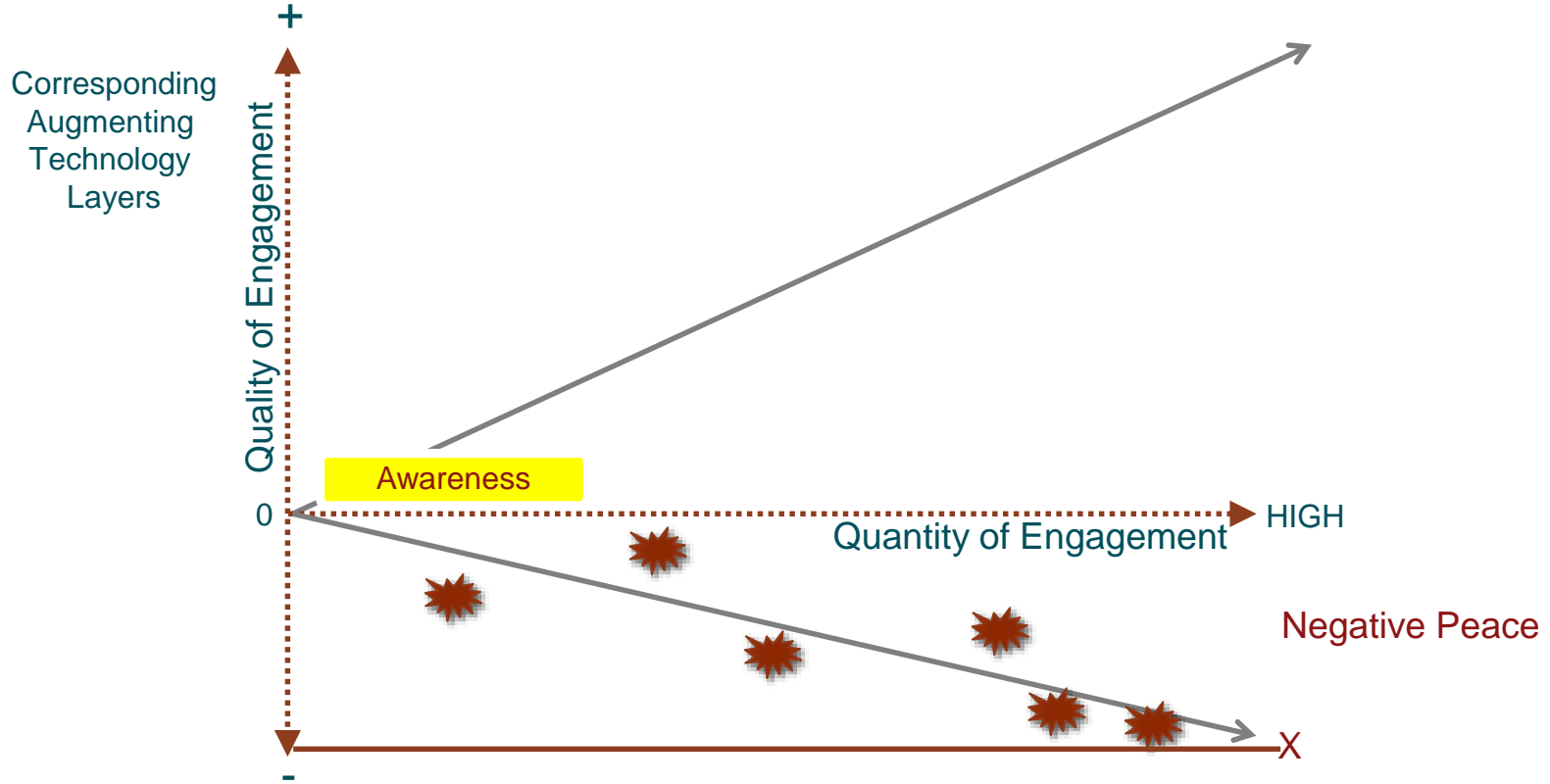
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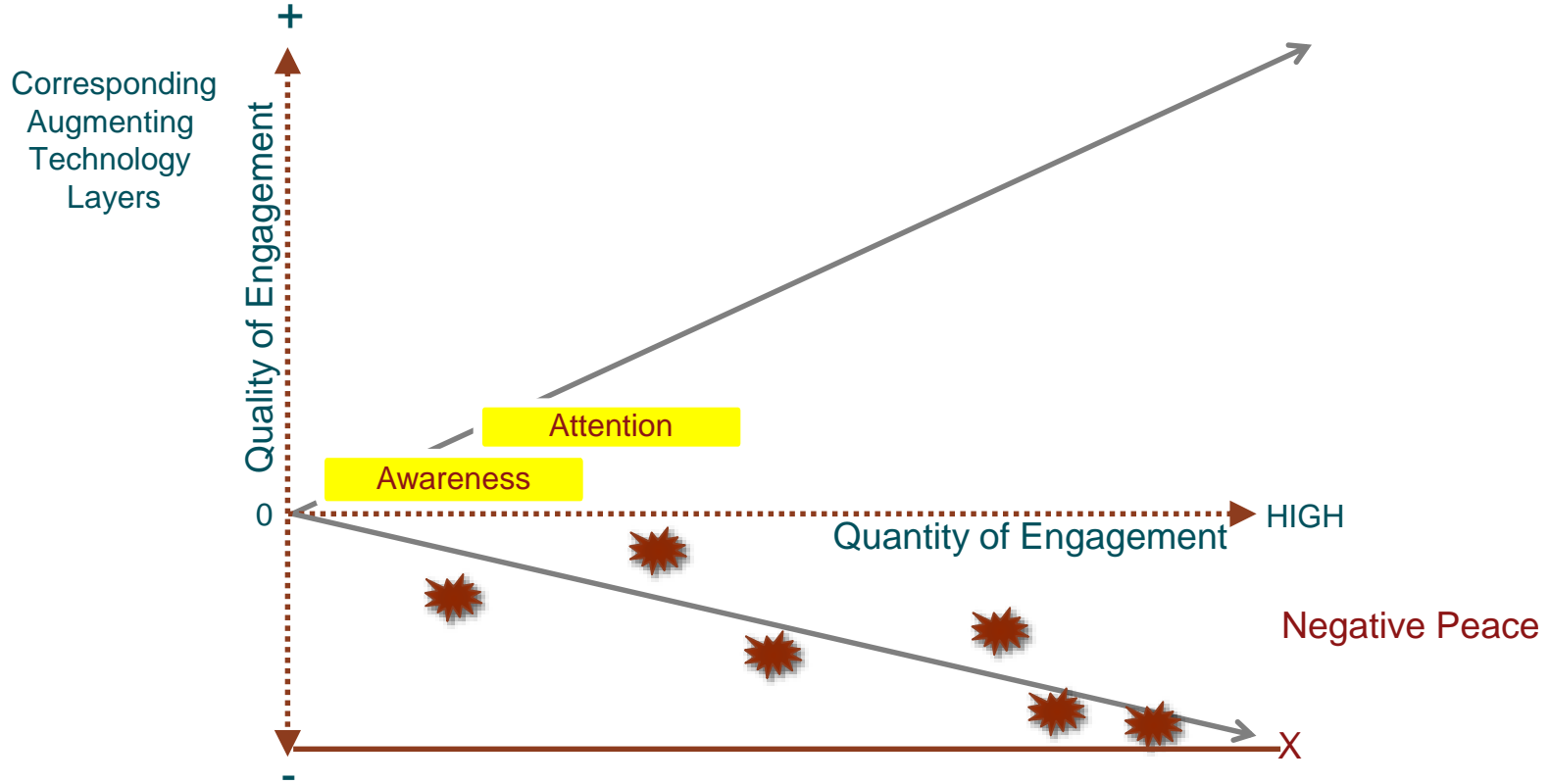
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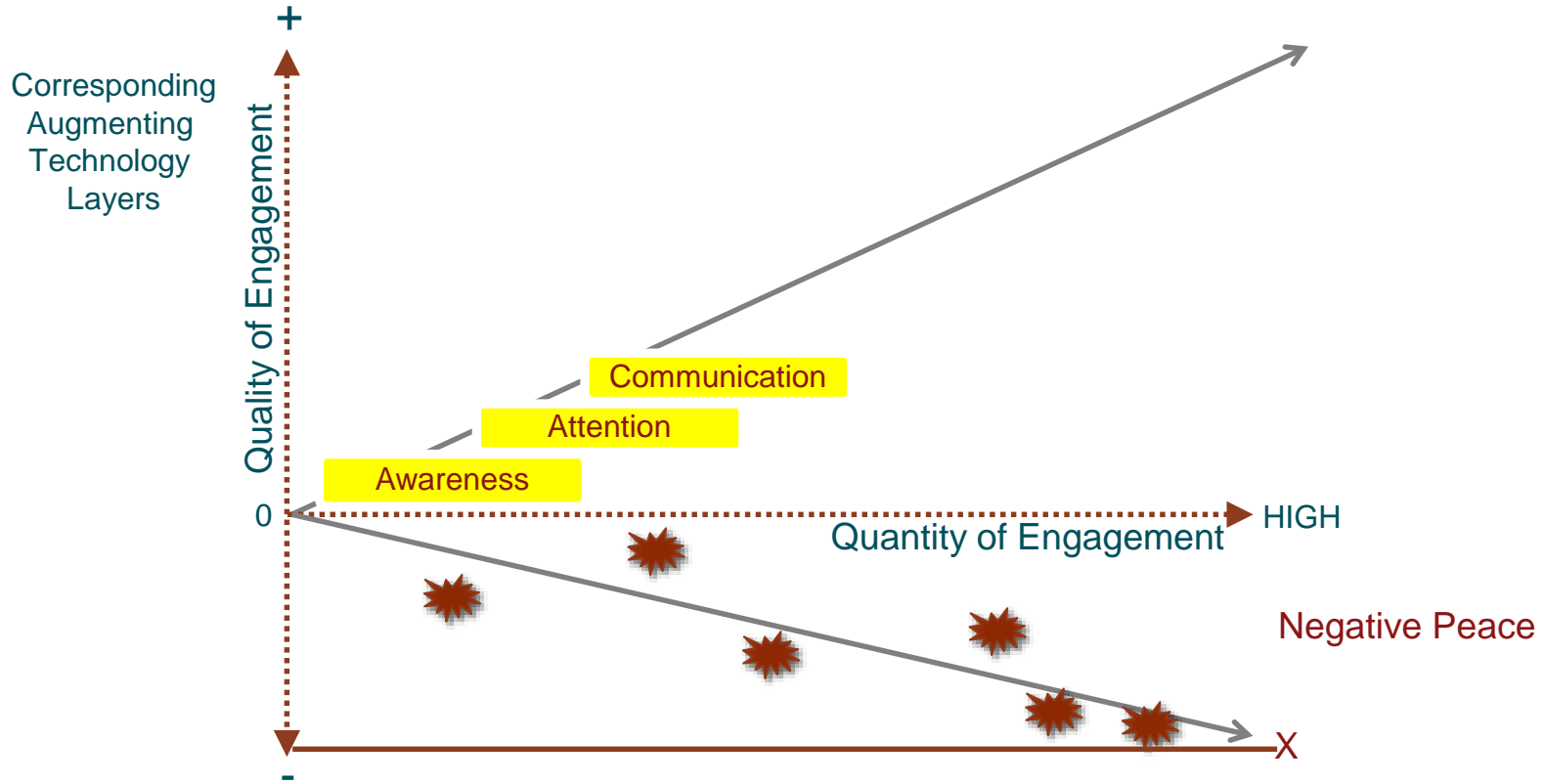
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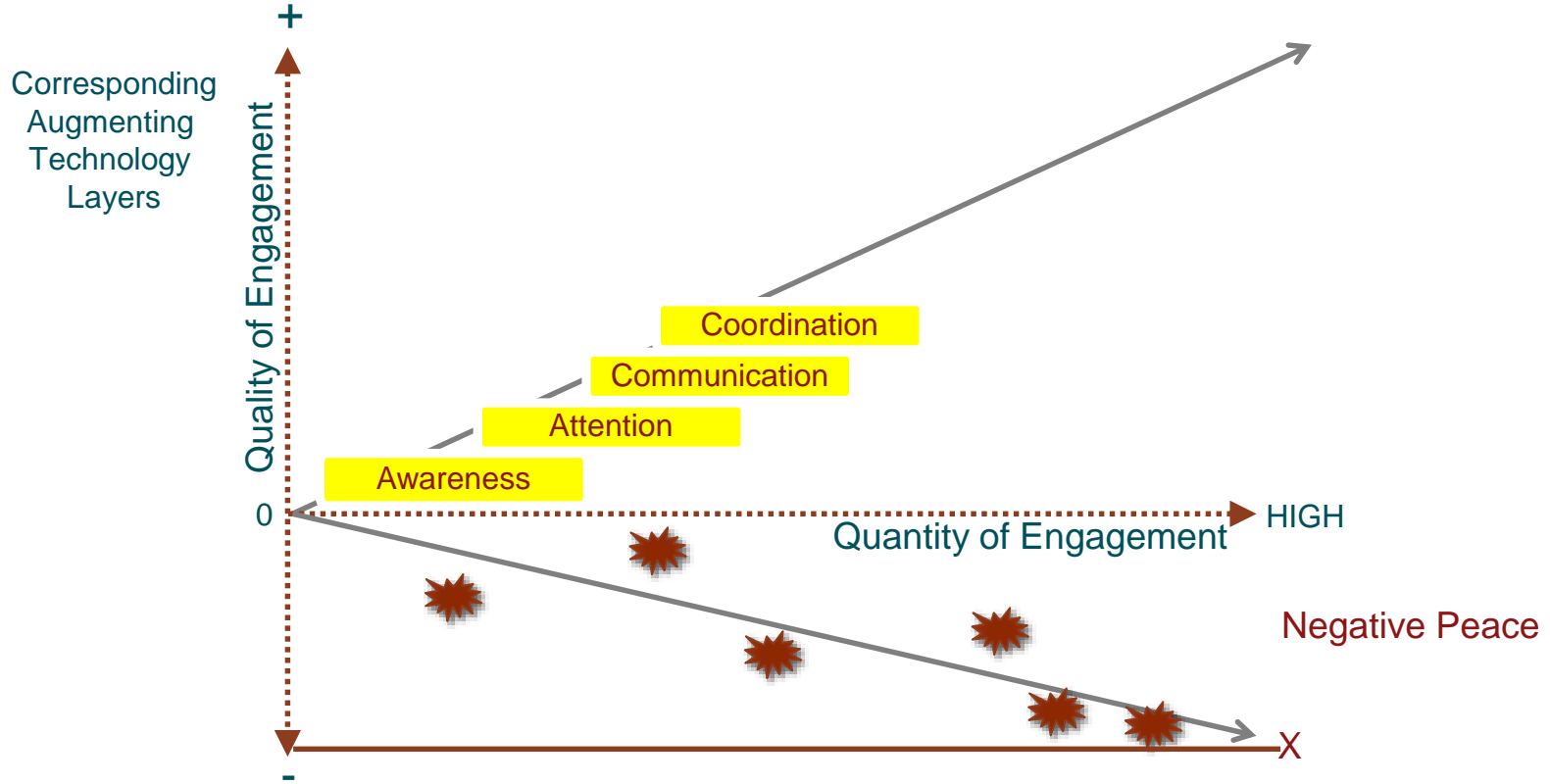
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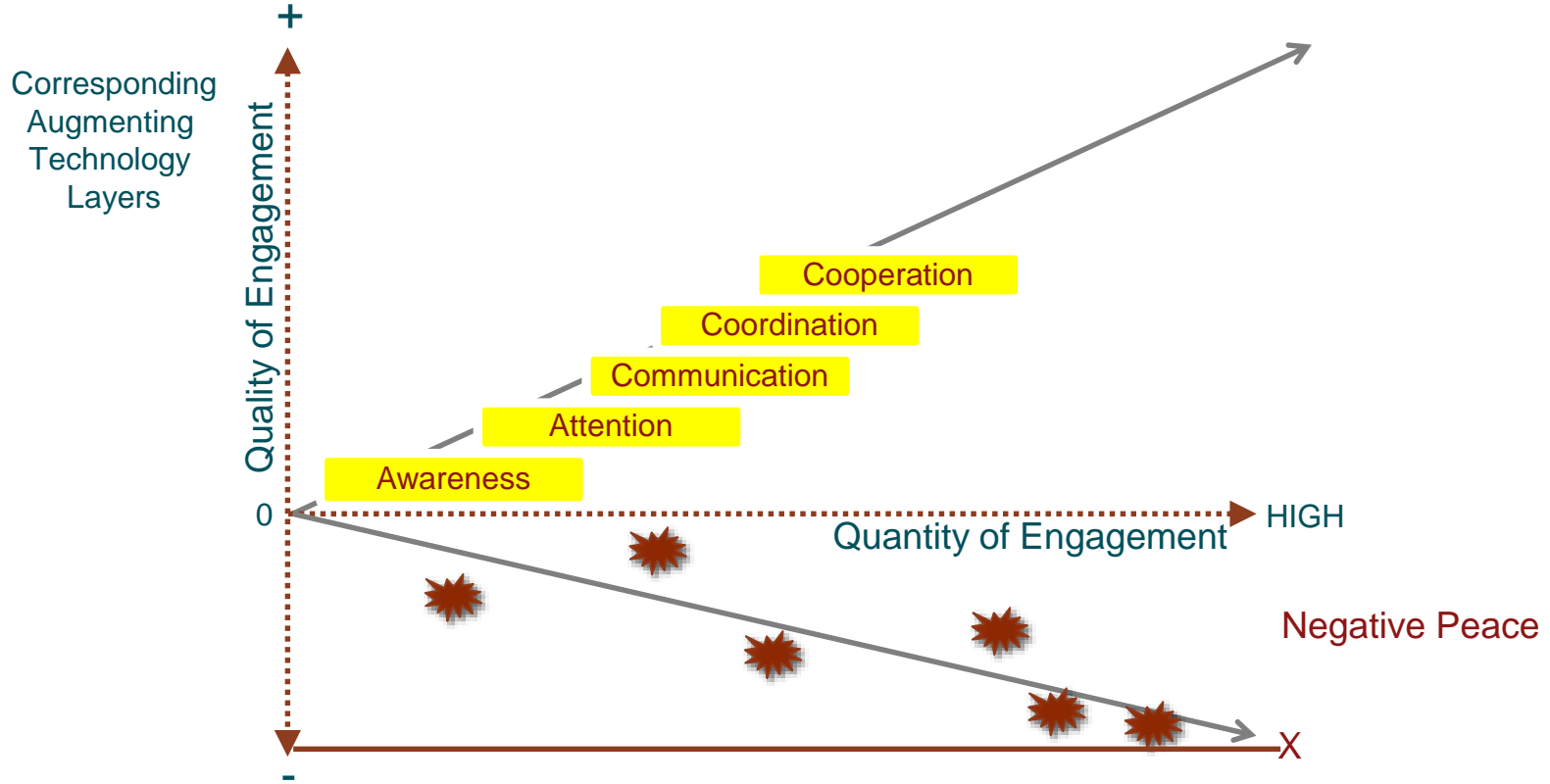
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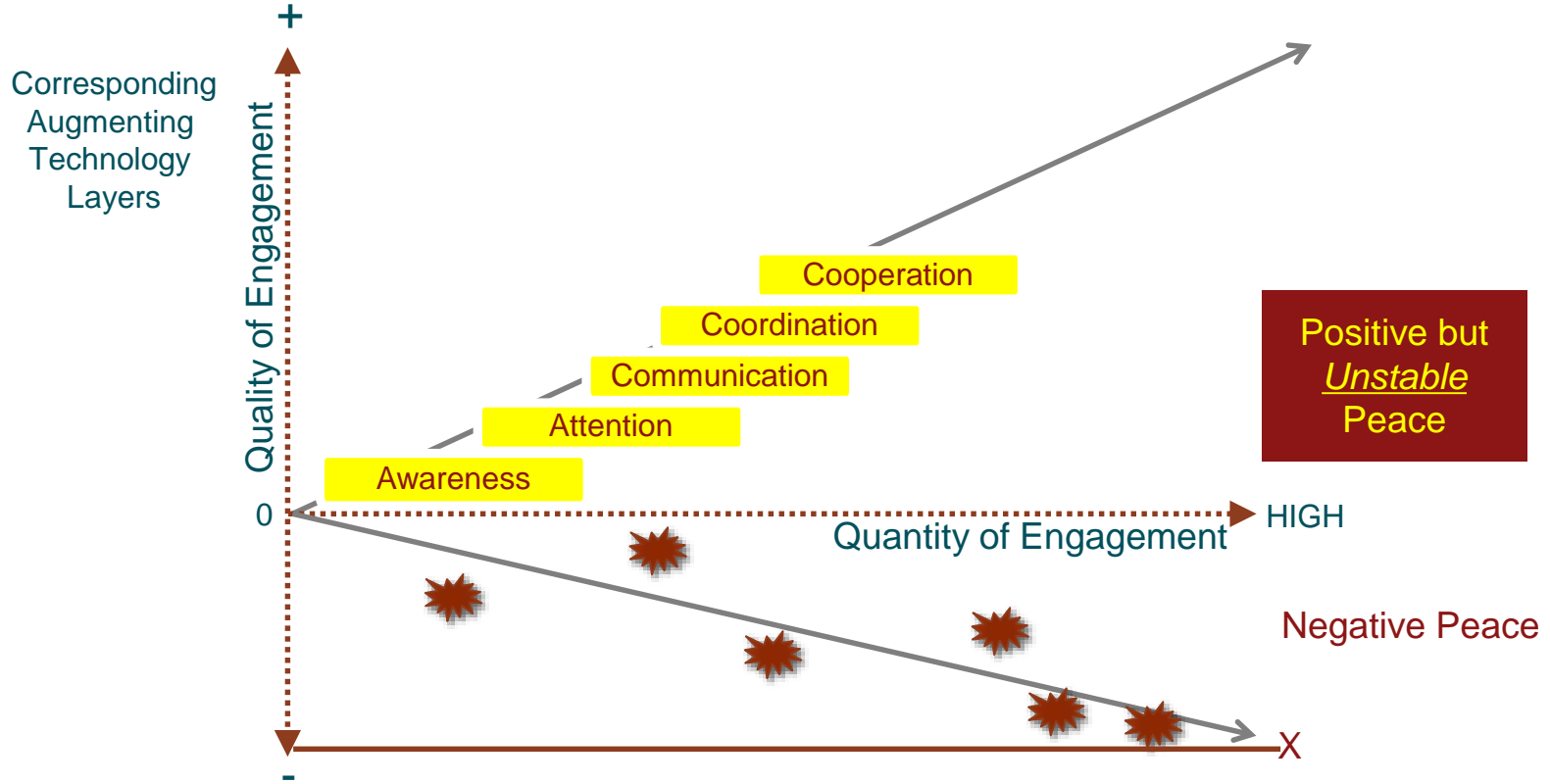
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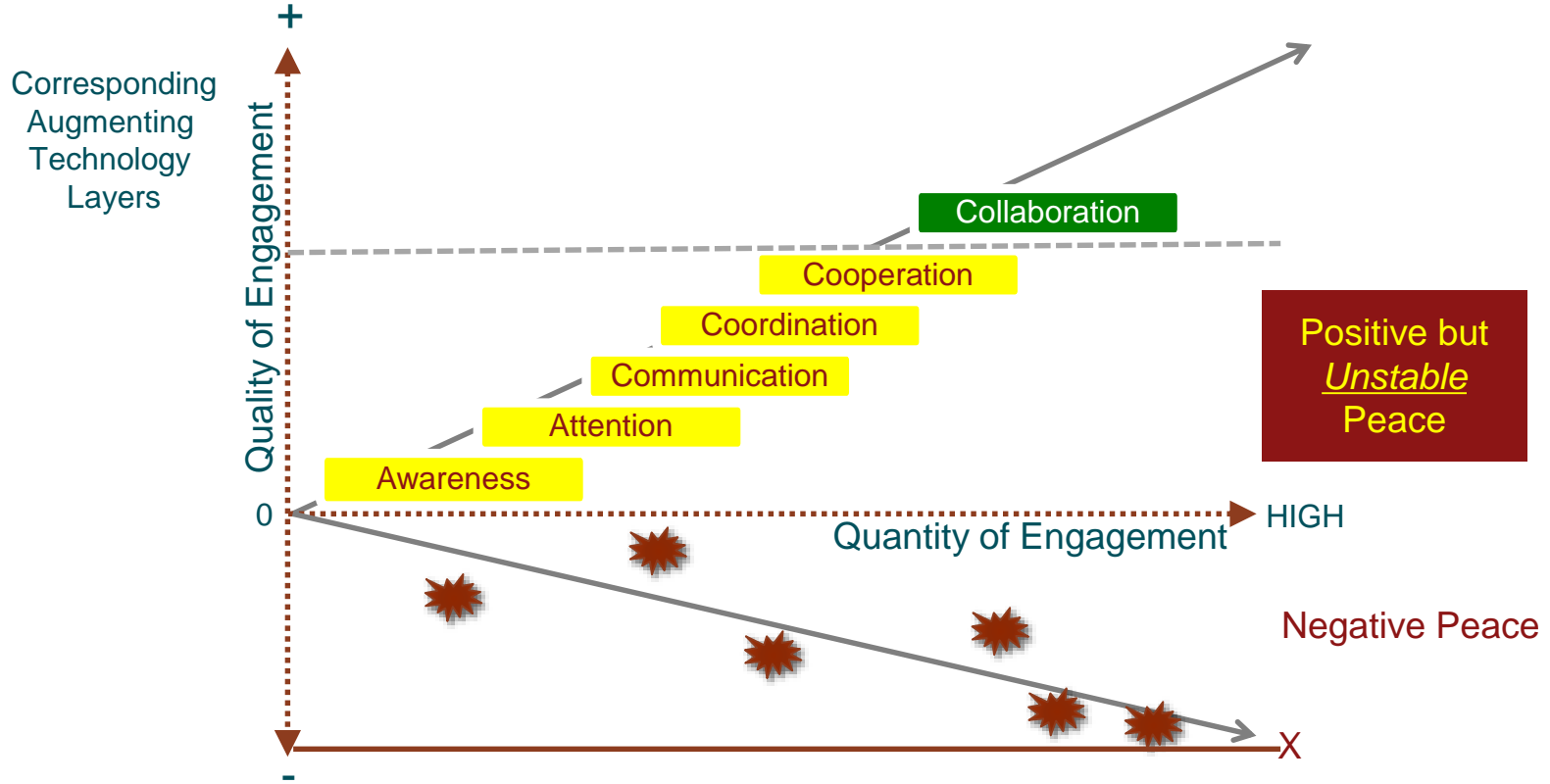
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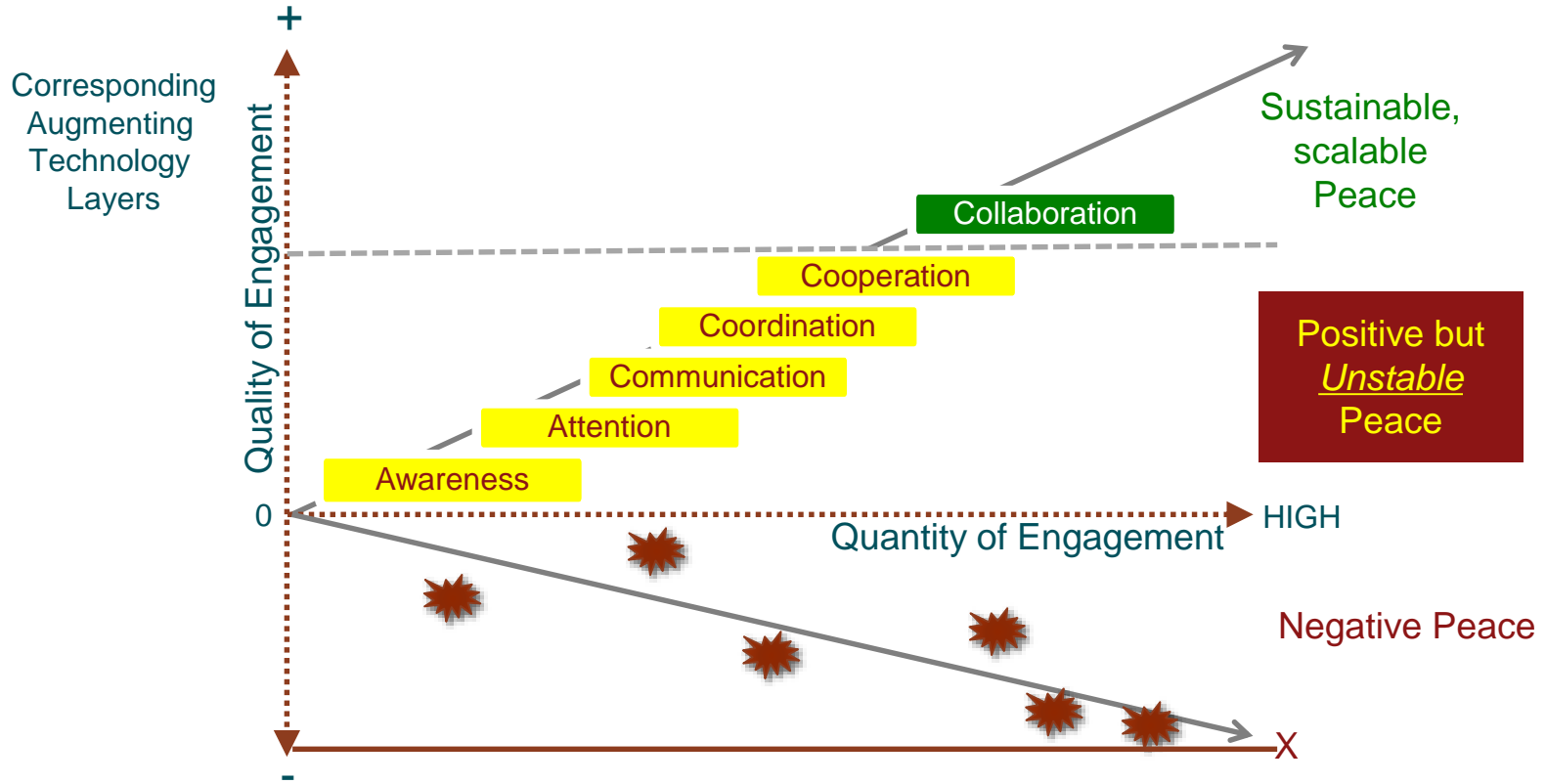
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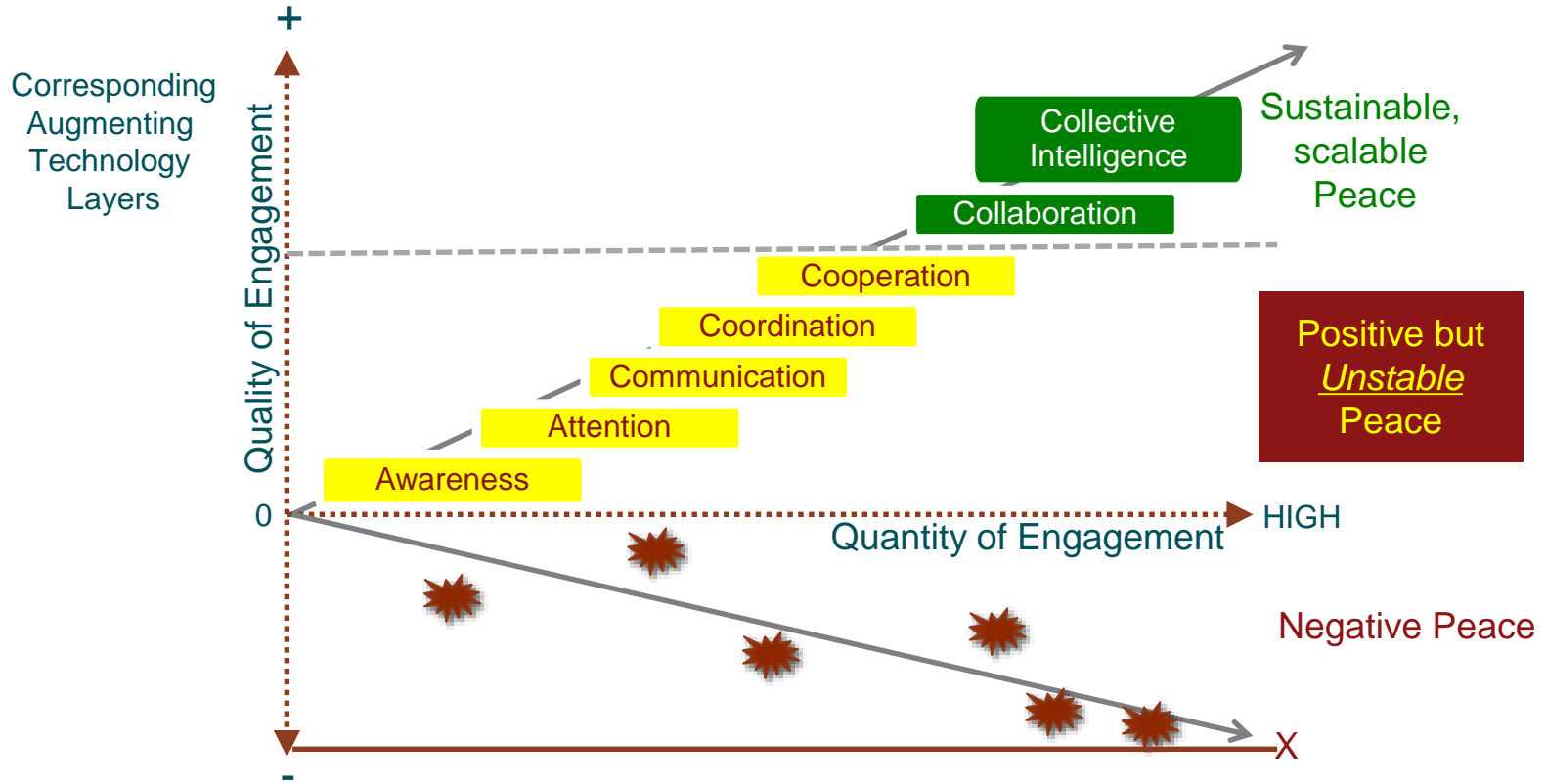
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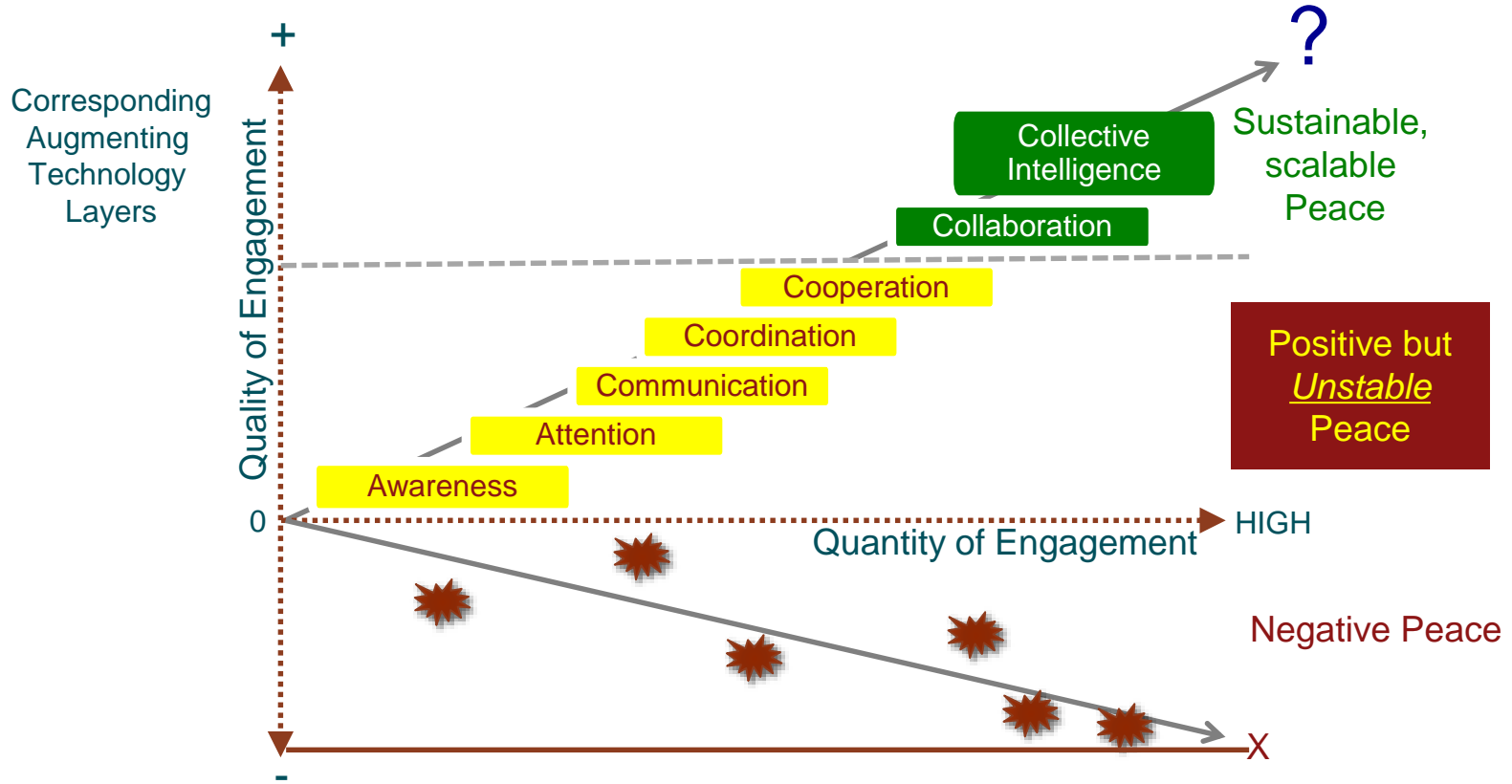
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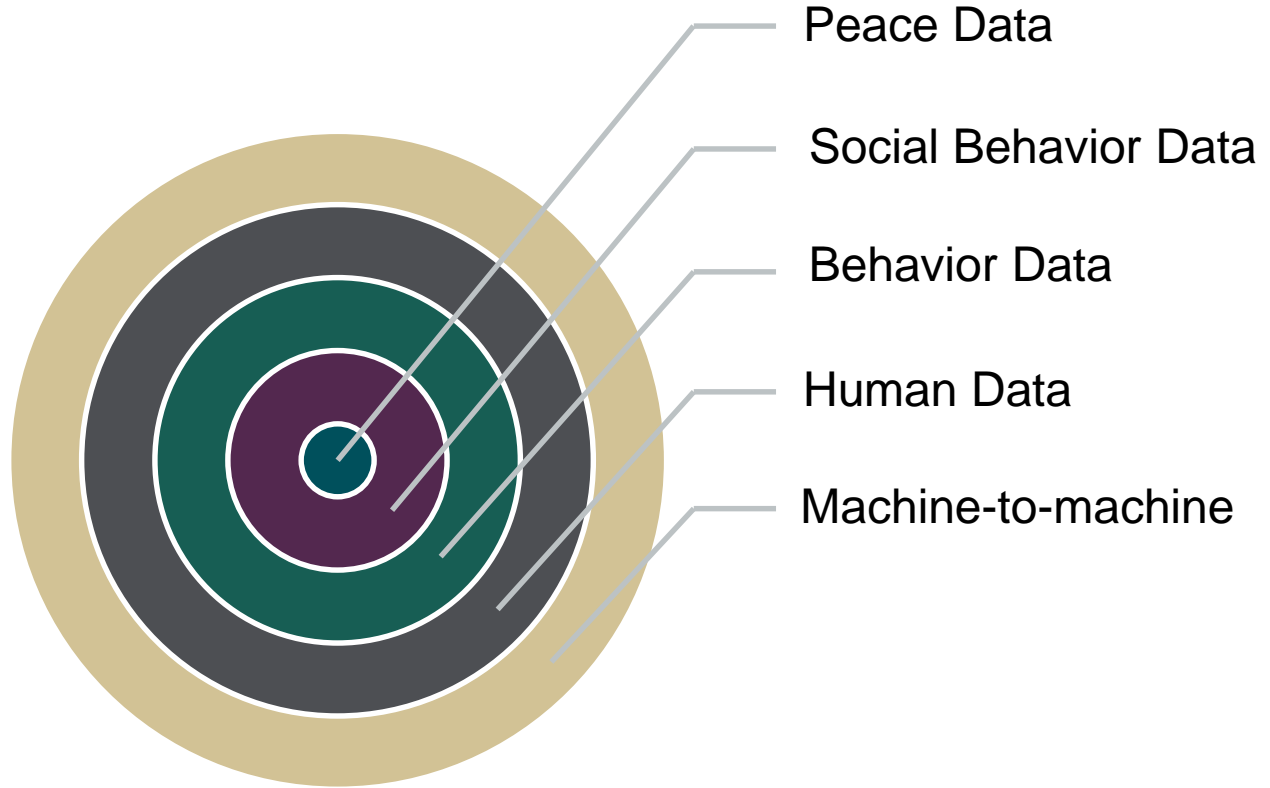
Engagement Framework



Engagement Framework



Peace Data in the context of Big Data



3. Peace for Profit? Why?

MEASURABLY INCREASING
POSITIVE ENGAGEMENT
ACROSS
DIFFERENCE BOUNDARIES



Three—or four?—historical human unifying forces

1. Religion—after animism, approximately 3,000 years ago, when some religions begin to consider everyone a potential convert.
2. Empire—after city-states, also emerges approximately 3,000 years ago, when some local governments begin to consider everyone a potential citizen.
3. Trade—also emerges approximately 3,000 years ago, with the invention of money, when some merchants begin to consider everyone a potential customer. Amplified by early forms of writing and accounting. **More successful than religion or empire** because it **requires rather than suppresses diversity**, and has much lower belief requirements. Works just fine across religious or political boundaries.
4. Science? Some historians and sociologists of science make a good case.

The Deep Structural Problem of Resourcing Peace

Our two traditional approaches: Gov (policy & diplomacy, the modern extensions of the Empire approach), or NGO (philanthropy & charity, the modern extension of the Religion approach)

1. First Problem: scale of resources to problem
2. Second Problem: where are the resources? Global capital markets
3. Third Problem: no effective resource bridge to either traditional path
 - › Why? No price signal
4. Result? Fourth Problem: perverse investments
5. Solution? A for-profit peace service industry that creates a price/value signal for positive pro-social behavior. Possible now that we can measure value creation episodes

Behavior-centered Design vs Persuasive Technology

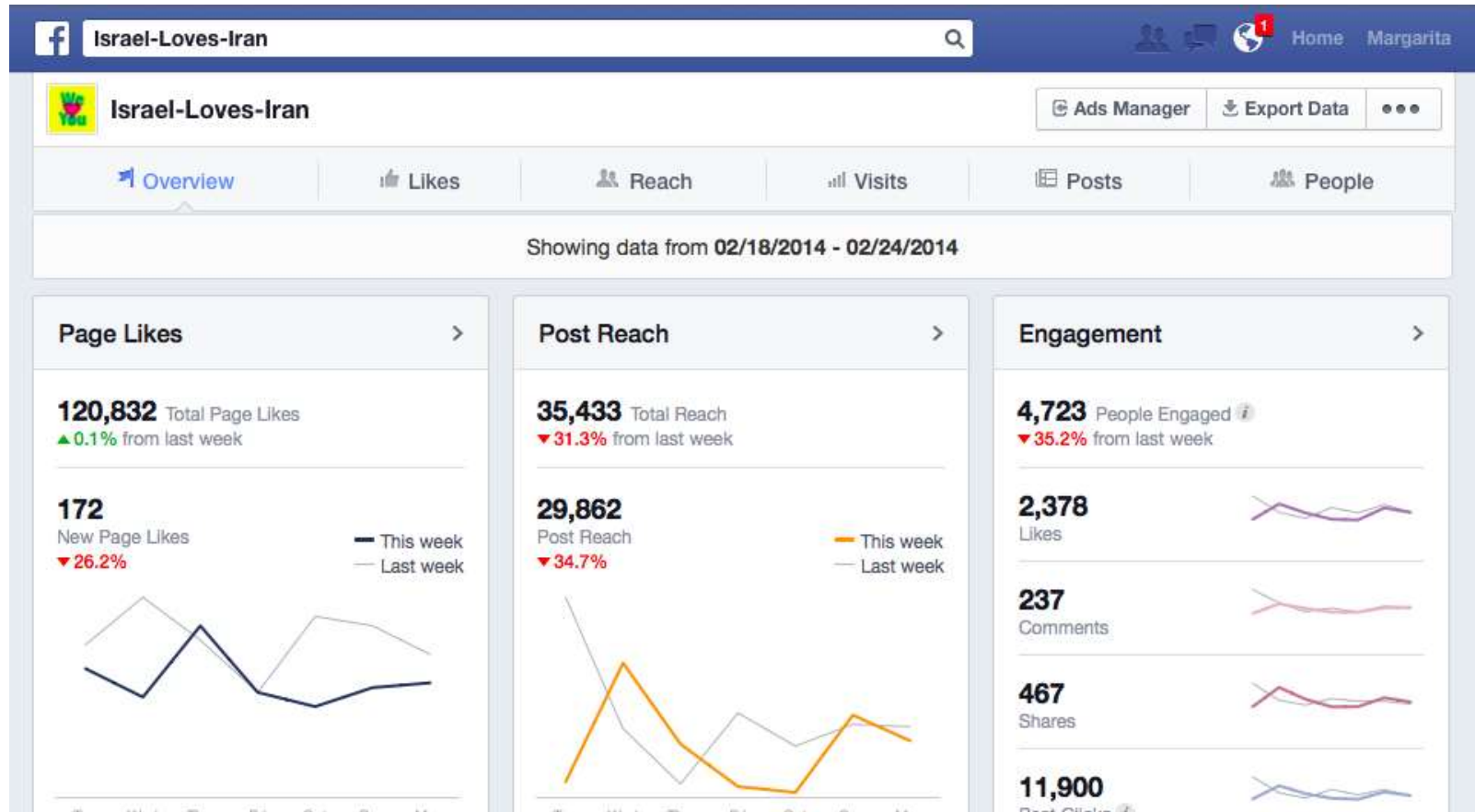
BEHAVIOR-CENTERED DESIGN *PROCESS*

- Observable measurable action
- Move people to **do** something (not about changing attitudes or beliefs)
- One time or repeated behaviors
- Ability through simplicity
- Triggers
- Habits

PERSUASIVE TECHNOLOGY *DELIVERY MECHANISM*

- Web, mobile, social technologies & devices:
- Give/increase ability
 - Act as Triggers
 - Are Sensors
 - Measure if behavior occurred
 - Deliver instant rewards to reinforce positive behavior

Technology-mediated behavior can be measured



Powerful analytics engines have been democratized

Your Fans | People Reached | People Engaged

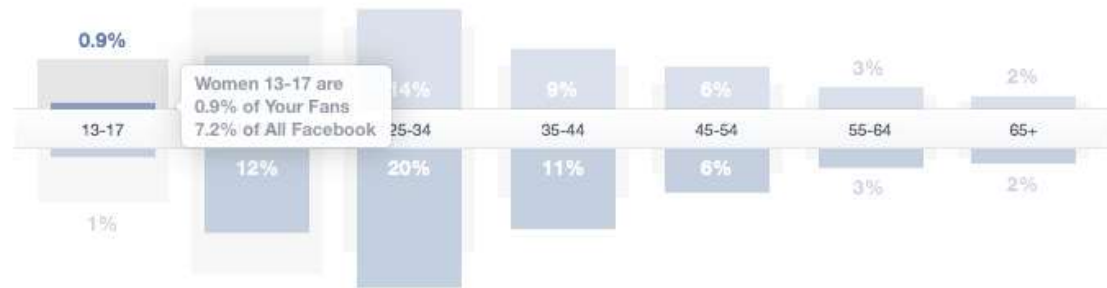
The people who like your Page

Women

43% Your Fans | 46% All Facebook

Men

56% Your Fans | 54% All Facebook



| Country | Your Fans | City | Your Fans | Language | Your Fans |
|--------------------------|-----------|-----------------------------|-----------|-----------------|-----------|
| United States of America | 23,086 | Tehran, Iran | 5,124 | English (US) | 54,773 |
| Germany | 21,572 | Tel Aviv, Israel | 4,251 | German | 21,579 |
| Iran | 9,678 | Berlin, Germany | 3,461 | English (UK) | 13,698 |
| Israel | 9,321 | London, England, United ... | 2,043 | Spanish | 4,265 |
| United Kingdom | 4,427 | Munich, Bayern, Germany | 1,429 | French (France) | 3,655 |

Time for reflection and...

LUNCH BREAK

Contact & Resources

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RESOURCES

Peace Innovation Lab: peaceinnovation.stanford.edu

Background & Overview: bit.ly/PeaceInnovationReading

Stanford Economic Impact: bit.ly/stanfordinnoimpact

Persuasive Technology: captology.stanford.edu

Fogg Behavior Model: behaviormodel.org

Behavior Grid: behaviorgrid.org