Building a Connected Strategy
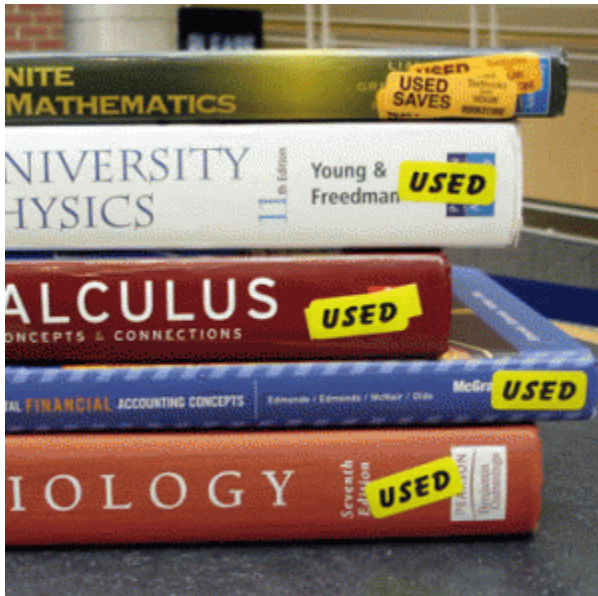
Nicolaj Siggelkow and Christian Terwiesch

PVMI Conference, Philadelphia, June 2017

Combination of
- Reading
- Videos
- Problem sets

Helps professor by:
- Providing feed-back where students struggle

- No more grading

≡ **connect**

Economics 101

A — PERFORMANCE

86%

YOUR AVERAGE CONNECT
ASSIGNMENT SCORE

513/600 POINTS

SECTION INFO

Jill Whitey
professor@mhhe.com

Office Hours : MWF 10-11am

C — LEARNSMART
Identify your study needs and practice
to improve.

D — NOTIFICATIONS (1)

Welcome to Economics 101. We're going
to learn a lot this fall, so here's what you
need to get started ...

E — BOOK

ECONOMICS

Campbell McConnell, 17th edition

F — TRENDS
See submission stats and
compare scores with the class.

G — STUDENT RESOURCES

H — NEXT UPI

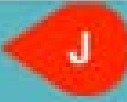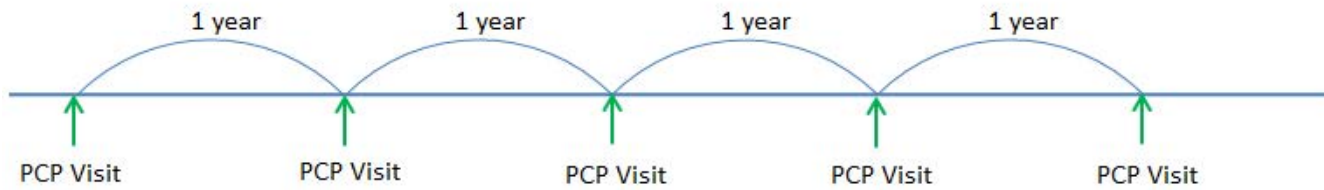| SEP 26 | Presentation 1 |
| SEP 30 | Group assignment: Group Project |
| SEP 30 | Writing assignment: Writing Assignment |

I — TEGRITY
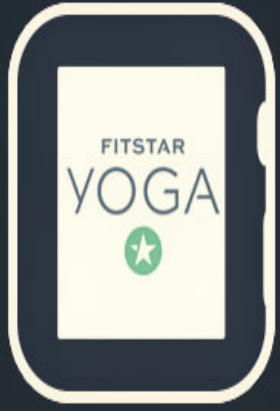Your instructor is currently not
recording lectures.

J — COURSE FILES

welcome.ppt

1 year   1 year   1 year   1 year
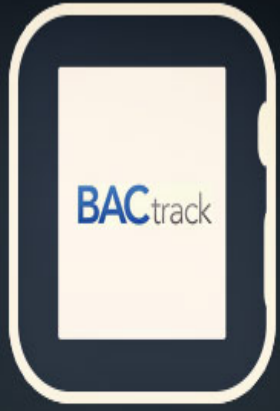
PCP Visit   PCP Visit   PCP Visit   PCP Visit   PCP Visit

Best Health And Fitness Apps
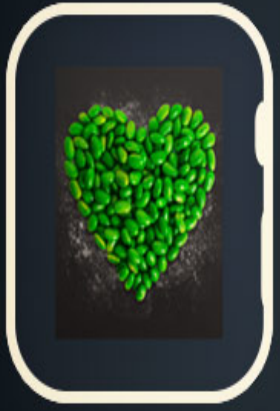
What is the Pattern Here?

	The old way	The Internet Way	The New Way

Student reading

Personal health
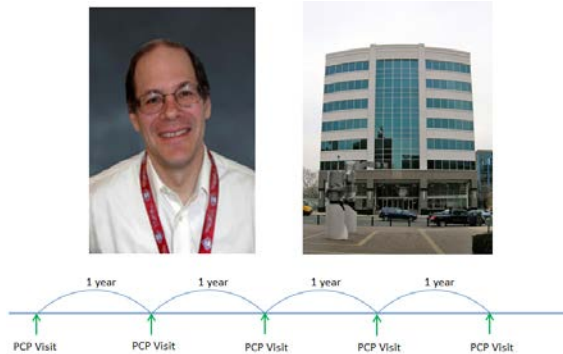
$\Rightarrow$ Increase in "smart devices" and "connectivity"

What is the Pattern Here?
Connectivity Enables New User Experiences

Data flow from customer to firm

Response from the firm to customer

Degree of customer control → increasing

Push-to talk (periodic)

Automated hovering (continuous)

Respond to desire

Curated offering

Tweak behavior
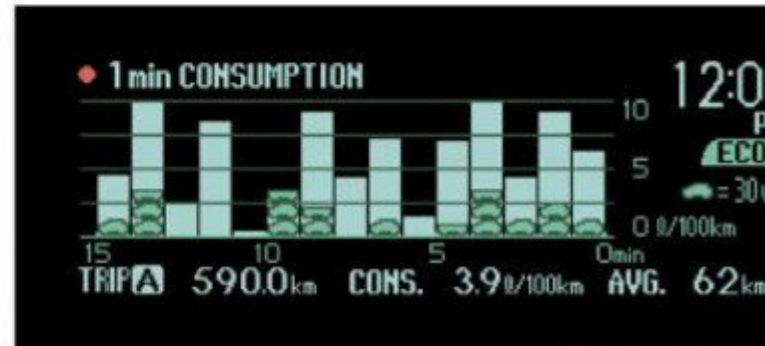
Automatic
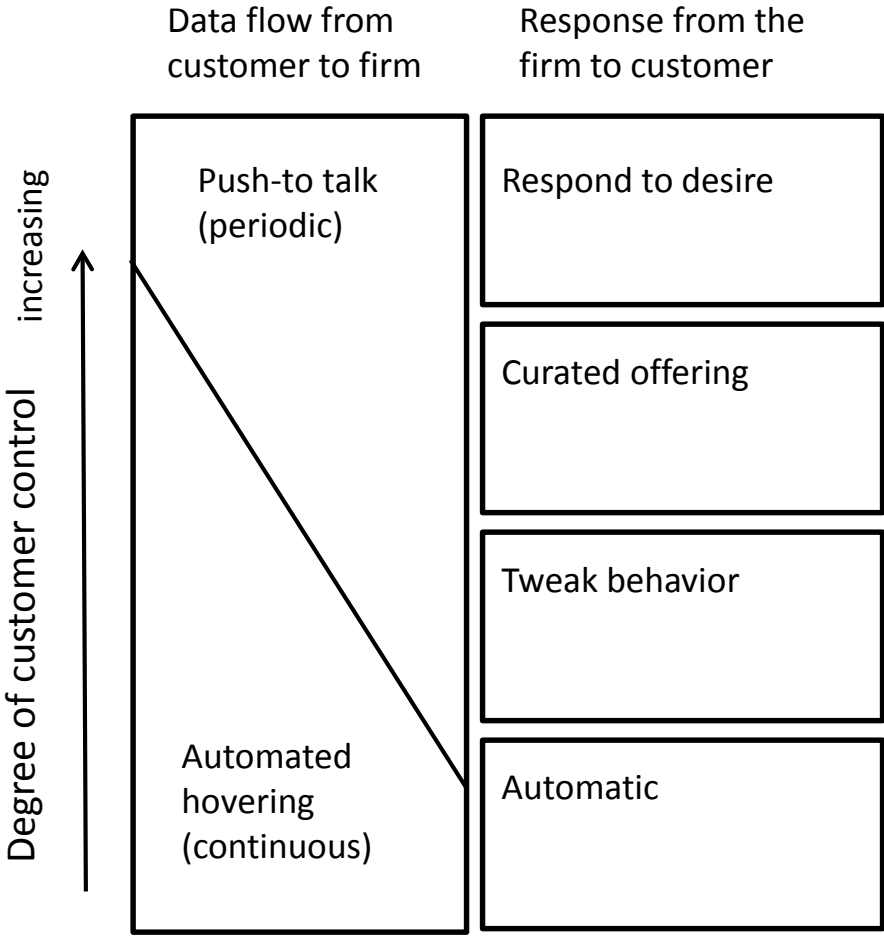
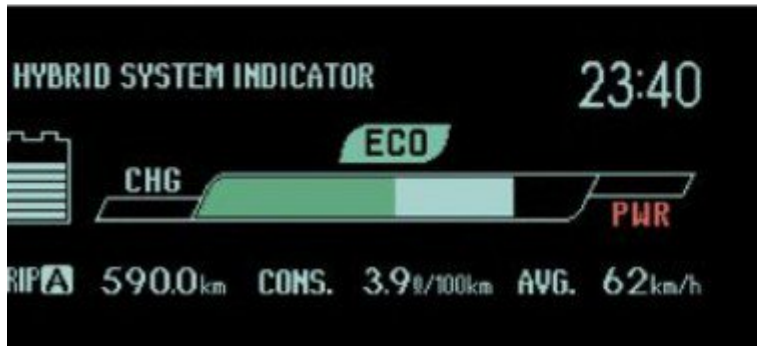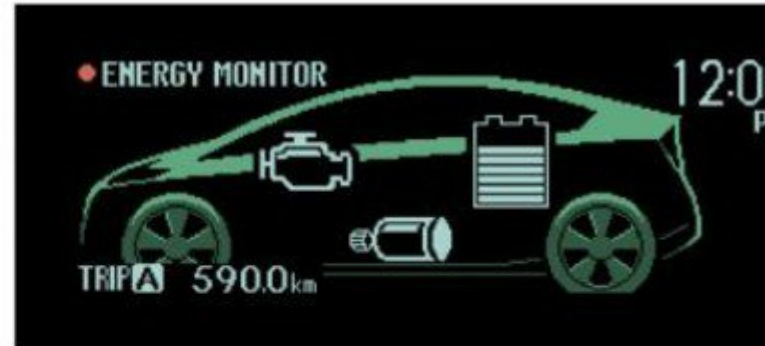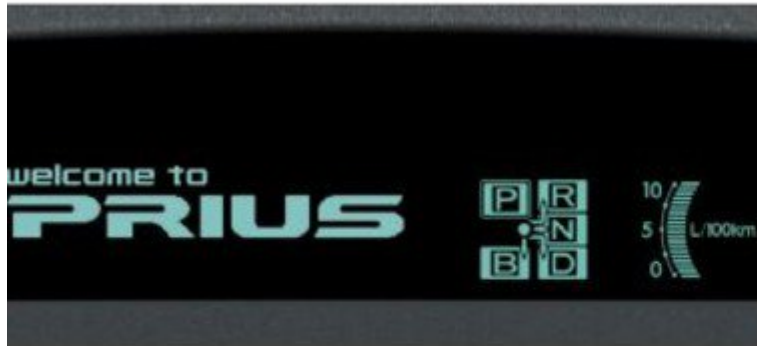"Reread page 234"

"Nicolaj got a 97% on Chapter 5"

?

"Given your DNA, you might want to test for x"

"If you take all your meds this week…"

What Does this have to Do with Mobility?

Respond to desire: pretty obvious

Nudging behavior:
- Eco Mode
- Permanent feed-back on fuel efficiency
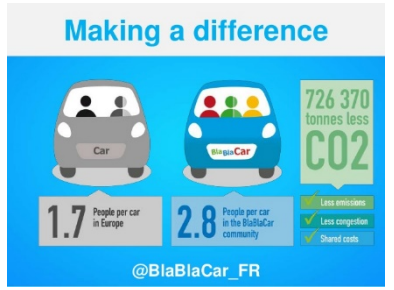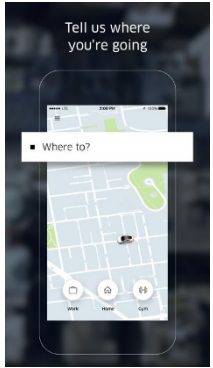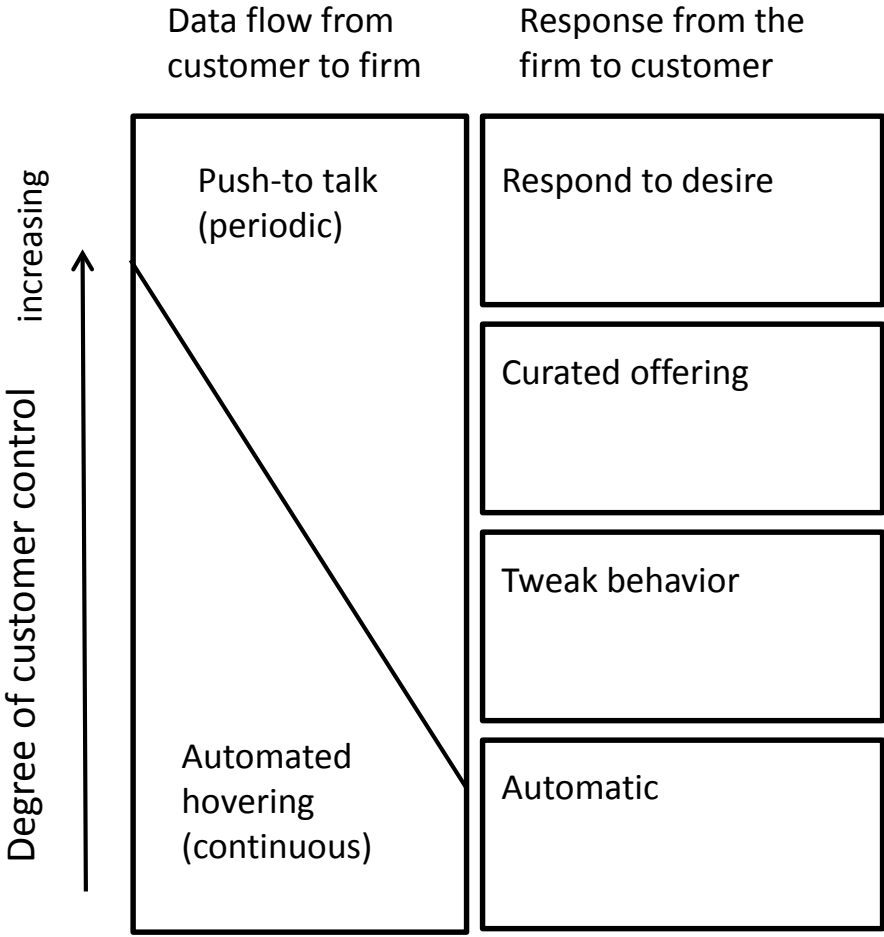
What Does this have to Do with Mobility?

Nudging behavior:
- Distance alerts in parking mode
- Alerts for

Automated
- "Bremseingriff"

What is Missing? Example of Ride Hauling

Degree of customer control — increasing

Data flow from customer to firm

Push-to talk (periodic)

Automated hovering (continuous)

Response from the firm to customer

Respond to desire

Curated offering

Tweak behavior

Automatic

Tell us where you're going

Where to?

Work   Home   Gym

Making a difference

Car   BlaBlaCar

726 370 tonnes less CO2

✔ Less emissions
✔ Less congestion
✔ Shared costs

1.7 People per car in Europe   2.8 People per car in the BlaBlaCar community
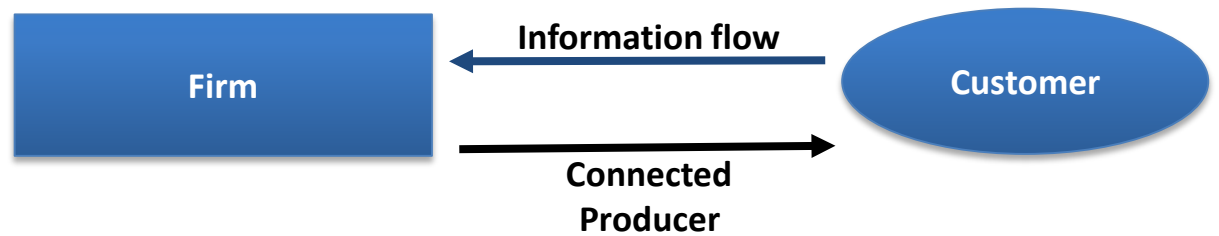
@BlaBlaCar_FR

?

Connected Strategy

- A connected strategy is the restructuring of the network of connections between you, customers, and suppliers in order to efficiently provide customized micro-interactions with customers.

Connection Architectures

Firm

Information flow

Customer

Connected Producer

Examples: Connected Producers

Push up WTP:

- Penn Health System
- UnderArmour (MyFitness Pal; MapMyFitness), Nike (Nike+ Training Club)
- EA, Valve (Video games; freemium)
- Disney Park (Magic Band: RFID + radio)
- Carnival (smart medallion)
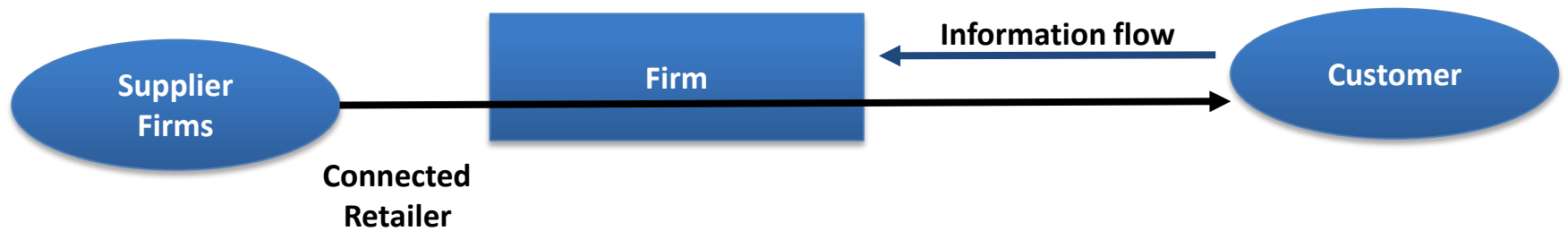- VRI (remote-patient monitoring platform)

Lower cost:

- Progressive (snapshot device)

Lower Cost through sharing of a common resource:

- Amazon Webservices, Microsoft Azure (rent the cloud)
- Car2go (Daimler: 14,000 vehicles in 30 cities in eight countries)

Connection Architectures

Supplier Firms

Firm

Information flow

Customer

Connected Retailer

Examples: Connected Retailers

- Amazon (with own warehouse)
- zipCar
- Overstock.com
- Plated, Blue Apron (meal kit delivery business)
- Netflix, Hulu, Amazon Video (movies, TV shows)
- Spotify, Pandora, iTunes (music)
- Birchbox (beauty related items each month)
- Trunk Club, StitchFix (monthly curated boxes of apparel)
- Coursera, EdX (on-line learning, content produced by universities)
- Ideel (flash-sales of designer apparel)
- Rent the Runway (rent designer dresses)

Connection Architectures

**B2C
Market Maker**

**Supplier
Firms**

Firm

Customer

Information flow
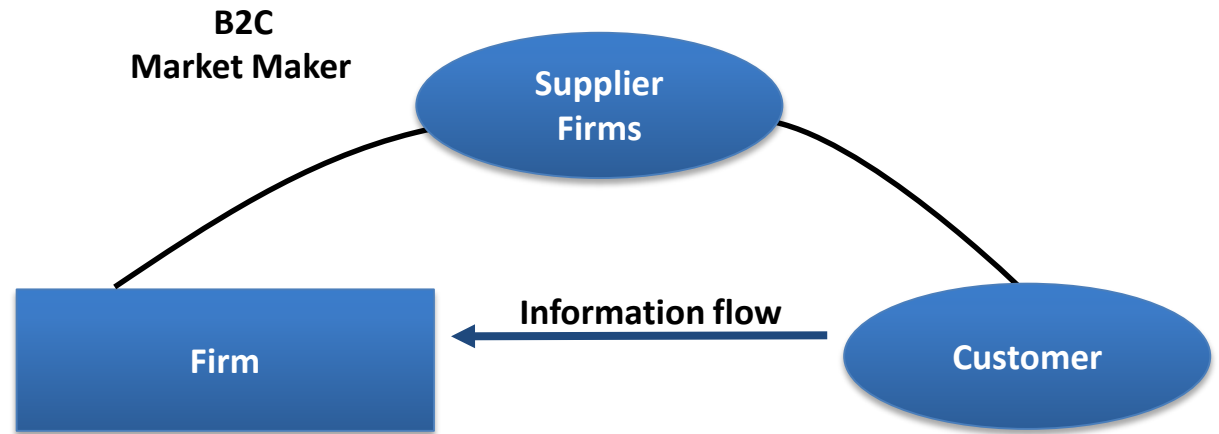
Examples: B2C Market Makers

- Expedia, Orbitz
- Cars.com, Autotrader.com (link to car dealers and individuals)
- Amazon Marketplace (access to many retailers)
- Wayfair (connect to 7000 home furnishing suppliers who ship directly)
- Open Table (restaurant reservations)
- GrubHub (on-line ordering of restaurant food)
- Class Pass (link to boutique fitness studios)
- Spot Hero (find open spots in car garages)
- Angie's List (user reviews and allows members to connect to local businesses)
- Teladoc (telehealth provider)
- Innocentive (link innovation problems to inventors)

Connection Architectures

Firm

Information flow →

Customer

I2C
Market Maker

Individuals as Suppliers
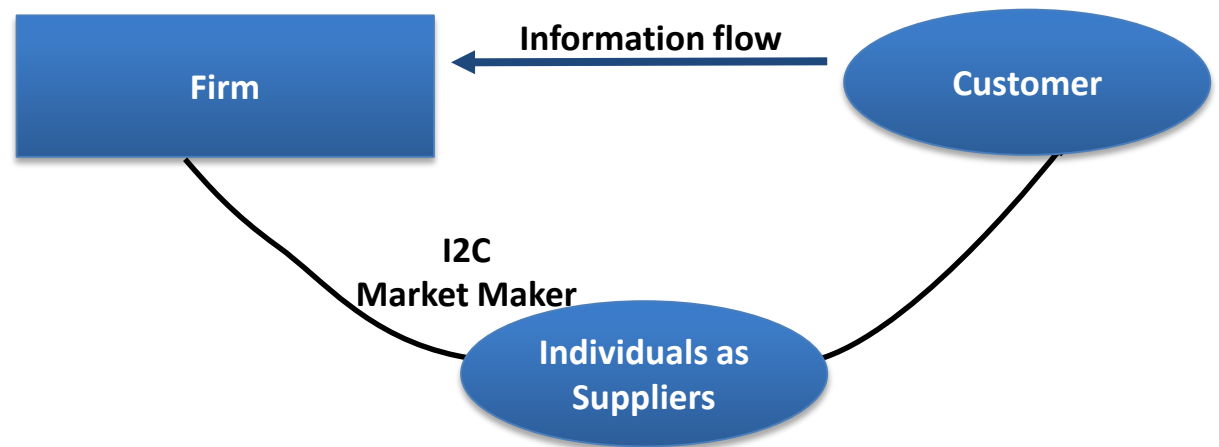
Examples: I2C Market Makers

- UberX, Lyft, BlaBla Car, Relayrides (longer term car rental)
- Airbnb (room rental)
- Ebay, Etsy (with some B2C)
- Instacart (grocery shopping service)
- ProsperFunding (match borrowers with lenders)
- Kickstarter (match investors with creators)
- StubHub (organize resale of tickets; owned by eBay)
- Amazon Mechanical Turk (on-line tasks)
- TaskRabbit (find a nanny, gardener, furniture assembly, etc.)
- Donorschoose (link donors with causes)

Connection Architectures

Firm

Information flow

Customer

P2P Network Creator

Customer
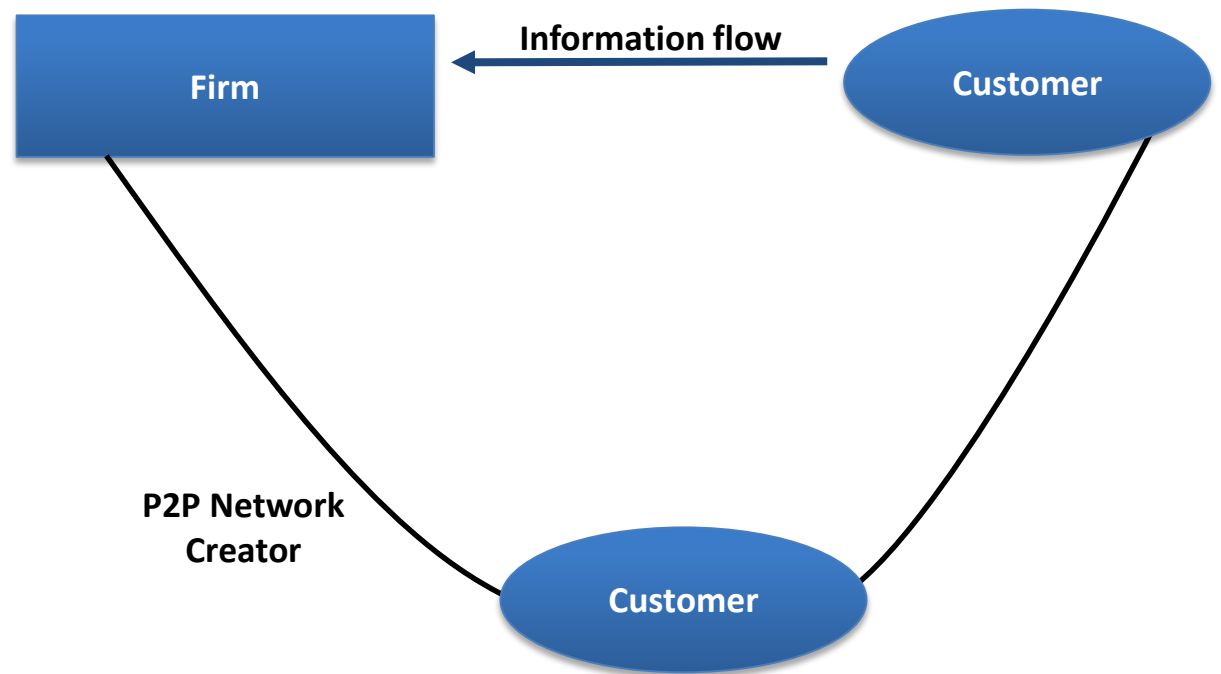
Transaction P2P Network Creators

- We can distinguish between three types of P2P Network Creators, depending on how they monetize the network

- Transaction P2P Network Creators charge for using the network, either as a transaction fee or as a membership fee.

- Examples:
  - Betfair (allow people to bid on sporting events against each other, not against a bookmaker)
  - Transferwise (P2P currency exchange)
  - Match.com, eHarmony.com

Access P2P Network Creators

- Access P2P Network Creators do not charge to join the network, but they sell access to the network participants and to the data that these participants create. Most frequent buyer are advertisers.
- Examples:
  - LinkedIn
  - Facebook
  - YouTube
  - Pinterest
  - Tripadvisor
  - Yelp

Complementor P2P Network Creators

- Complementor P2P Network Creators establish networks, usually with free membership, as a complementor to other products or services they sell.

- Examples:

  - Nike sponsored on-line running "clubs"

  - Patient portals created by health care providers or pharmaceutical companies

- As before, firms may engage more than one operating model:

  - Venmo: Charge for transactions using credit cards; free transactions for internal transfers.

Connection Architectures

Connected Strategy Matrix

Degree of supplier control

increasing →

decreasing →

Degree of customer control →

		Connected Producer	Connected Retailer	B2C Market Maker	I2C Market Maker	P2P Network Creator
Push-to-talk (peri-odic)	Respond-to-Desire					
	Curated offering					
Auto-mated hovering (contin-uous)	Tweak Behavior					
	Automatic Execution					

C -> F
connection

F -> C
connection

Connected Strategy Matrix

Degree of supplier control — increasing → decreasing

Degree of customer control — increasing

		Connected Producer	Connected Retailer	B2C Market Maker	I2C Market Maker	P2P Network Creators
Push-to-talk (peri-odic)	Respond-to-Desire	MAVEN, DriveNow, CAR2GO	Hertz 24/7, zipcar, enterprise CarShare	cars.com	Bla Bla Car, Getaround, UBER, lyft	link FORD CREDIT
Auto-mated hovering (contin-uous)	Curated offering					
	Tweak Behavior					
	Automatic Execution					

C -> F connection   F -> C connection

Connected Strategy Matrix

Degree of customer control (increasing)

Degree of supplier control — decreasing

		Connected Producer	Connected Retailer	B2C Market Maker	I2C Market Maker	P2P Network Creators
Push-to-talk (peri-odic)	**Respond-to-Desire**	**Everyone** (except Spotify)		CLASSPASS	7 CUPS	7 CUPS
	Curated offering	Nike+, activex, SWORKIT, fitbit	Spotify		Rise SWORKIT	activex
Auto-mated hover-ing (contin-uous)	**Tweak Behavior**	Apple WATCH, activex, sensoria, Nike+, RALPH LAUREN, SWORKIT, myfitnesspal, STRIVR, Babolat, SAP, 94Fifty, fitbit	Spotify		Rise SWORKIT activex	activex, Babolat, Nike+, myfitnesspal, fitbit
	Automatic Execution		Spotify			

C -> F connection

F -> C connection