La coda lunga
basato su:

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differenziazione del prodotto e dimensioni di impresa
  - ieri

la distribuzione on-line consente di spingere ancora di più la differenziazione
  - oggi

con la produzione via stampa 3D e desktop fabrication si rimuovono anche i vincoli alla produzione di piccoli lotti
  - domani
Distribuzione on-line e coda lunga

- Una regolarità del commercio è la regola 20/80
  - Il 20% dei prodotti conta per l’80% del fatturato
  - Questo dipende dai vincoli alla struttura distributiva:
    - Spazio limitato sugli scaffali (o nei palinsesti televisivi, vd. Netflix)
    - Numero limitato di consumatori in ogni mercato locale
  - Non è conveniente tenere in stock articoli con un fatturato troppo basso

- La distribuzione on-line consente di superare questi limiti
  - Magazzini centralizzati con costi molto bassi (invece di affitti in centro storico …)
  - Aggregare consumatori dispersi
    - \(1 \text{ su } 1 \text{ milione}) \times 1 \text{ miliardo} = 1000\) consumatori

- Oltre (e forse più) che il prezzo basso, la distribuzione on-line consente di aumentare il benessere dei consumatori attraverso la varietà/differenziazione dei prodotti
Anatomia della coda lunga

**TOTAL INVENTORY**
* inventory in a typical store

<table>
<thead>
<tr>
<th>Store</th>
<th>Inventory Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhapsody</td>
<td>Music</td>
<td>735,000 songs</td>
</tr>
<tr>
<td>Wal-Mart</td>
<td>Music</td>
<td>39,000 songs*</td>
</tr>
<tr>
<td>Amazon</td>
<td>Books</td>
<td>2.3 mil books</td>
</tr>
<tr>
<td>Barnes &amp; Noble</td>
<td>Books</td>
<td>130,000 books*</td>
</tr>
<tr>
<td>Netflix</td>
<td>DVDs</td>
<td>25,000 DVDs</td>
</tr>
<tr>
<td>Blockbuster</td>
<td>DVDs</td>
<td>3,000 DVDs*</td>
</tr>
</tbody>
</table>

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**THE NEW GROWTH MARKET**

Obscure products you can't get anywhere but online

- product not available in offline retail stores
  (% total sales)

- Rhapsody: 22%
- Amazon: 25%
- Netflix: 20%

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**Average number of plays per month on Rhapsody**

- 6,100
- 2,000
- 1,000

**Songs available at both Wal-Mart and Rhapsody**

**Songs available only on Rhapsody**

**Titles ranked by popularity**
Anatomia della coda lunga

Internet channel, product sales are significantly more evenly distributed on the Internet than through the catalog. For the catalog channel, the top 20% of products generate just over 80% of the company's sales, nearly mirroring the widely used Pareto principle or so-called 80/20 rule, which generally holds that 20% of anything produces 80% of the results. However, at the company's Internet channel, the top 20% of products generate barely 70% of sales. Since the same products are available in both channels at this retailer, this shows that the demand-side drivers of the Long Tail phenomenon can operate independently of the supply-side drivers, such as virtual shelf space.

Second-Order Effects of the Long Tail

Powerful as these effects are, we predict that they will be amplified over time because of second-order, or positive feedback, effects for both consumers and producers. For producers, the Long Tail will change the kinds of products that are profitable. In a world where only products with mass-market appeal make it to store shelves, producers have strong incentives to focus on mass-market tastes, to the exclusion of niche audiences. Expanding the types of products that can be profitably sold by retailers may provide artists and other producers with incentives to create products to serve more varied tastes.

We may already be seeing examples of this phenomenon. As noted above, print-on-demand and other IT systems have significantly lowered the costs to produce books targeted at niche audiences. It is possible that these changes are driving an increase in the number of new books produced each year. R.R. Bowker, the official U.S. agency for assigning International Standard Book Numbers, has reported that the number of new titles has increased by 72% since 1995—most of the increase coming from small publishing houses and the self-publishing model. Sites like Lulu.com and CafePress.com have sprung up to serve this market by offering on-demand printing and promotional services for books produced by niche authors. Lulu.com says that it publishes 2,300 new books a month, mostly from authors who wouldn't otherwise have access to major publishing houses.

The music industry has seen a similar effect owing to changes in the cost to produce, market and distribute music. Niche bands can reportedly turn a profit with sales of 25,000 albums, compared to break-even points of 500,000 through major labels.

To understand what is causing the Long Tail phenomenon and how it affects the dynamics of the economy, consider these first- and second-order drivers on the supply (producers/retailers) and demand (consumers) side of the market.

### Anatomy of the Long Tail

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<thead>
<tr>
<th>Supply Side (Producers and Retailers)</th>
<th>Demand Side (Consumers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Order</td>
<td>Second Order</td>
</tr>
<tr>
<td>• Cost: Virtual shelf space, made-to-order production, electronic delivery</td>
<td>• Increased incentives to develop new products</td>
</tr>
<tr>
<td>• Benefit: Aggregation of consumers</td>
<td>• Restructuring of marketing strategies</td>
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<td>• Active: Powerful search tools, sampling tools</td>
<td>• New intermediaries and industry structures</td>
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<td>• Positive feedback within niches from consumer advisory tools and their users</td>
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</table>

The online marketplace has enabled consumers in many industries to locate, evaluate and purchase a far wider variety of products than they can via traditional brick-and-mortar channels. The following table provides a comparison of product variety between large online retailers and typical large brick-and-mortar stores:

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Number of Different Products Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large Online Retailer</td>
</tr>
<tr>
<td>Books</td>
<td>3,000,000</td>
</tr>
<tr>
<td>CDs</td>
<td>250,000</td>
</tr>
<tr>
<td>DVDs</td>
<td>18,000</td>
</tr>
<tr>
<td>Digital Cameras</td>
<td>213</td>
</tr>
<tr>
<td>Portable MP3 players</td>
<td>128</td>
</tr>
<tr>
<td>Flatbed scanners</td>
<td>171</td>
</tr>
</tbody>
</table>

MIT SLOAN MANAGEMENT REVIEW SUMMER 2006
La regola numero 1 per soddisfare i consumatori nella coda lunga è rendere tutto disponibile
- È più costoso valutare cosa proporre che metterlo in vendita
- Ma i consumatori devono essere in grado trovare la varietà di prodotto che desiderano
  - Strumenti di ricerca
    - attivi
      - Es. estratti di libri, filtri avanzati, …
    - passivi
      - Es. sistemi di referenze (‘Chi ha comprato questo ha comprato anche questo…’, ‘Prodotti simili’
    - Combinazioni dei due
      - Review dei prodotti, comunità online, blogs
  - Cataloghi che combinano hits e coda lunga
“IF YOU LIKE BRITNEY, YOU’LL LOVE...”

Just as lower prices can entice consumers down the Long Tail, recommendation engines drive them to obscure content they might not find otherwise.
Beyond bricks and mortar there are two main retail models — one that gets halfway down the Long Tail and another that goes all the way. The first is the familiar hybrid model of Amazon and Netflix, companies that sell physical goods online. Digital catalogs allow them to offer unlimited selection along with search, reviews, and recommendations, while the cost savings of massive warehouses and no walk-in customers greatly expands the number of products they can sell profitably.

Pushing this even further are pure digital services, such as iTunes, which offer the additional savings of delivering their digital goods online at virtually no marginal cost. Since an extra database entry and a few megabytes of storage on a server cost effectively nothing, these retailers have no economic reason not to carry everything available.

**THE BIT PLAYER ADVANTAGE**

- **PHYSICAL RETAILERS**: Profit threshold for physical stores (like Tower Records)
- **HYBRID RETAILERS**: Profit threshold for stores with no retail overhead (like Amazon.com)
- **PURE DIGITAL RETAILERS**: Profit threshold for stores with no physical goods (like Rhapsody)
Effetti di secondo ordine della coda lunga

- **Lato offerta**
  - Incentivi all’allargamento dell’offerta, con innovazione di prodotto

- **Lato domanda**
  - L’aumento della varietà spinge i consumatori ad approfondire/raffinare i propri gusti, scendendo sempre più lungo la coda lunga
  - Stimolo ai consumatori a diventare produttori di contenuti attraverso social networking
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  - **Benefit:** Aggregation of consumers

- **Second Order**
  - Increased incentives to develop new products
  - Restructuring of marketing strategies
  - New intermediaries and industry structures

**Demand Side (Consumers)**

- **First Order**
  - **Active:** Powerful search tools, sampling tools
  - **Passive:** Recommendation systems, advisers, dynamic Web-based storefronts
  - **Combination:** Customer reviews, online communities

- **Second Order**
  - Changes in consumer tastes and demand patterns as a result of exposure to new products
  - Positive feedback within niches from consumer advisory tools and their users
  - Cultural changes from access to more varied sources of information

The online marketplace has enabled consumers in many industries to locate, evaluate and purchase a far wider variety of products than they can via traditional brick-and-mortar channels.
La coda lunga ‘delle cose’

- La rivoluzione tecnologica dell’additive manufacturing e del desktop fabrication da ulteriore stimolo allo sfruttamento della coda lunga per prodotti non digitali
- I prodotti fisici possono essere acquistati solo se hanno abbastanza mercato per:
  1. rendere conveniente produrli
  2. per rendere conveniente distribuirli
  3. essere trovati dai consumatori
- Il Web aiuta
  - con 2 e 3
  - In parte con 1, perché se la distribuzione consente di servire nicchie trasversali, più prodotti raggiungono la soglia minima di volumi perché sia conveniente produrli
- Ma le nuove tecnologie riducono drasticamente la dimensione del mercato necessaria (al limite anche un solo consumatore)
  - Coda lunga dell’offerta
  - Da one-size-fits-all a one-size-fits-one/few (mercati di massa per prodotti di nicchia)