



Siate dono
nel mondo

Dove ci conduce la rivoluzione tecnologica?

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26 aprile 2016

Rotary Club Gemona Friuli Collinare

Innovazione

L'Innovazione è la dimensione applicativa di un'invenzione o di una scoperta. L'innovazione riguarda un processo o un prodotto che garantisce risultati o benefici maggiori apportando quindi un progresso sociale, anche se a volte non sempre efficace e migliorativo rispetto a ciò che va ad innovare. Il cambiamento che porta invece un peggioramento delle condizioni sociali non è innovazione, ma regresso

<https://it.wikipedia.org/wiki/Innovazione>

Evoluzione Tecnologica

- Evoluzione tecnologica è il termine della seconda metà del XX secolo che indica la teoria degli studi su scienza e tecnologia sviluppata dal filosofo ceco Radovan Richta, volta a descrivere il processo dello sviluppo tecnologico.
- Secondo Richta e successivamente Masse Bloomfield, la tecnologia (che Richta definisce come un'«entità materiale creata dall'applicazione di sforzo mentale e fisico alla natura al fine di ottenere un certo valore») evolve in tre stadi: strumenti, macchine, automazione. Questa evoluzione, afferma, segue due tendenze: sviluppo e implicazioni teoriche.

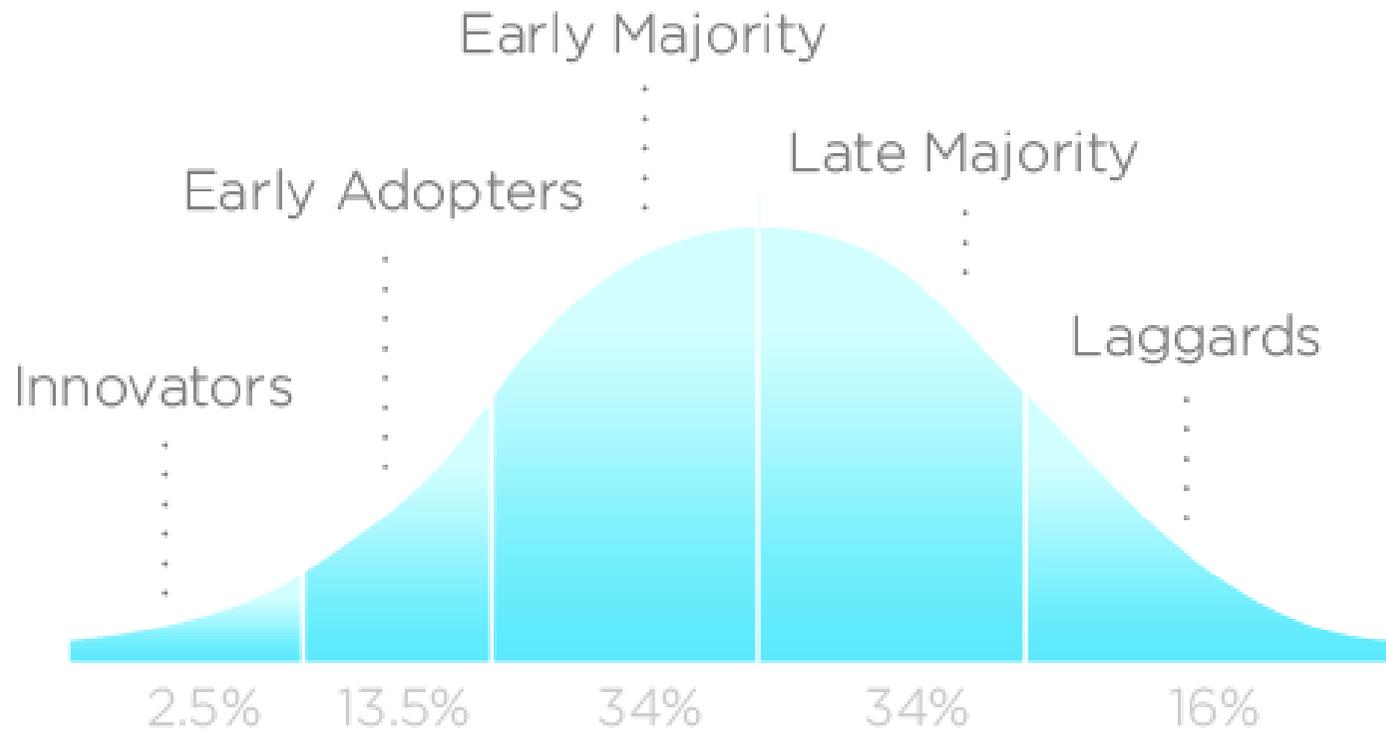
https://it.wikipedia.org/wiki/Evoluzione_tecnologica

Technology Adoption Life Cycle

- Il grafico (nella slide seguente) riassume le categorie:
- **innovatori** – posseggono aziende più grandi, sono più istruiti, più ricchi e più orientati al rischio
- **early adopters** - più giovani, più istruiti, tendono ad essere leader di comunità, meno abbienti degli innovatori
- **early majority** - più conservatori, ma aperti a nuove idee, attivi nella comunità ed hanno influenza su coloro che frequentano
- **late majority** - più anziani, meno istruiti, piuttosto conservatori e meno socialmente attivi
- **Laggards** - molto conservatori, posseggono piccole aziende e poco capitale, più anziani e meno istruiti

https://en.wikipedia.org/wiki/Technology_adoption_life_cycle

Technology Adoption Life Cycle



INNOVATION ADOPTION LIFECYCLE

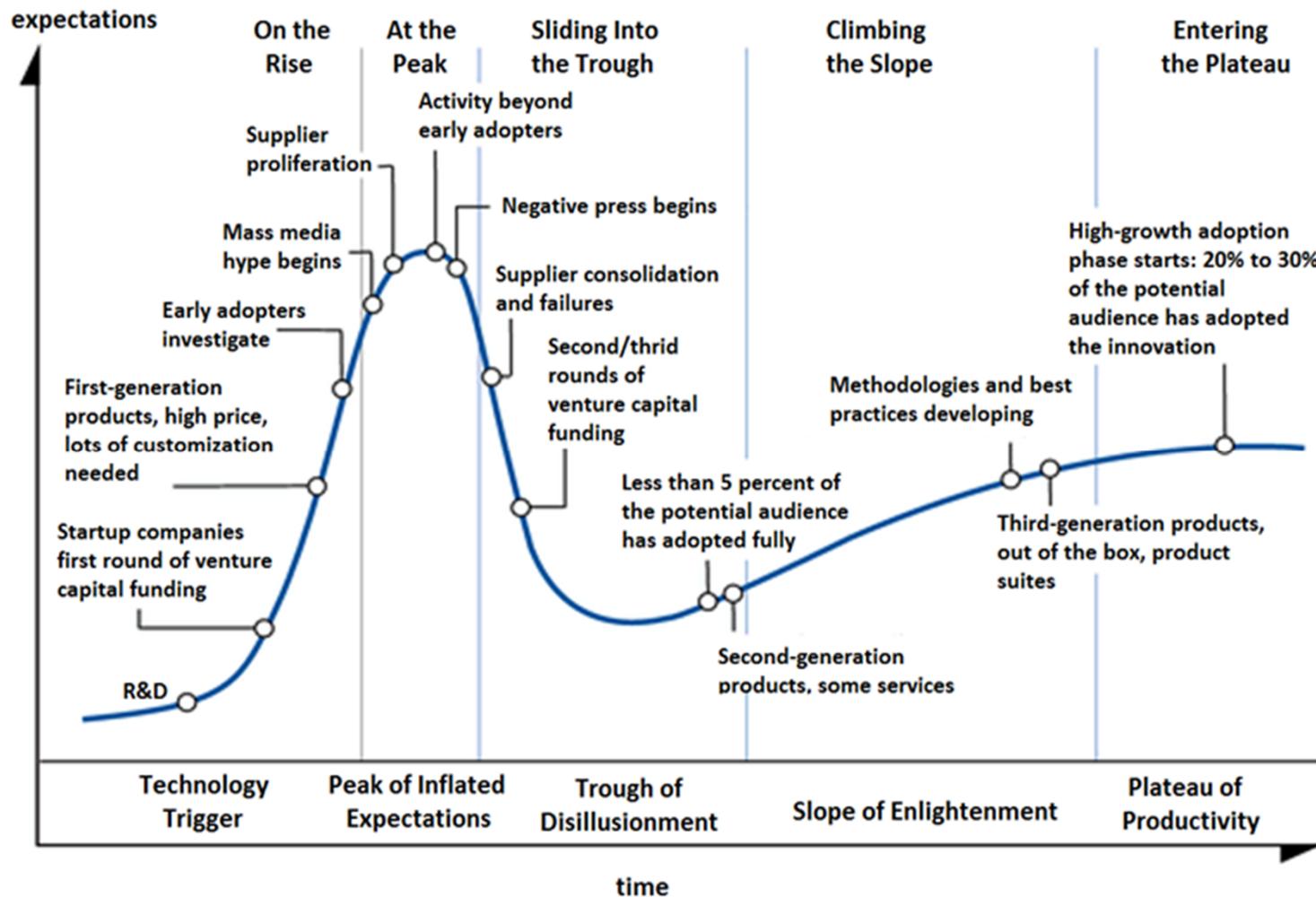
https://en.wikipedia.org/wiki/Technology_adoption_life_cycle

Hype Cycle

- Il modello Hype Cycle (lett. ciclo dell'esagerazione) è una metodologia sviluppata da Gartner, società di consulenza, ricerca e analisi nel campo dell'Information Technology, per rappresentare graficamente la maturità, l'adozione e l'applicazione di specifiche tecnologie.
- L'Hype Cycle di Gartner è articolato in cinque fondamentali fasi del ciclo di vita di una tecnologia.

https://en.wikipedia.org/wiki/Hype_cycle

Hype Cycle



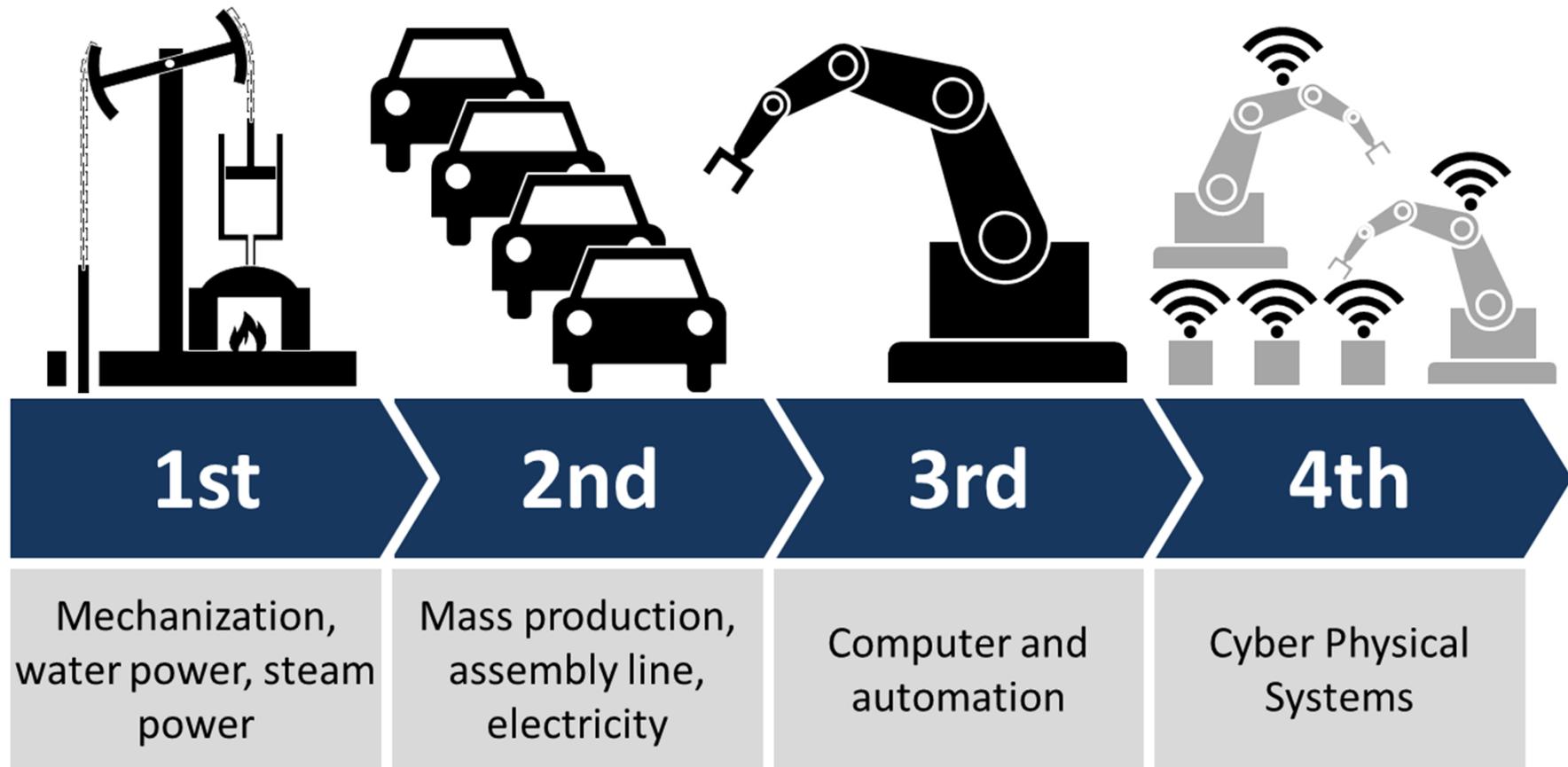
https://en.wikipedia.org/wiki/Hype_cycle

4th Industrial Revolution

- Industry 4.0, Industrie 4.0 o la quarta rivoluzione industriale , è un termine collettivo che comprende l'automazione contemporanea, lo scambio di dati e le tecnologie di produzione. Era stato definito come «un termine collettivo per tecnologie e concetti» quali i Sistemi Cyber-fisici, l'Internet delle cose e l'Internet di servizi .

https://en.wikipedia.org/wiki/Industry_4.0

4th Industrial Revolution



https://en.wikipedia.org/wiki/Industry_4.0

World Economic Forum 2016

Mastering Hypergrowth



Published

Thursday 28 April 2016

Download PDF



Report Reader



Share



Mastering Hypergrowth (In Collaboration with EY)

The Fourth Industrial Revolution is creating enterprise opportunities at a staggering rate. The impact of technology on global business has opened the door to business model innovation, redistribution of talent, new forms of stakeholder management and massive market expansion.

<https://www.weforum.org/events/world-economic-forum-annualmeeting-2016>

<https://www.weforum.org/reports/mastering-hypergrowth>

La Quarta Rivoluzione Industriale



<http://it.euronews.com/2016/01/20/a-davos-i-vantaggi-e-i-rischi-della-quarta-rivoluzione-industriale/>

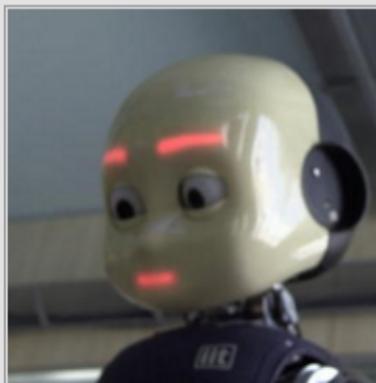
Rivoluzione 4.0

Trasmissione Report del 25/10/2015

RIVOLUZIONE 4.0

Di Michele Buono - **Economia**

MI place Piace a 148 persone. Di' che ti piace prima di tutti i tuoi amici.      ShareThis



Collaborazione di Andrea De Marco e Filippo Proietti

[English version below](#)

Industria 4.0 è la quarta rivoluzione industriale, quella dell'interconnessione e dei sistemi intelligenti: la fabbrica che fa dialogare i macchinari, gli uomini, e i prodotti. Sistemi di fabbriche collegate in rete che creano un unico processo produttivo.

Si razionalizza così la produzione. Si può personalizzare un prodotto, produrre in modo flessibile seguendo la domanda, senza più eccessi, magazzini pieni e invenduto: cioè l'anticamera della crisi.

Si sa che la crescita, i cambiamenti globali, hanno sempre ruotato intorno alle grandi innovazioni. e spaventano. In questo momento siamo ancora sull'onda lunga delle innovazioni

<http://www.report.rai.it/dl/Report/puntata/ContentItem-99470f20-8984-429a-a6c7-b3d27fa42e3a.html>

Gartner Group Hype Cycle for Emerging Technologies 2015

Figure 1. Hype Cycle for Emerging Technologies, 2015



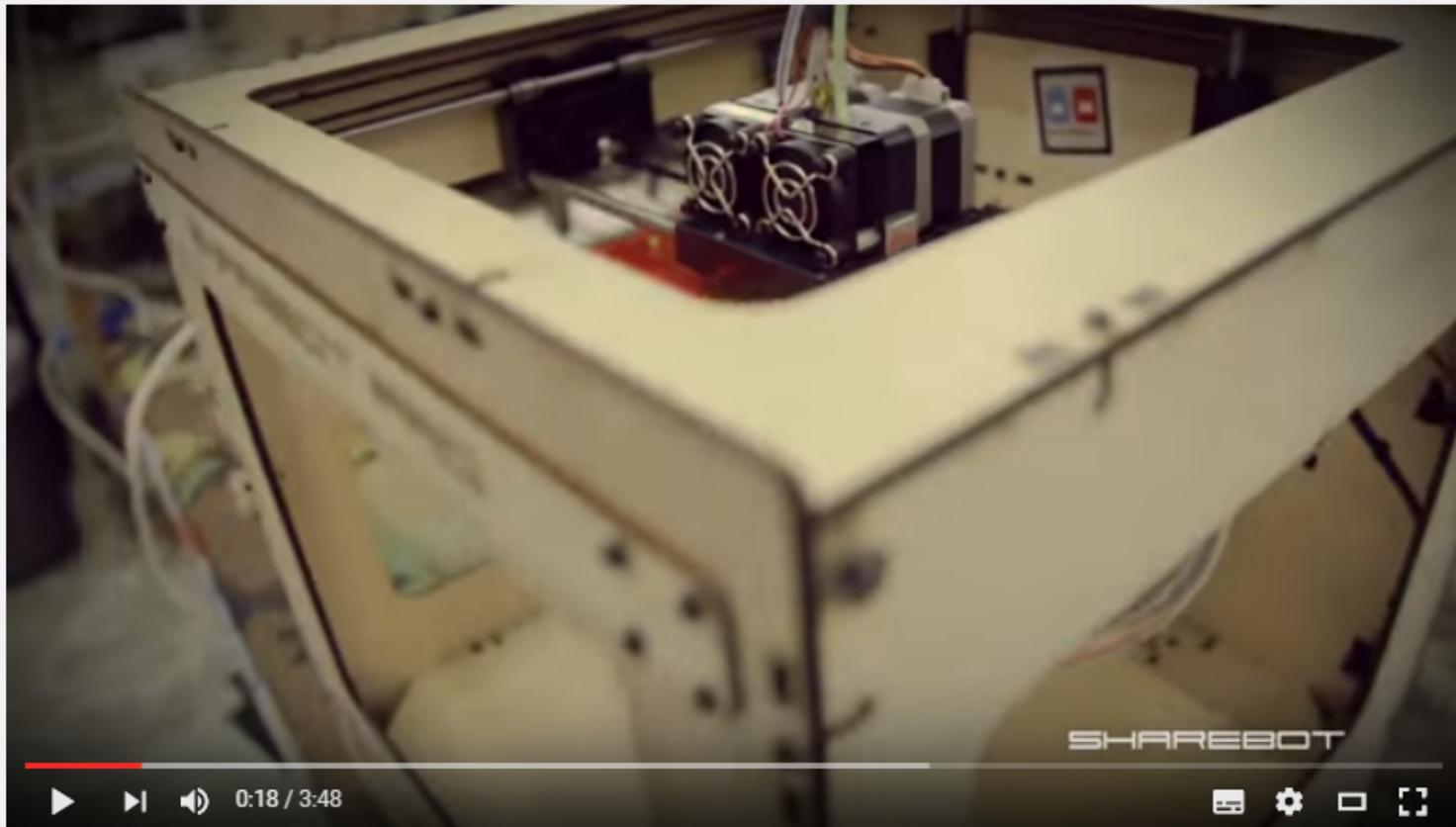
Source: Gartner (August 2015)

<http://www.gartner.com/newsroom/id/3114217>

3D PRINTING

Sharebot

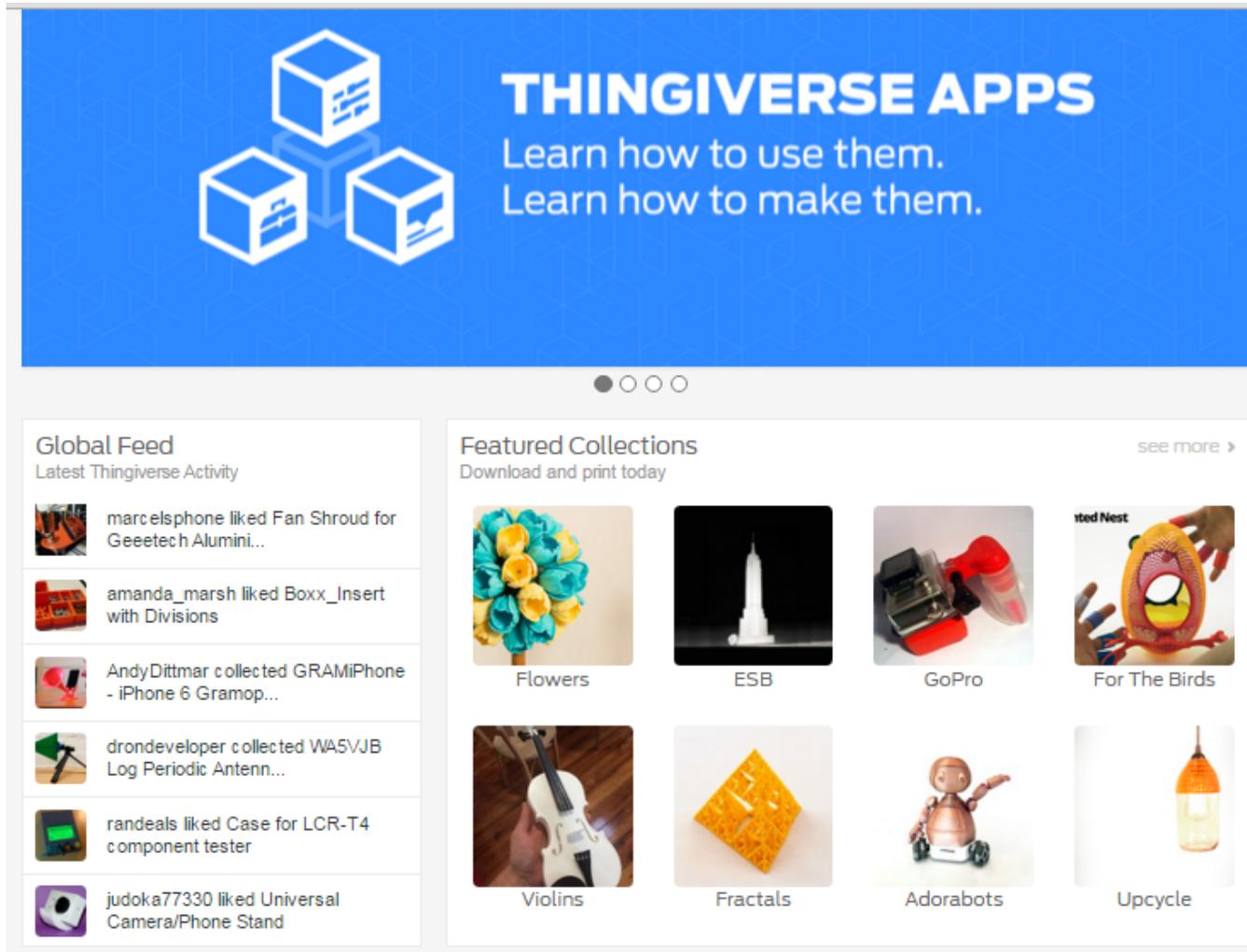
☰ YouTube IT



Sharebot Pro, la Stampante 3D italiana

<https://www.youtube.com/watch?v=JfKb5F8cJFo>

MakerBot Thingiverse



The screenshot shows the MakerBot Thingiverse website interface. At the top, there is a blue banner with the text "THINGIVERSE APPS" and the subtext "Learn how to use them. Learn how to make them." Below the banner, there are two main sections: "Global Feed" and "Featured Collections".

Global Feed
Latest Thingiverse Activity

- marcelsphone liked Fan Shroud for Geeetech Alumi...
- amanda_marshall liked Boxx_Insert with Divisions
- AndyDittmar collected GRAMiPhone - iPhone 6 Gramop...
- drondeveloper collected WA5VJB Log Periodic Antenn...
- randeals liked Case for LCR-T4 component tester
- judoka77330 liked Universal Camera/Phone Stand

Featured Collections
Download and print today

- Flowers
- ESB
- GoPro
- For The Birds
- Violins
- Fractals
- Adorabots
- Upcycle

<http://www.thingiverse.com/>

Airbus 3D Printing



The video player shows a close-up of a grey, 3D printed metal part mounted on a yellow wall. The part has the LZM logo and the text 'EINFAHRT' and 'Am Schlussungabau 1d'. The video player interface includes a search bar, a play button, a progress bar showing 0:11 / 4:59, and various control icons.

Airbus 3D Printing technology transformation underway

Airbus   155.689

41.662

<https://www.youtube.com/watch?v=Cy3V3KR1LWc>

WASP

☰ YouTube IT

stress



Caratteristiche della stampante

Tecnologie:
estrusore per calcestruzzo

Area di stampa cilindrica:
Ø1500 mm - h 1500 mm

Altezza massima di stampa:
1500 mm

Massima dimensione raggiungibile:
triangolo di base 150 cm

Diametro ugello:
25 mm/ugello intercambiabile

Risoluzione layer:
1 mm < 1.5 mm

Precisione assi:
X,Y 1.0 mm
Z 1.5mm

Velocità massima: 20 mm/s

Materiali utilizzabili:
calcestruzzo
malte cementizie
fibre PP

0:16 / 2:07

STRESS - STAMPA 3D - per materiali da costruzione

str Stress Scarl

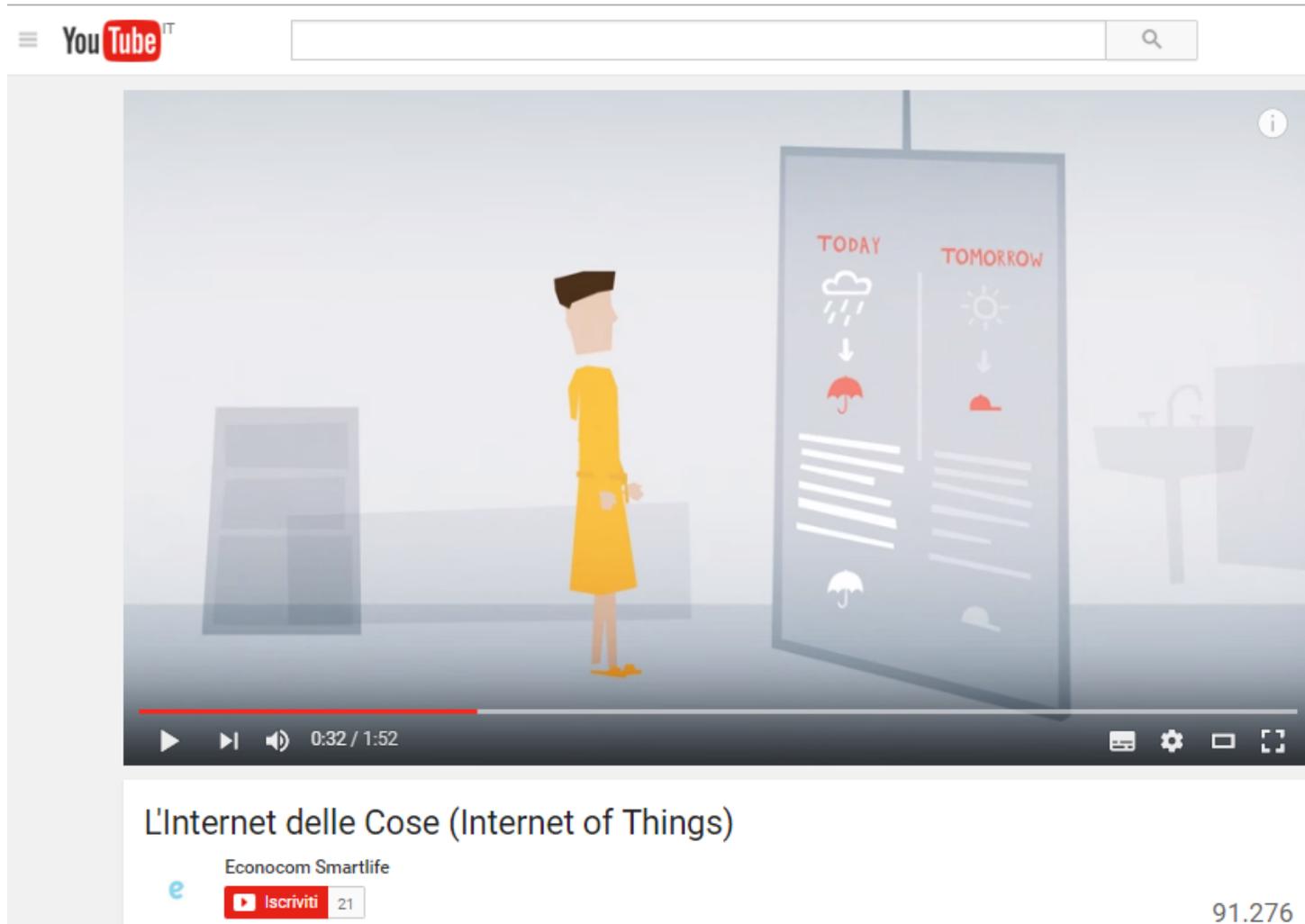
Iscriviti 55

44.787

<https://www.youtube.com/watch?v=TkQUJOmF2Cg>

IOT (INTERNET OF THINGS)

Econocom



The image shows a YouTube video player interface. At the top, there is the YouTube logo and a search bar. The video content depicts a woman in a yellow dress standing in a smart home environment. A large, semi-transparent digital display in the center shows weather forecasts for 'TODAY' and 'TOMORROW'. The 'TODAY' forecast shows a cloudy day with rain, indicated by a cloud with raindrops and a red umbrella icon. The 'TOMORROW' forecast shows a sunny day, indicated by a sun icon and a red hat icon. Below the weather icons are several horizontal lines representing text. The video player controls at the bottom show a progress bar at 0:32 / 1:52, along with play, volume, and other standard controls. Below the video player, the video title 'L'Internet delle Cose (Internet of Things)' is displayed, followed by the channel name 'Econocom Smartlife', a red 'Iscriviti' button with '21' subscribers, and a view count of '91.276'.

<https://www.youtube.com/watch?v=ukpDC0wxy7Y>

Smart Living



Life Simplified with Connected Devices



Kelly Flanagan



55.722

<https://www.youtube.com/watch?v=NjYTzvAVozo&list=PLI-15sUN2G4eEY2VOqxMEazASNrIMF5FP>

Philips HUE



The image shows a screenshot of a YouTube video player. At the top left, the YouTube logo is visible. A search bar is located at the top center. The video frame shows a person's hands holding a smartphone, with the Philips logo in the top right corner. The video title is "Philips Hue - Accendi la tua tranquillità". The channel name is "PhilipsLighting" with a subscriber count of 10,741. The video has 58 views. The video player controls at the bottom show a progress bar at 0:30 / 0:50, along with play, volume, and full screen icons.

gestisci l'illuminazione anche quando sei fuori casa

PHILIPS

hue

Philips Hue - Accendi la tua tranquillità

PhilipsLighting

10.741

58 visualizzazioni

<https://www.youtube.com/watch?v=QMGMitjMxgl>

HAPI Fork



The image shows a YouTube video player interface. At the top left is the YouTube logo. A search bar is located at the top right. The main video area displays a white HAPI Fork against a light blue background. Two labels with leader lines point to specific features: 'Vibration alerts' points to the upper handle section, and 'LED indicators' points to a small red light at the bottom of the handle. Below the video is a playback control bar showing a progress bar at 1:00 / 2:15 and various control icons. Underneath the video, the title 'Hapifork, Eat Slowly - Lose Weight - Feel Great' is displayed. To the left of the title is the channel name 'Hapilabs' with a profile picture of a Santa Claus. A red 'Iscriviti' button with '156' subscribers is next to the channel name. On the right side, the view count '84.050' is shown.

<https://www.youtube.com/watch?v=boM3EAuz-oU>

Smart Egg Tray



The video player shows a person's hands pointing to a white, rectangular egg tray with several white eggs inside. The tray is placed on a countertop next to a glass bowl. The video player interface includes a search bar at the top, a play button, a progress bar showing 0:28 / 0:56, and a volume icon. Below the video, the title "Introducing Egg Minder by Quirky" is displayed, along with the Quirky logo and a red "Iscriviti" button. The view count "34.944" is shown in the bottom right corner.

Introducing Egg Minder by Quirky

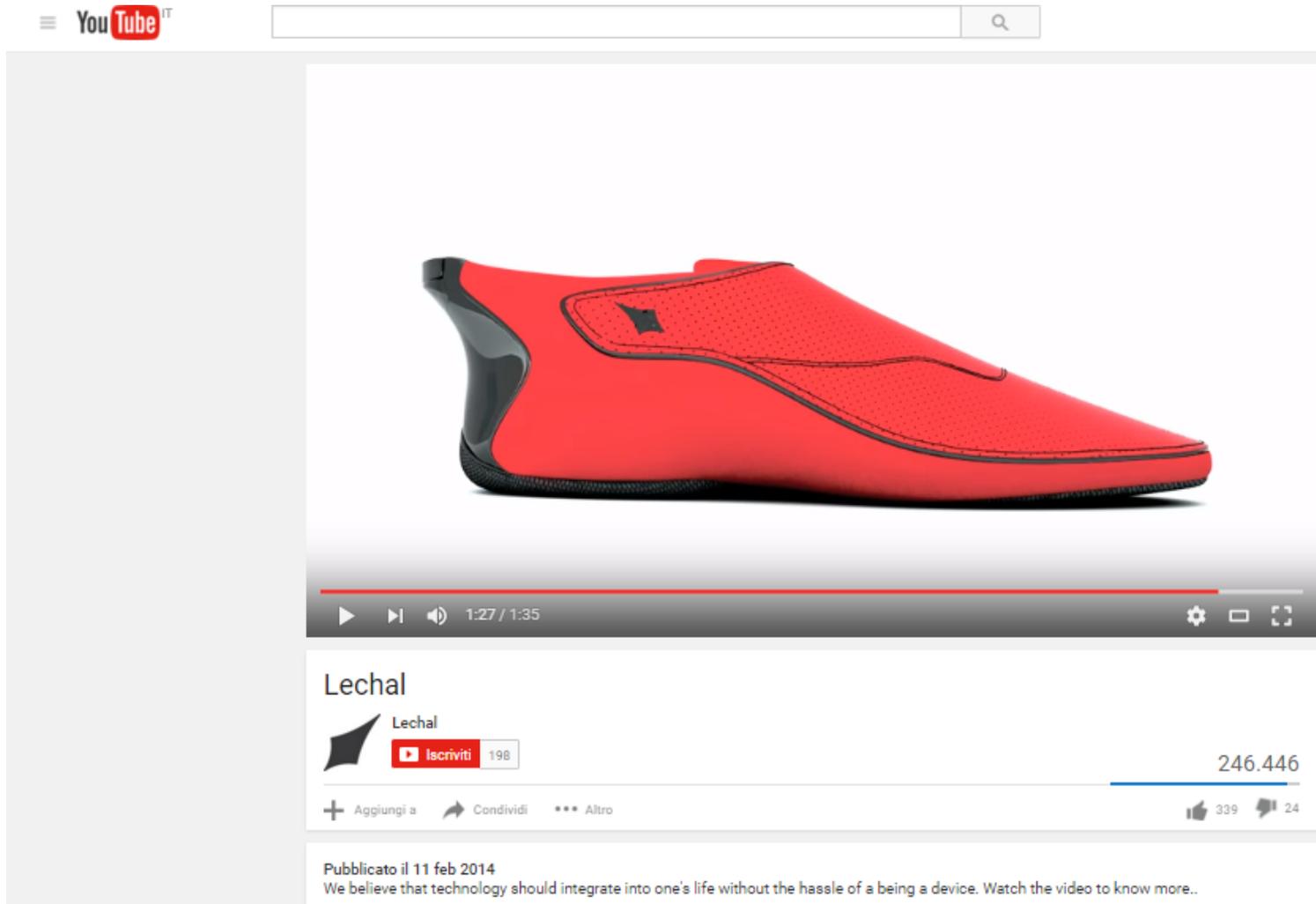
Quirky

Iscriviti

34.944

https://www.youtube.com/watch?v=_9tVckcCz-c

Lechal Smart Shoes



The image shows a YouTube video player interface. At the top left is the YouTube logo. A search bar is located at the top right. The main video frame displays a side view of a red, slip-on smart shoe with a black sole and a small black logo on the side. Below the video frame is a playback control bar showing a progress indicator at 1:27 / 1:35. Underneath the video is the channel name 'Lechal' with a profile picture, a 'iscriviti' button with '198' subscribers, and a view count of '246.446'. Below this are icons for 'Aggiungi a', 'Condividi', and 'Altro', along with like and comment counts of '339' and '24' respectively. At the bottom, it says 'Pubblicato il 11 feb 2014' and a short description: 'We believe that technology should integrate into one's life without the hassle of a being a device. Watch the video to know more..'

<https://www.youtube.com/watch?v=ucK6jhdRIUY#t=50.706314>

AUTONOMOUS VEHICLE

Google Car



A First Drive

Google Self-Driving Car Project

47.315

10.400.316

49.322 3.151

Publicato il 27 mag 2014

Fully autonomous driving has always been the goal of our project, because we think this could improve road safety and help lots of people who can't drive. We're now developing prototypes of vehicles that have been designed from the ground up to drive themselves—just push a button and they'll take you where you want to go! We'll use these vehicles to test our software and learn what it will really take to bring this technology

<https://www.youtube.com/watch?v=CqSDWoAhvLU>

Daimler Benz



The video player shows a futuristic Mercedes-Benz truck at night. The truck's front grille is illuminated with a glowing green pattern, and the Mercedes-Benz logo is visible in the center. The truck is positioned in a dark environment, possibly a tunnel or a night setting. The video player interface includes a search bar at the top, a play button, a progress bar showing 0:06 / 3:36, and a 'SUBSCRIBE NOW' button in the bottom right corner of the video frame.

► Mercedes Future Truck 2025 (Autonomous Driving Demo)

YouCar   

3.711.967

+ Aggiungi a  Condividi  Altro  9.315  766

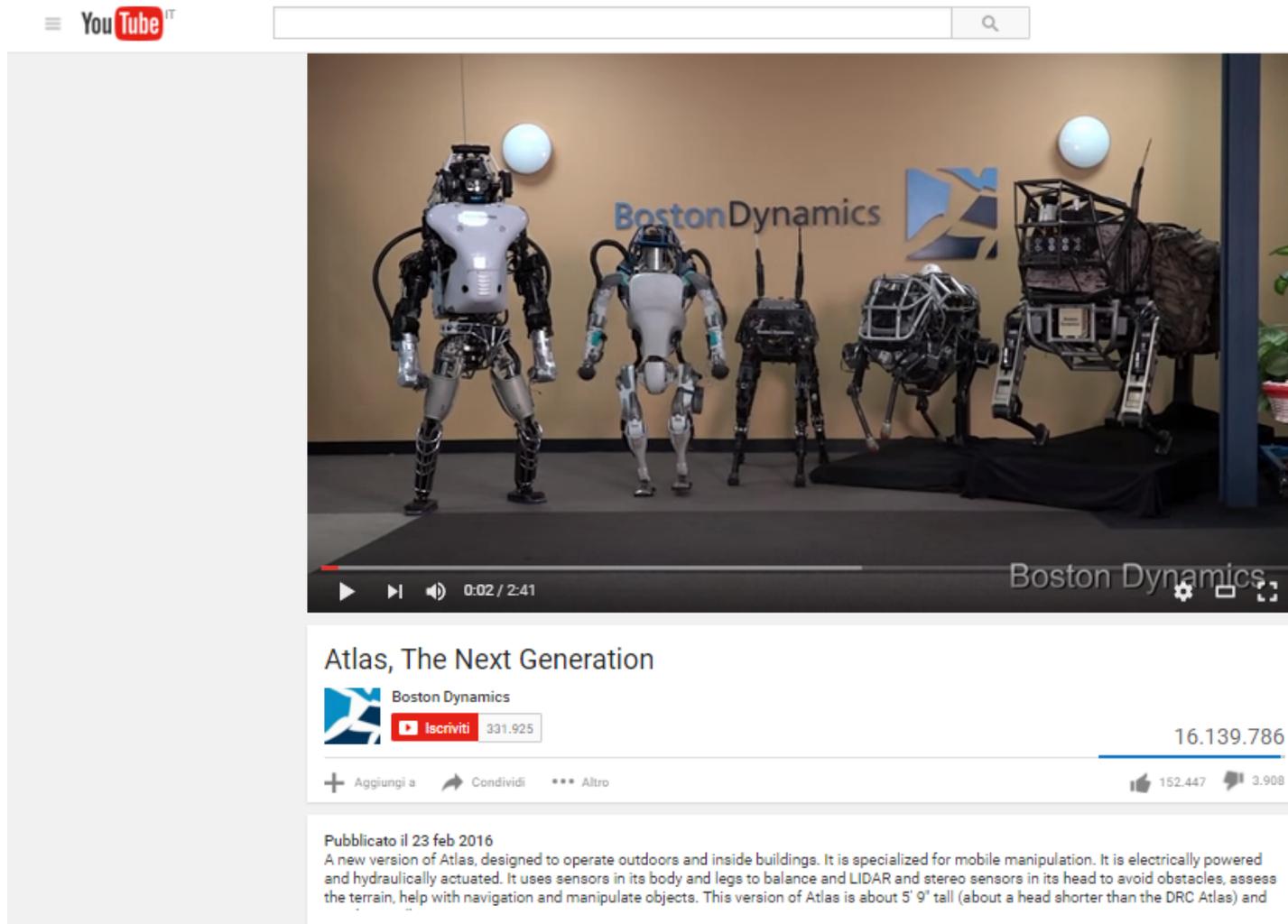
Publicato il 23 set 2014

The Mercedes-Benz Future Truck 2025 constitutes a revolution in efficiency, safety and networking, a revolution for road traffic and its infrastructure, for professional driving and for the road transport sector. This is not a new truck, but rather the key element in the interconnected transport system of the future. It is being developed as part of the "Shaping Future Transportation" initiative by Daimler Trucks to conserve

<https://www.youtube.com/watch?v=R1e9gSRBQTk>

ROBOTICS

Boston Dynamics



The image shows a screenshot of a YouTube video player. At the top, the YouTube logo is visible on the left, and a search bar is on the right. The video frame displays five robots from Boston Dynamics: two humanoid Atlas robots, a quadruped Spot robot, a quadruped BigDog robot, and a quadruped LSIII robot. The background features the Boston Dynamics logo and name on a wall. Below the video frame, the title "Atlas, The Next Generation" is displayed. The channel name "Boston Dynamics" is shown with a subscriber count of 331,925. The video has 16,139,786 views, 152,447 likes, and 3,908 dislikes. The video was published on February 23, 2016. The description below the video reads: "A new version of Atlas, designed to operate outdoors and inside buildings. It is specialized for mobile manipulation. It is electrically powered and hydraulically actuated. It uses sensors in its body and legs to balance and LIDAR and stereo sensors in its head to avoid obstacles, assess the terrain, help with navigation and manipulate objects. This version of Atlas is about 5' 9" tall (about a head shorter than the DRC Atlas) and

<https://www.youtube.com/watch?v=rVIhMGQgDkY>

Le 3 Leggi della Robotica



The image shows a screenshot of a YouTube video player. The video is titled "Isaac Asimov enuncia le Tre Leggi Della Robotica" and is uploaded by the channel "Andrea Cabassi". The video player shows a man with glasses, presumably Isaac Asimov, speaking. The video progress bar indicates it is at 0:20 out of 0:45. Below the video player, the video title is repeated, followed by the channel name "Andrea Cabassi" and a red "Iscriviti" button with "21" subscribers. To the right, it says "575 visualizzazioni". Below this, there are icons for "Aggiungi a", "Condividi", and "Altro", along with a thumbs up icon showing "7" likes and a thumbs down icon showing "0" dislikes. At the bottom, the publication date is "Pubblicato il 25 apr 2014" and the URL is "http://www.ryo.it/". Below the URL, the three laws of robotics are listed:

- Prima Legge: un robot non può recar danno a un essere umano né può permettere che, a causa del proprio mancato intervento, un essere umano riceva danno
- Seconda Legge: un robot deve obbedire agli ordini impartiti dagli esseri umani, purché tali ordini non contravvengano alla Prima Legge
- Terza Legge: un robot deve proteggere la propria esistenza, purché questa autodifesa non contrasti con la Prima o con la Seconda Legge

<https://www.youtube.com/watch?v=mYJGnaQPifw>

Dove ci conduce la rivoluzione tecnologica?

- Introduzione
- Innovazione (<https://it.wikipedia.org/wiki/Innovazione>)
- Evoluzione Tecnologica (https://it.wikipedia.org/wiki/Evoluzione_tecnologica)
- Technology Adoption Life Cycle (https://en.wikipedia.org/wiki/Technology_adoption_life_cycle)
- Hype Cycle (https://en.wikipedia.org/wiki/Hype_cycle)
- 4th Industrial Revolution (https://en.wikipedia.org/wiki/Industry_4.0)
- World Economic Forum 2016 (<https://www.weforum.org/events/world-economic-forum-annualmeeting-2016>)
- La Quarta Rivoluzione Industriale (<http://it.euronews.com/2016/01/20/a-davos-i-vantaggi-e-i-rischi-della-quarta-rivoluzione-industriale/>)
- Rivoluzione 4.0 – Trasmissione Report del 25/10/2015 (<http://www.report.rai.it/dl/Report/puntata/ContentItem-99470f20-8984-429a-a6c7-b3d27fa42e3a.html>)
- Gartner Group Hype Cycle for Emerging Technologies 2015 (<http://www.gartner.com/newsroom/id/3114217>)
- 3D Printing:
 - - ShareBot (<https://www.youtube.com/watch?v=JfKb5F8cJFo>)
 - - MakerBot Thingiverse (<http://www.thingiverse.com/>)
 - - Airbus 3D Printing (<https://www.youtube.com/watch?v=Cy3V3KR1LWc>)
 - - WASP (<https://www.youtube.com/watch?v=TkQUJOMf2Cg>)
- IoT (Internet of Things):
 - - Econocom (<https://www.youtube.com/watch?v=ukpDC0wxy7Y>)
 - - Smart Living (<https://www.youtube.com/watch?v=NjYTzvAVozo&list=PLI-15sUN2G4eEY2VOqxMEazASNrIMF5FP>)
 - - Philips HUE (<https://www.youtube.com/watch?v=QMGMitjMxgl>)
 - - HAPI Fork (<https://www.youtube.com/watch?v=boM3EAuz-oU>)
 - - Smart Egg Tray (https://www.youtube.com/watch?v=_9tVckcCz-c)
 - Lechal Smart Shoes (<https://www.youtube.com/watch?v=ucK6jhdRIUY#t=50.706314>)
- Autonomous Vehicle:
 - - Google Car (<https://www.youtube.com/watch?v=CqSDWoAhvLU>)
 - - Daimler Benz (<https://www.youtube.com/watch?v=Rle9gSRBQTK>)
- Robotics:
 - - Boston Dynamics (<https://www.youtube.com/watch?v=rVlhMGQgDkY>)
 - - Le 3 Leggi della Robotica (<https://www.youtube.com/watch?v=mYJGnaQPfw>)
- Conclusione