Digital Ecosystems: The Impacts and The Opportunities

Jenny Beresford
If My Digital Twin Could See Me Now…
60% top companies by market cap are digital giants

In Elite Company
Chinese social media giant Tencent is now the world’s 10th biggest public corporation

- Apple
- Alphabet
- Microsoft
- Amazon
- Berkshire Hathaway
- Facebook
- Exxon Mobil
- Johnson & Johnson
- JPMorgan
- Tencent
- Wells Fargo

Note: As of April 5th trading close

Bloomberg
"Laboratory of Dilemmas" multi-media installation by George Drivas.
Source: Pavilion of Greece at the 57th International Art Exhibition - La Biennale di Venezia 2017
CEO's Definition of Digital Business …

"In your own words what do you mean when you think about 'digital business' in the context of your business and industry?"

n = 388

5% "not applicable" responses
"In your own words what do you mean when you think about 'digital business' in the context of your business and industry?"
Digitalize
“Alexa, turn on the living room lamp”

Wink now works with Amazon Echo. Control your smart home just by asking.

wink + amazon echo
Digital Business Leads to New Digital Competition

Legacy Twin → Digital Twin → Already Digital

**Physical**
- Home
- Factory
- Utilities
- Cars
- Transportation
- Cities

**Healthcare**
- Health
- Hospital
- Fitness
- Insurance
- Stored Value
- Savings
- Credit
- Payments
- Loans
- Equities

**Financial**

Already Digital
- Social Networks
- Search
- Gaming
- Apps
- Digital Advertising
- Media

Digital Business Leads to New Digital Competition
This Is What Enterprises "Hope" Will Happen

Connected Thing  Plumbing  Apps & Software

**Auto**

![Automotive Example](arduino.png)

**Home**

![Home Automation Example](home.png)

**Health/Self**

![Healthcare Example](health.png)
What Enterprises (Should) Fear ...

Connected Thing  |  Plumbing  |  Apps & Software
---|---|---
Auto | ![Onyx](image), Covisint | ![OpenXL](image), APIs
Home | Arrayent, AllJoyn | Whirlpool, APIs
Health/Self | Validic, Stayfitthecare.com | UnitedHealthcare, APIs

Ecosystem Giants Win!

Hub/Aggregator  |  "Apps"
---|---
Apple CarPlay | Google Now & Nest
HomeKit, Nest | Apple Health, Google Fit, HealthKit, Microsoft Health
Amazon Echo Now Supports IFTTT Trigger Commands

Source: www.pcmag.com/article2/0,2817,2495553,00.asp
All Roads Lead To …

Platforms & Plumbing

Apps & Software

"Single Face to Customer"

Consumer & Employee

Products
Cars
Hospitals
Factories
Cities

Platforms & Plumbing

Fitbit
Azure IoT Suite
Xively
Axeda
Predix

IBM: Internet of Things
Covisint
OpenXC

2net
CISCO

Validic

Consumer & Employee

Apps & Software

Apple CarPlay
HomeKit
AllJoyn

Amazon
Google
Microsoft

Microsoft Health
HealthKit

HealthKit

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"The Walled Garden of Existing Ecosystems Is Unsustainable"

Source: Deutsche Bank, June 2015
1. "If you can't beat them, join them"
   Join With Digital Giants

2. "Become the ecosystem"
   Compete Against Digital Giants
1. "If you can't beat them, join them"
   Join With Digital Giants

2. "Become the ecosystem"
   Compete Against Digital Giants
"If You Can't Beat Them, Join Them"

General Motors MyLink

Pre-2016

Post-2016

Audi
Buick
Cadillac
Chevrolet
Citroën
Ferrari
Ford
GMC
Honda
Hyundai
Motor

Mercedes-Benz
Mitsubishi
Motors
Opel
Porsche
Peugeot
Seat
Škoda Auto
Suzuki Motor
Volkswagen
Volvo
Points to Consider When Aligning WITH Digital Giants

1. **Be clear about the business model** — even if no money is exchanged with digital ecosystem leaders:
   - e.g., you may get something for free (technology and access to customers), but you will give up some of the customer relationship and data.

2. **Join multiple ecosystems** — although not all:
   - go where your customers go (current and future). Pick the Top 2 ecosystems in your industry/geography.

3. **Set boundaries** for how far you will let the digital giants overlap your space:
   - e.g., currently GM MyLink only allows Apple CarPlay to handle phone and media functions. Will GM allow Apple to access telematics functions?
"If you can't beat them, join them"

Join With Digital Giants

"Become the ecosystem"

Compete Against Digital Giants
1. "If you can't beat them, join them"
   Join With Digital Giants

2. "Become the ecosystem"
   Compete Against Digital Giants
"Join Our Ecosystem and Benefit From Our Know-How"

Goldman Sachs to Give Out ‘Secret Sauce’ on Trading

New open source platform is an attempt by Goldman to bolster its technology bona fides

Source: www.wsj.com/articles/goldman-sachs-to-give-out-secret-sauce-on-trading-1439371800
Do You Have What It Takes to Be a Digital Ecosystem?

1. **Leverage your very strong brand** or captive audience to attract a critical mass of customers and ecosystem partners.

2. **Digitalize goods, services or value so that they can be aggregated, traded and shared.**

3. **Be a leader that enforces standards, quality and rules of engagement** in the ecosystem.

4. **Create a simple and consistent experience** that aggregates many disparate parts for customers.

5. **Create fertile ground for multisided markets.** Ecosystems employ more than supply-demand-style markets.
What competitive dynamics will exist in B2B, enterprise and industrial ecosystems?
### Three Major Roles Will Emerge in B2B Ecosystems

<table>
<thead>
<tr>
<th>Role</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver</td>
<td>&quot;We need to work together. I will lead the ecosystem&quot;</td>
</tr>
<tr>
<td>Partner</td>
<td>&quot;We need to work together. We will equally agree and contribute&quot;</td>
</tr>
<tr>
<td>Market Maker</td>
<td>&quot;We bring together sellers, buyers — and anyone who contributes for the win of all.&quot;</td>
</tr>
</tbody>
</table>
"We need to work together. I will lead the ecosystem."
“deep democracy”
Partners

"We need to work together. We will equally agree and contribute."
“get me home”

Air Traffic Control
Airspace Traffic

Airline
Luggage
Crew Aircraft

Aircraft Maker

Gate
Fuel
Runway Availability
Luggage Operations
Catering

Engine
Turbine Diagnostics
Market Maker

"We bring together sellers, buyers and anyone who contributes for the win of all."
“customers first, employees second, shareholders third”
Business
Forecast the emergence of ecosystems

Technology
Build the foundation for ecosystems
Forecast the Emergence of Ecosystems in Your Industry

Leaders and Roles
- Will there be a natural/clear leader?
- Will digital giants intervene in customer relationship?
- Does your industry need an orchestrator, middleman or equal partnership?

Business Models
- Is there fragmented supply and demand?
- What monetization models will exist?

Mergers and Acquisitions
- Techquisition — acquire an ecosystem?
“Laboratory of Dilemmas” multi-media installation by George Drivas.
Source: Pavilion of Greece at the 57th International Art Exhibition - La Biennale di Venezia 2017
Recommended Gartner Research

- **Building a Digital Business Technology Platform**
  Hung LeHong, Chris Howard and others, June 2016, G00297286

- **The Armed and Potent Digital Leader: How to Become a Digital Dragon**
  Jenny Beresford and Bard Papegaaij, May 2017, G00326381

- **Evolve the Digital Leadership Platform: How to Do an Agile IT Strategy Sprint**
  Jenny Beresford, February 2016, G00295756

- **Eight Dimensions of Business Ecosystems Enable the Digital Age**
  Betsy Burton, Marcus Blosch and Others (G00273589)

- **Willful Disruption: An Intent-Based Model for Analyzing Digital Disruption**
  David Mitchell Smith and Daryl C. Plummer (G00327543)

- **Platform Business Models That Adapt and Disrupt**
  Kristin Moyer, Mary Mesaglio and others (G00322502)
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Thank you