Communicating via CAFCR; illustrated by security example

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Abstract

One of the main bottlenecks of developing complex products is communication between the many involved stakeholders. The ”CAFCR” model is explained as one of the means to help communicating. The views of the ”CAFCR” model are integrated amongst others by many qualities. This is illustrated by means of a mobile infotainment product and zooming in on the quality security.
The bilateral communication is analyzed and the importance of interaction for fruitful communication is explained

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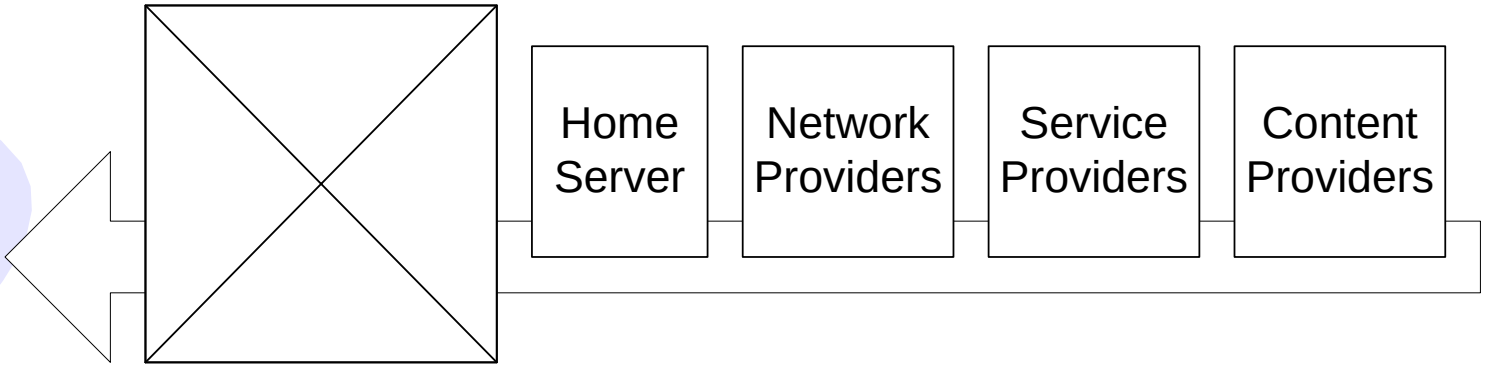
Example product: mobile infotainment

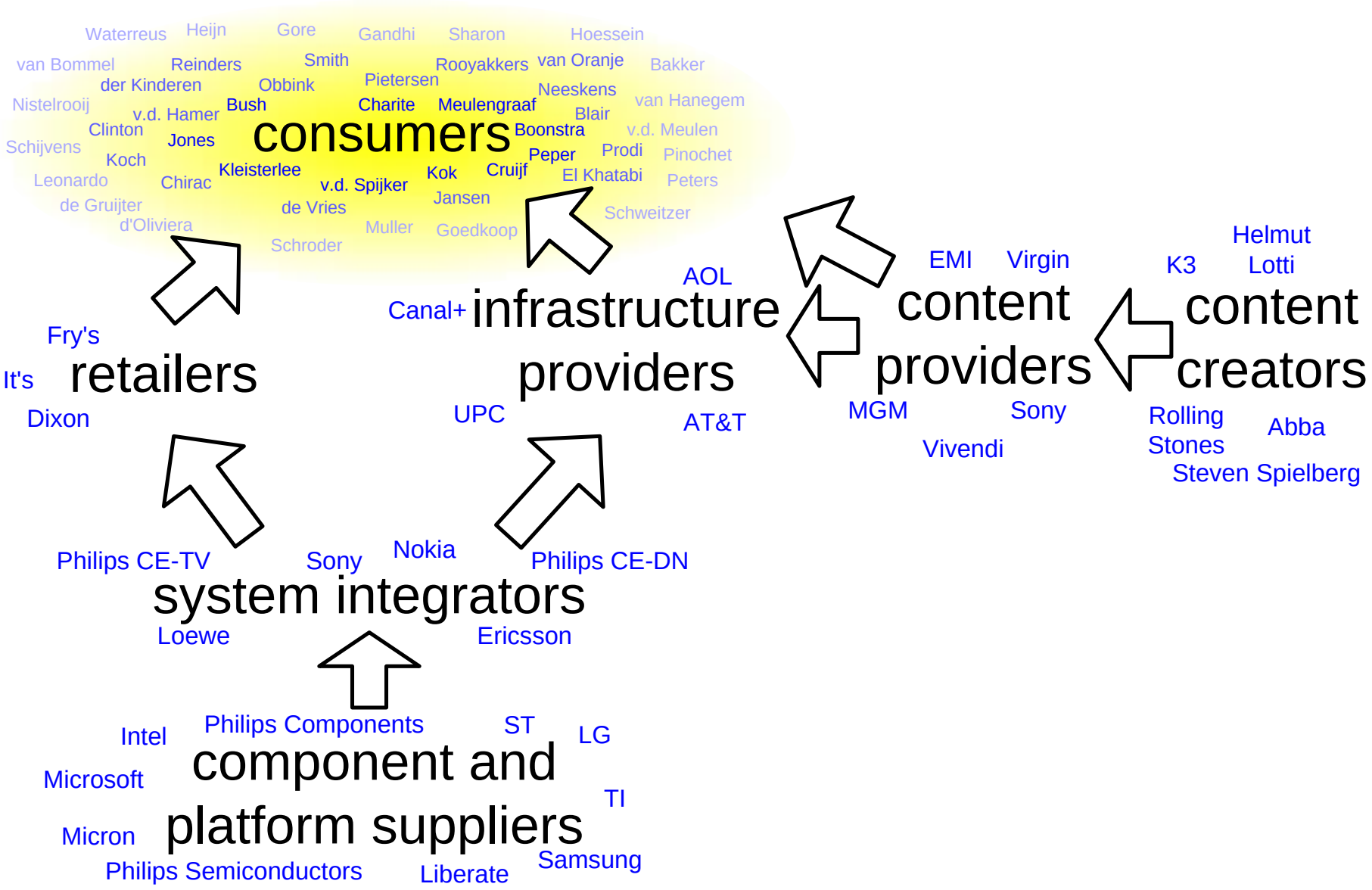
users



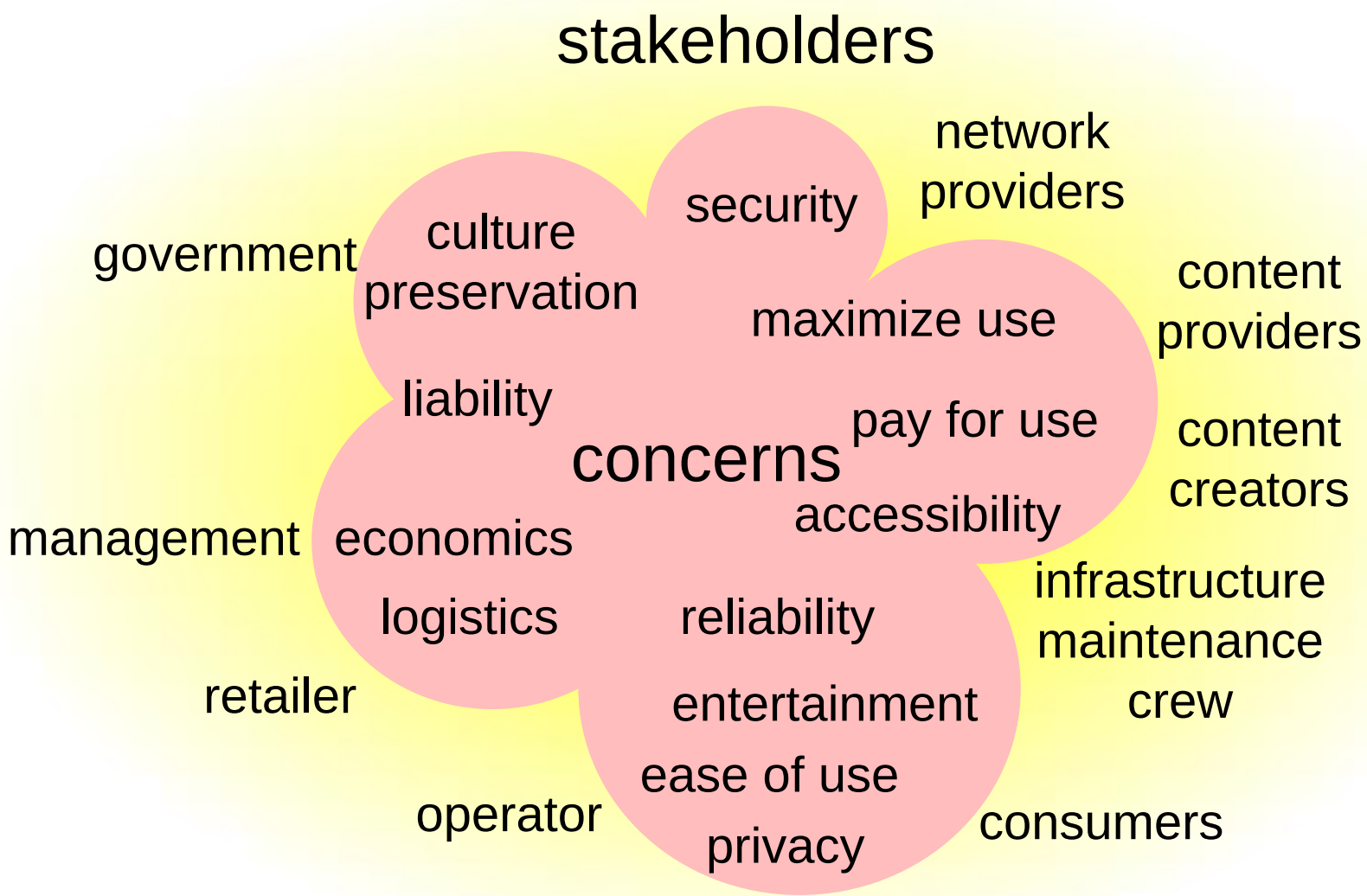
infotainment appliance

watch video
browse photo's
calendar
and much more...

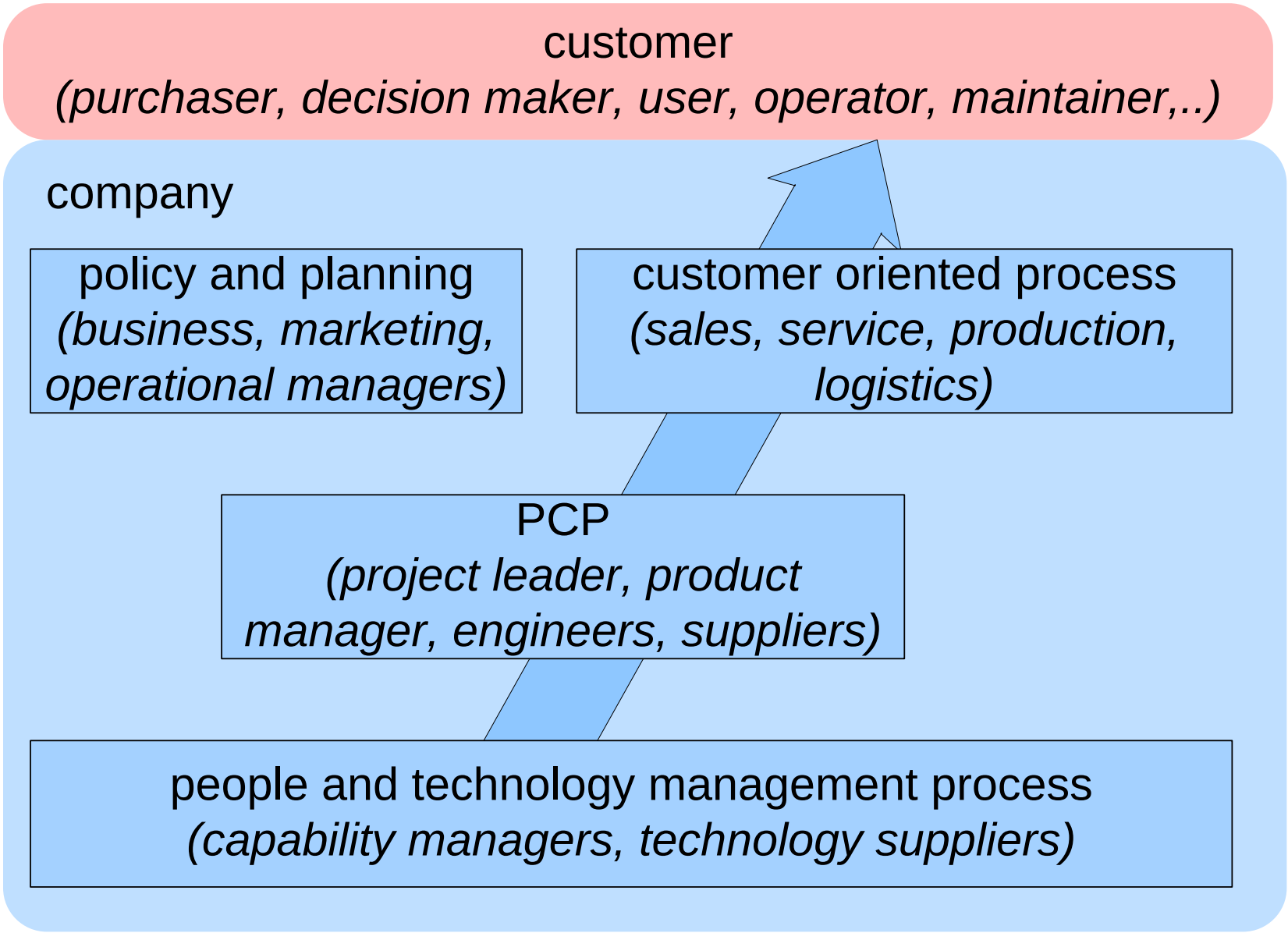
Value chain


consumers
Waterreus
Heijn
Gore
Gandhi
Sharon
Hoessein
van Bommel
Reinders
Smith
Rooyakkers
van Oranje
Bakker
der Kinderen
Obbink
Pietersen
Neeskens
Nistelrooij
v.d. Hamer
Bush
Charite
Meulengraaf
Blair
van Hanegem
Clinton
Jones
Boonstra
v.d. Meulen
Schijvens
Koch
Peper
Prodi
Pinochet
Leonardo
Chirac
Kleisterlee
v.d. Spijker
Kok
Cruijf
El Khatabi
Peters
de Gruijter
de Vries
Jansen
Schweitzer
d'Oliviera
Muller
Goedkoop
Schroder
retailers
Fry's
It's
Dixon
infrastructure providers
Canal+
AOL
UPC
AT&T
content providers
EMI
Virgin
MGM
Sony
Vivendi
content creators
Helmut
K3
Lotti
Rolling Stones
Abba
Steven Spielberg
system integrators
Philips CE-TV
Sony
Nokia
Philips CE-DN
Loewe
Ericsson
component and platform suppliers
Philips Components
Intel
ST
LG
Microsoft
TI
Micron
Philips Semiconductors
Liberate
Samsung

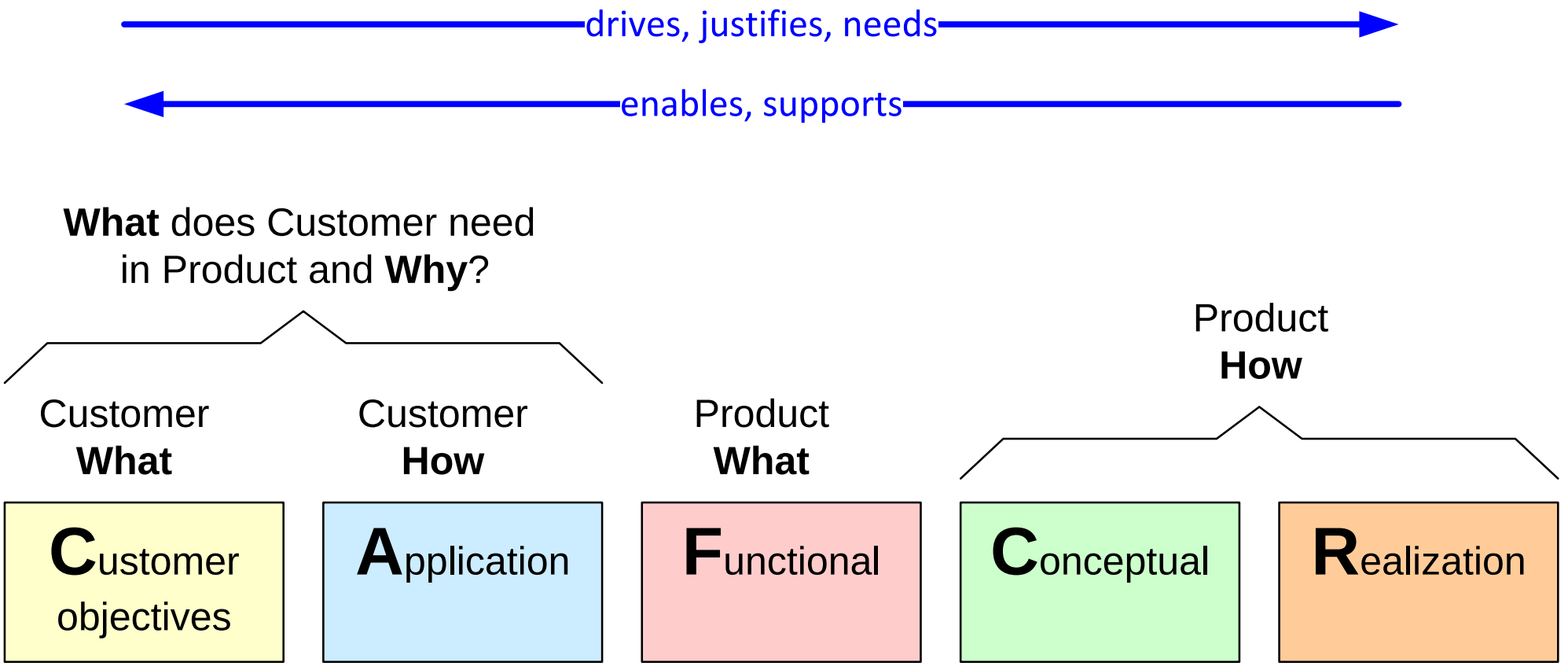
Stakeholders and concerns



Internal stakeholders

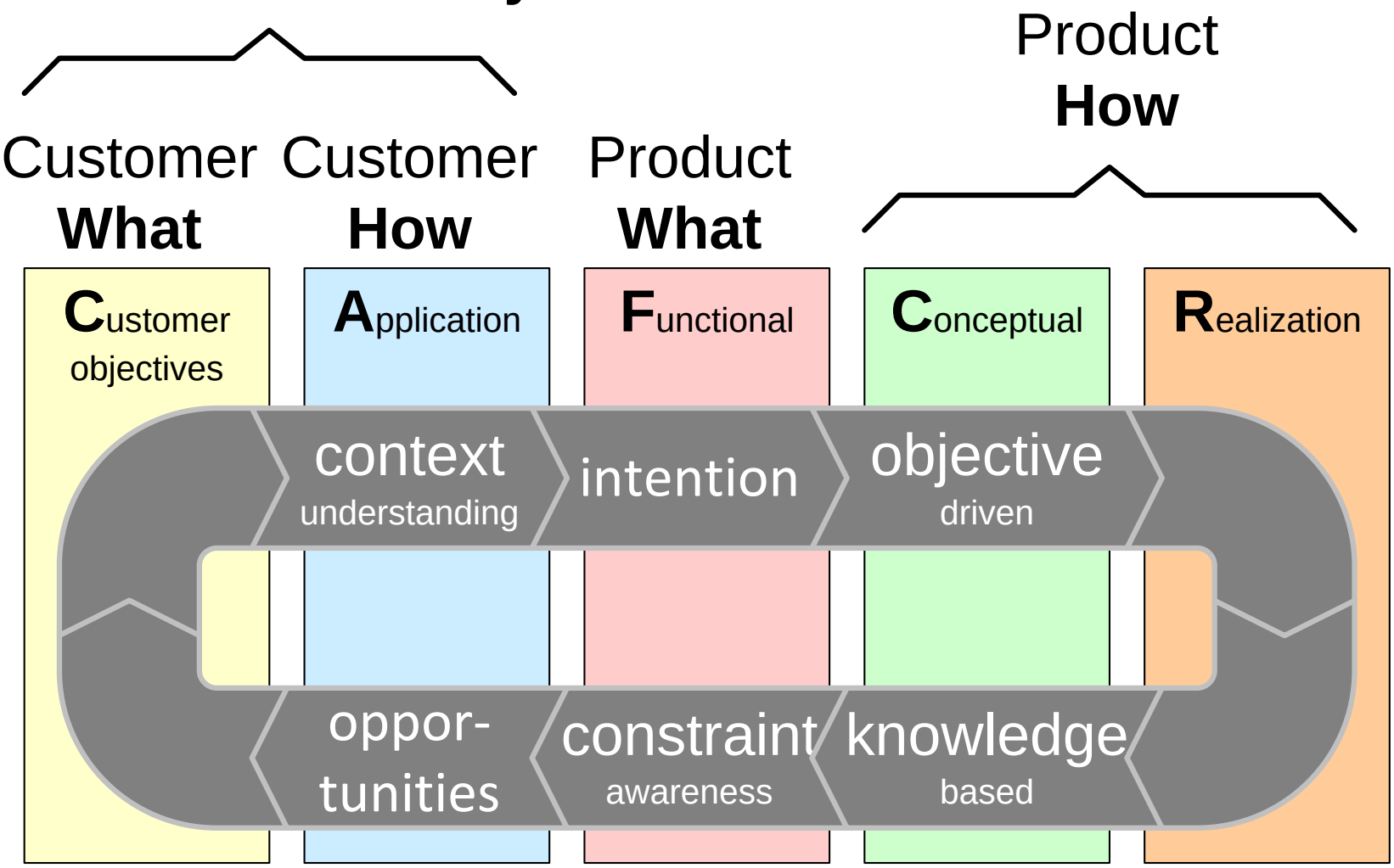


The “CAFCR” model

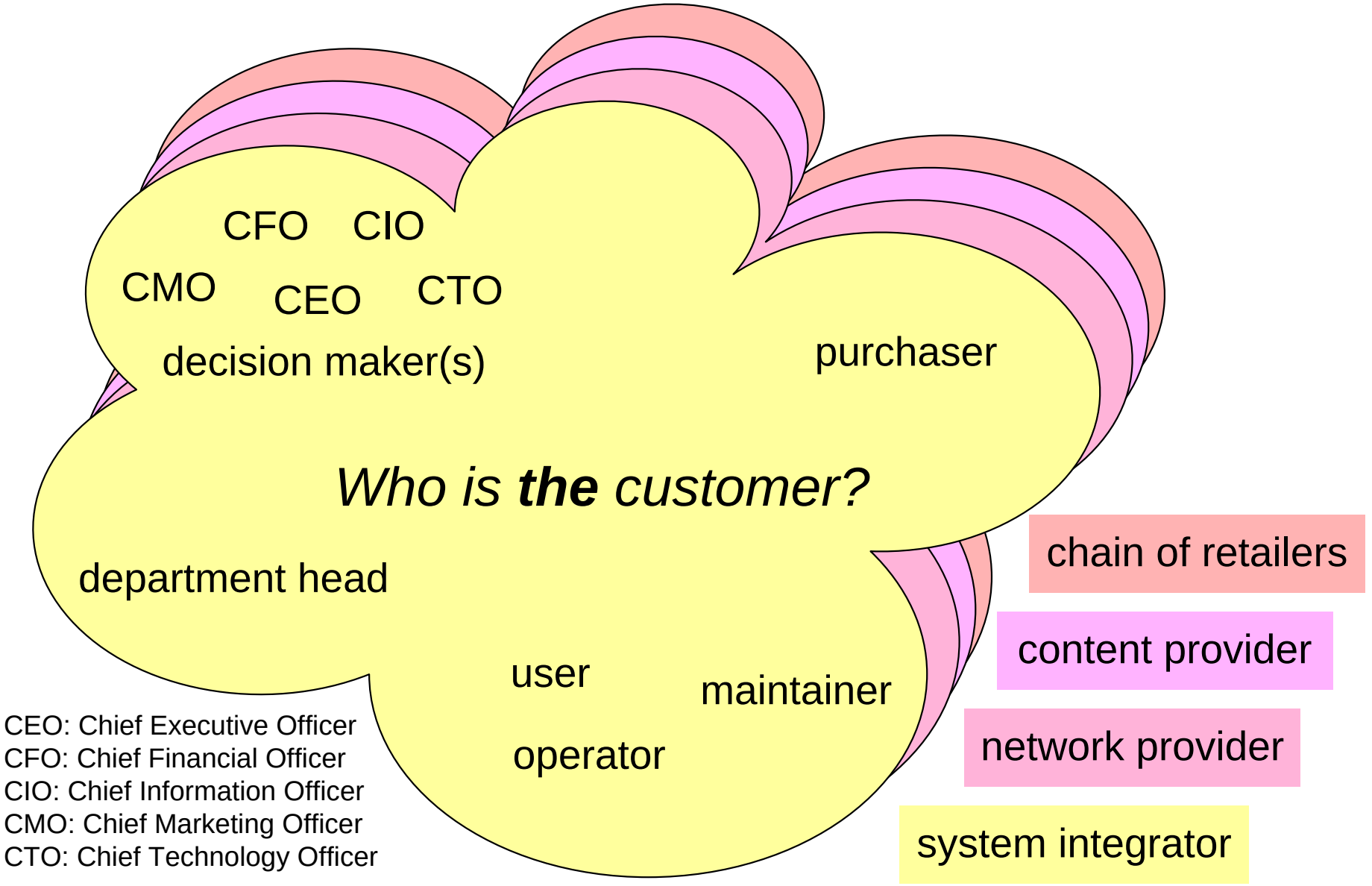


Integrating CAFCR

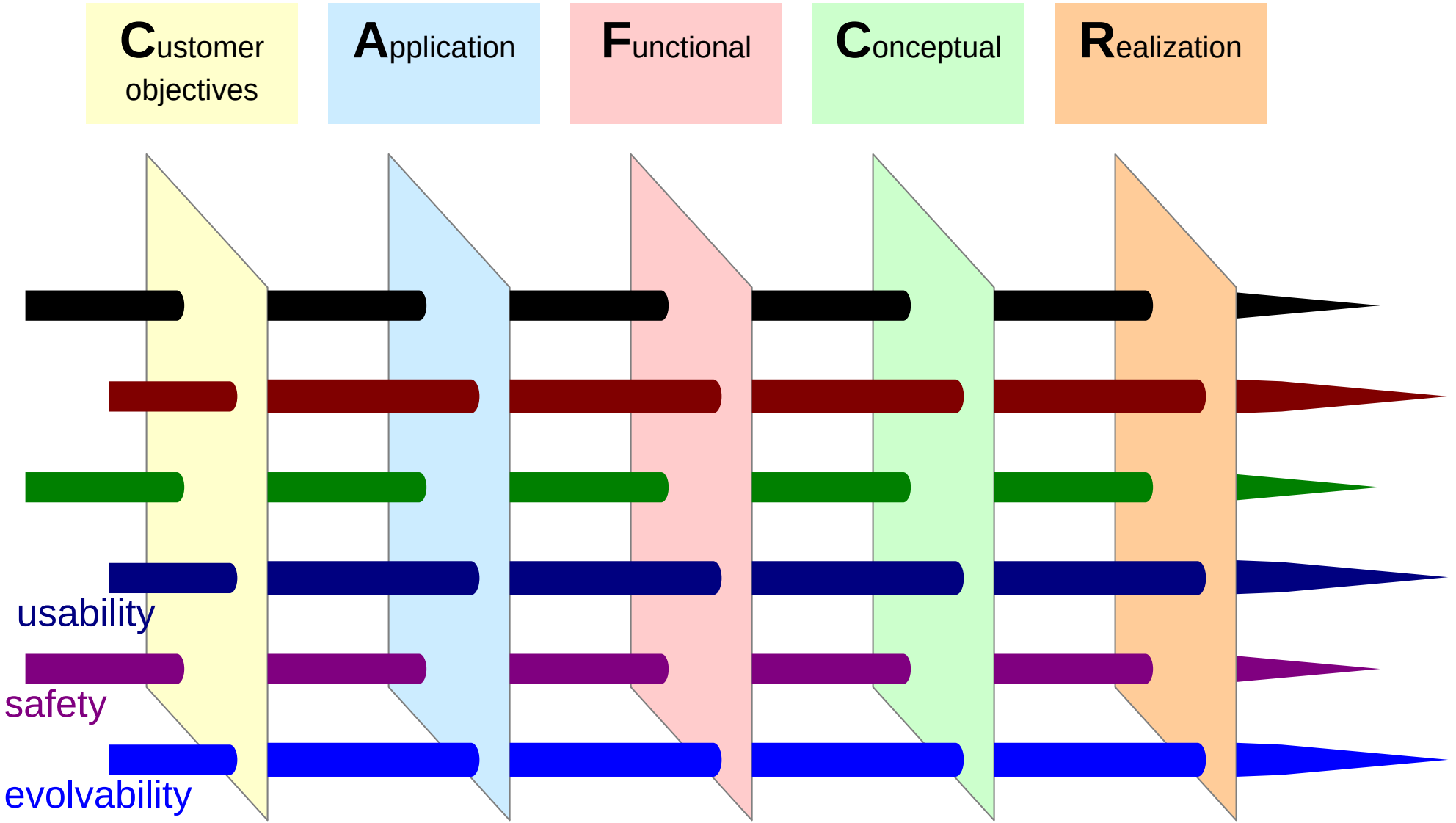
What does Customer need in Product and **Why**?



The abstracted customer



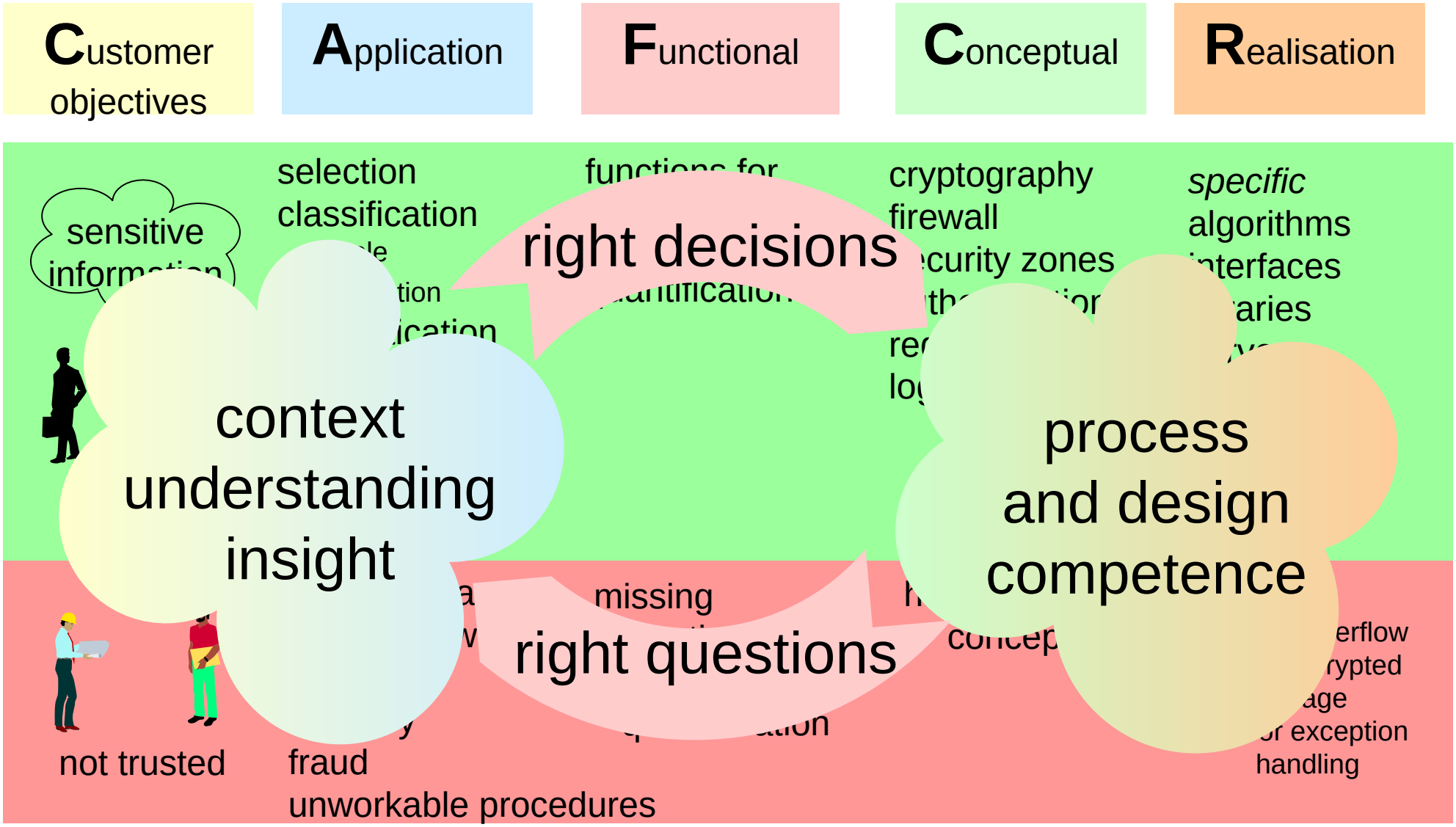
Quality needles as generic integrating concepts



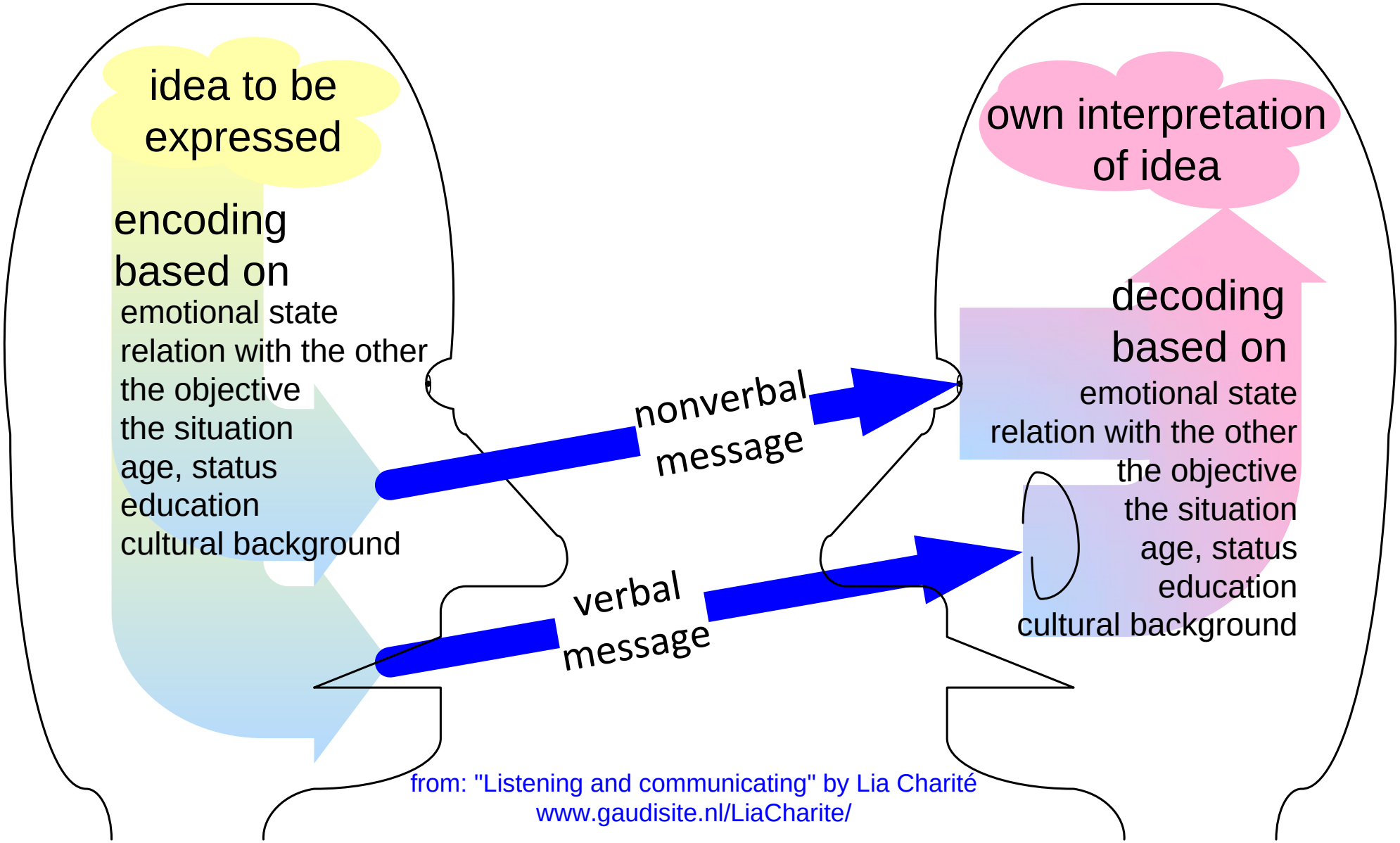
Security as example through all views

Customer objectives	**A**pplication	**F**unctional	**C**onceptual	**R**ealization
sensitive information  trusted	selection classification people information authentication badges passwords locks / walls guards administrators	functions for administration authentication intrusion detection logging quantification	cryptography firewall security zones authentication registry logging	*specific* algorithms interfaces libraries servers storage protocols
	desired characteristics, specifications & mechanisms			
 not trusted	social contacts open passwords blackmail burglary fraud unworkable procedures	missing functionality wrong quantification	holes between concepts	bugs buffer overflow non encrypted storage poor exception handling
			threats	

Role of the views



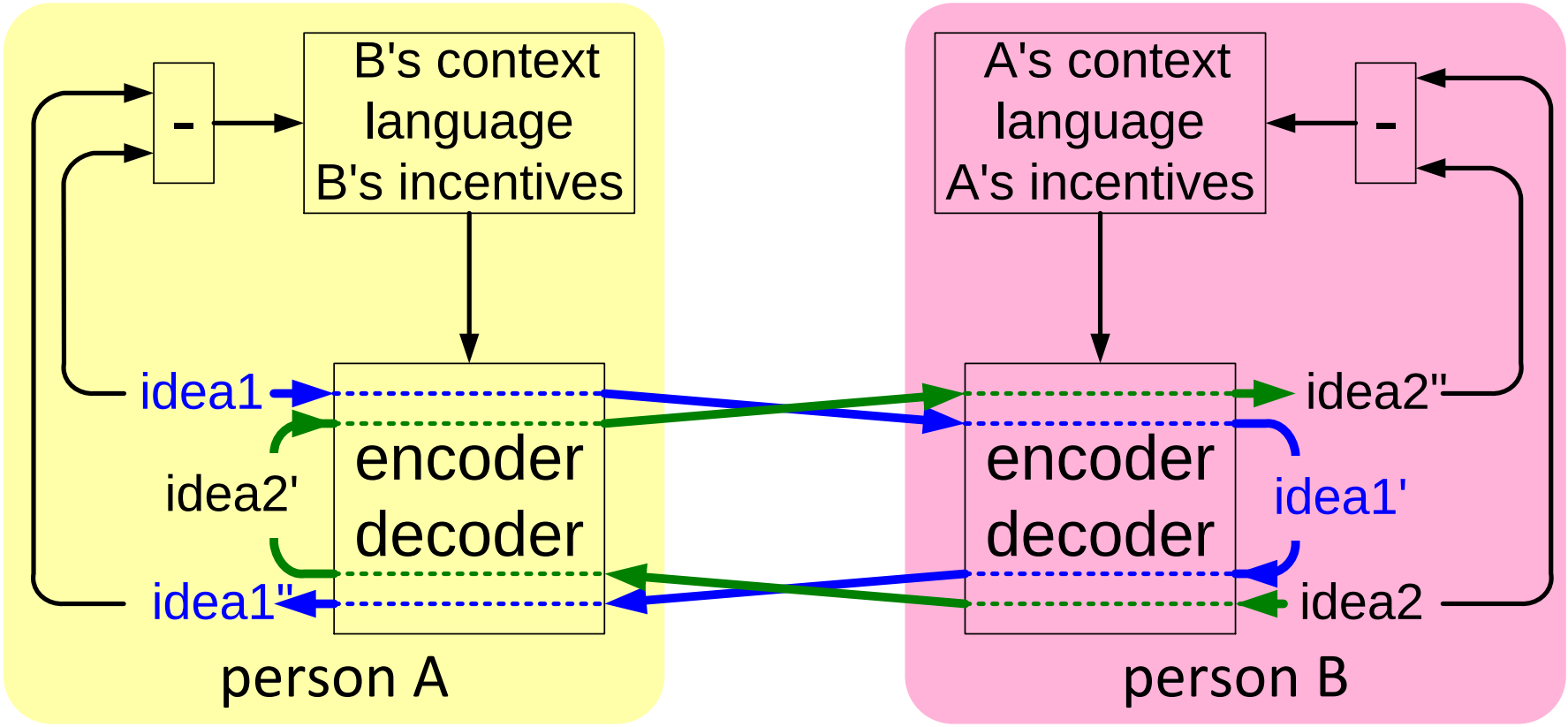
Active listening: the art of the receiver to decode the message



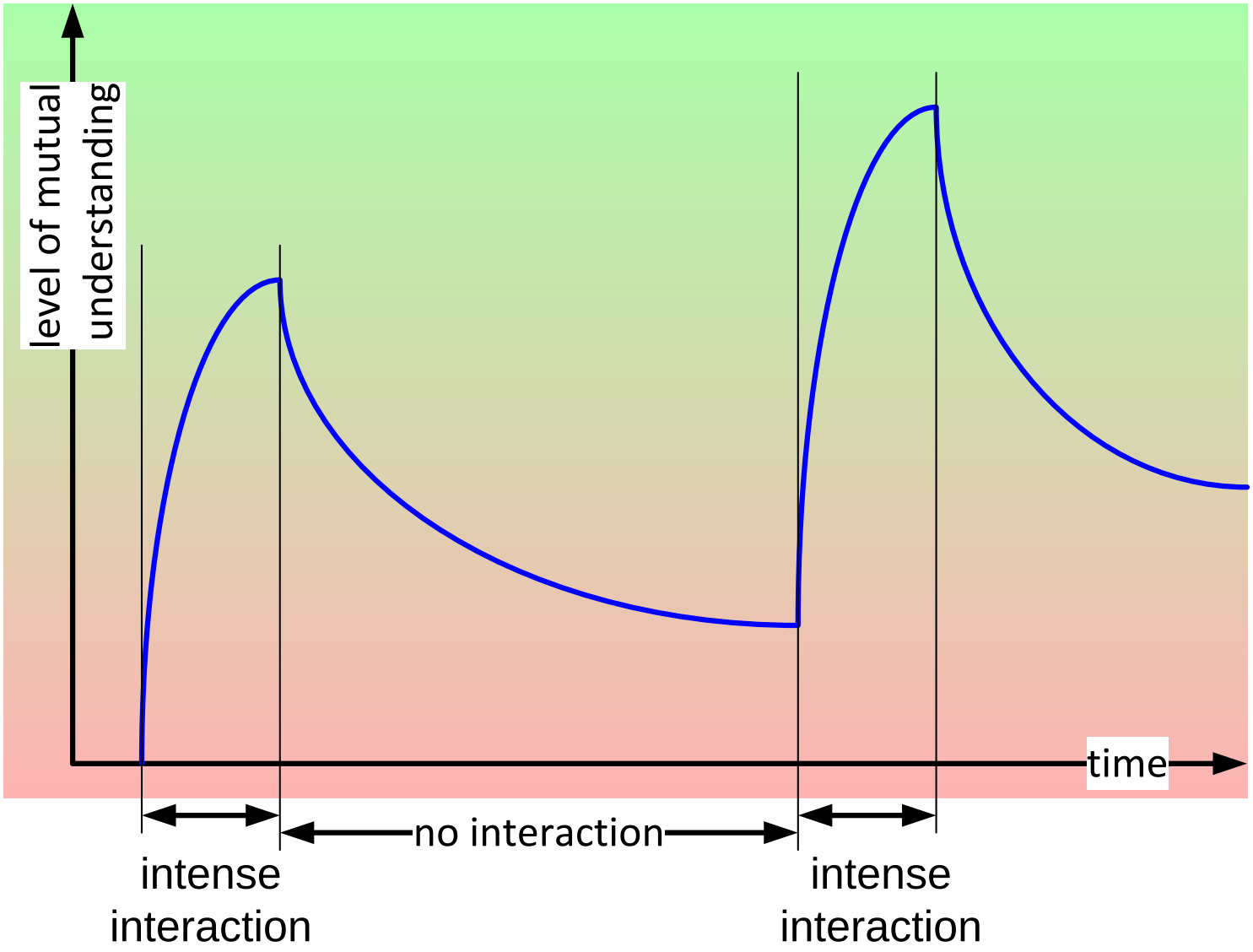
from: "Listening and communicating" by Lia Charité
www.gaudisite.nl/LiaCharite/

Intense interaction needed for mutual understanding

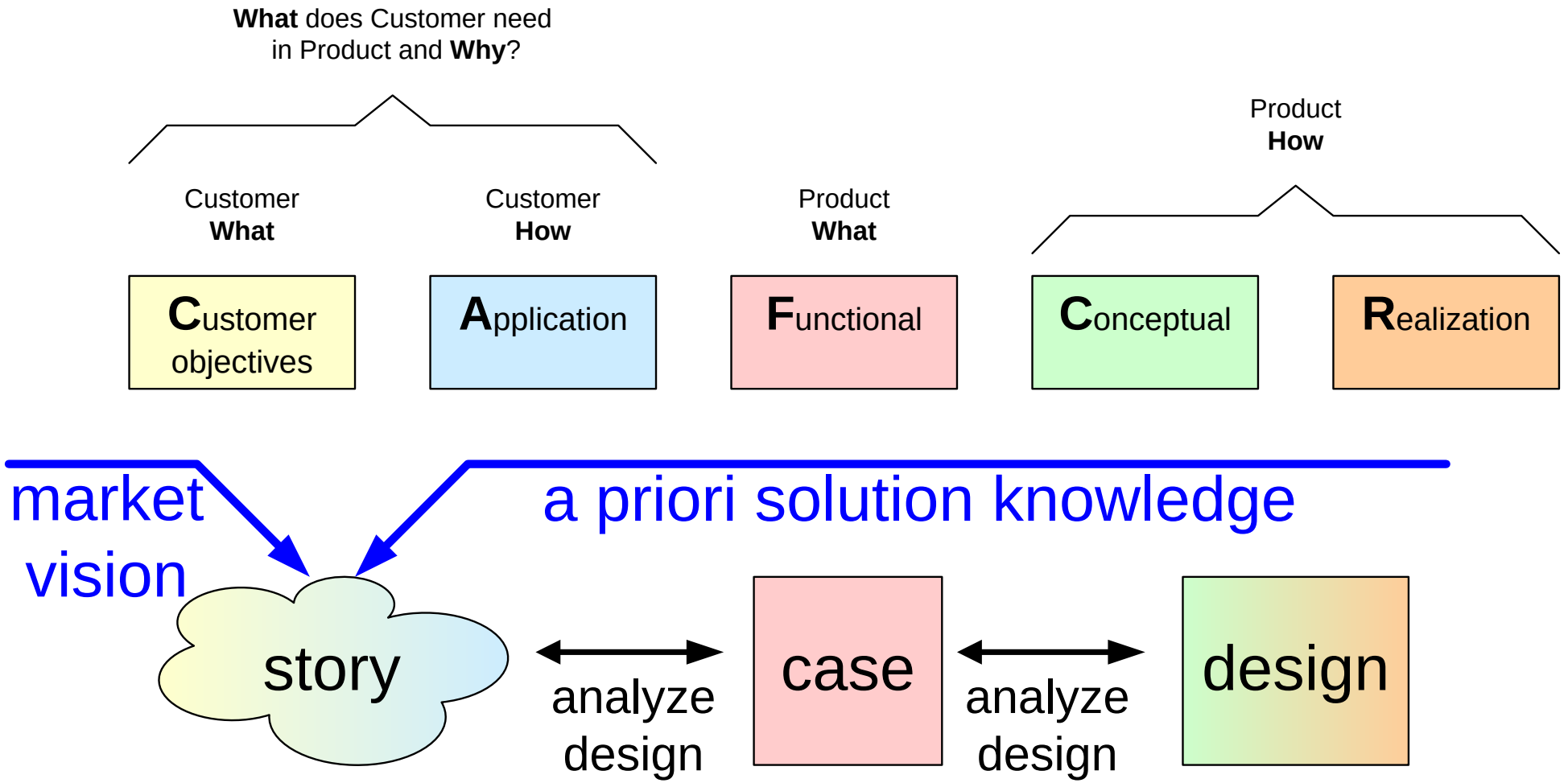
to calibrate:
repeat many times with different
examples, illustrations, and explanations



Mutual understanding as function of time



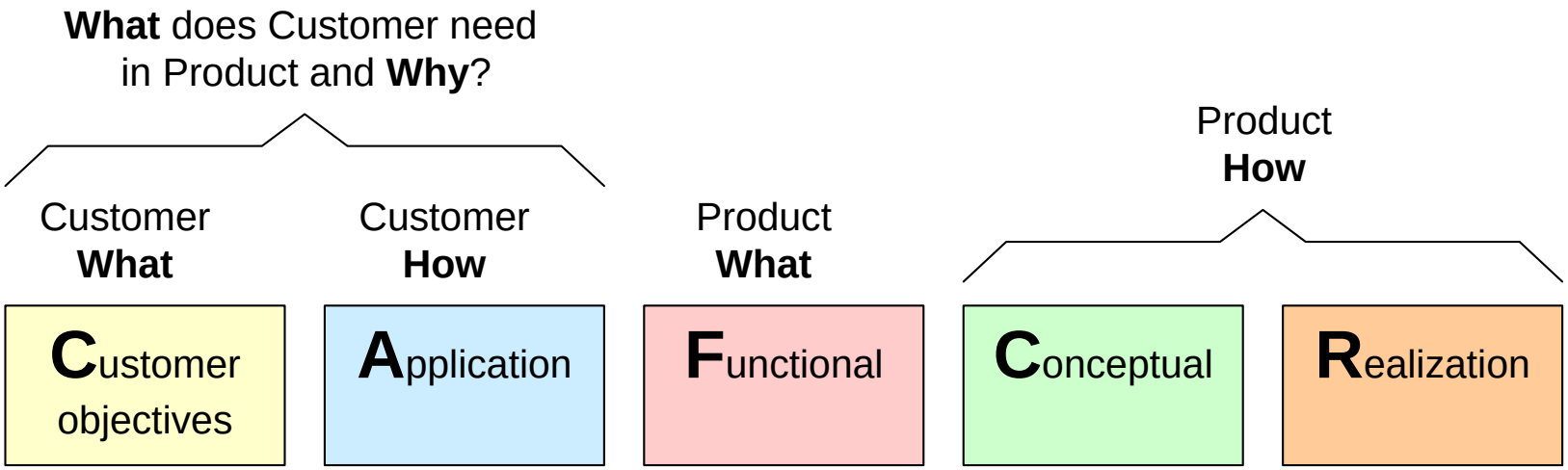
Story telling method



How do these stakeholders communicate?

stakeholder	primary thought	threat
consumer	privacy	kill usability
content provider	DRM, consumer == pirate	kill usability kill market
Chief Financial Officer	how to stay in control	kill usability
operational manager	result in time, accessibility	security
web engineer	PHP only supports alphanumerical password	poor password protection
crypto engineer	128 bit keys	no attention for key handling process

Summary



CAFCR, as shared reference, enables:

+ Positioning of concerns, problems and solutions
+ Checklists per view
+ Reasoning top down and bottom up