



GIGAWorld to unlock wave of innovation worth at least €250 billion per year in Europe by 2025

- In-depth report from Arthur D. Little estimates market could be worth at least €1.3 trillion per year globally by 2025
- New technologies enabled by GIGAWorld predicted to improve lives, boost economy and revolutionize businesses
- Three families of apps will be central to the GIGAWorld: Augmented Discovery, Virtual Telepresence and Automated Living

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New research from leading consultancy Arthur D. Little (“ADL”) estimates that the GIGAWorld – the world enabled by widespread access to high quality, gigabit internet in which people, machines and the environment collaborate intelligently – could generate billions of Euros for the European economy, and trillions globally.

The report, commissioned by Liberty Global, offers a tantalising glimpse into the future, outlining the exciting possibilities that will arise with the emergence of a GIGAWorld, including robot-assisted remote tele-surgery, 3D holographic projections of sports events and skyscraper windows maintained by drone-robots.

However, the research notes that the success of the GIGAWorld “will depend on the room its innovation cycle will be given to function, to allow new innovative applications and devices to be developed, networks to be upgraded to GIGANetworks and new monetization models to be adopted.” A key factor will be the “predictability and clarity of the public policy framework to stimulate all actors to invest in the GIGAWorld and to experiment with new business models.”

ADL estimates that, under the right circumstances, the GIGAWorld innovation cycle will unlock a market of at least €250 billion and up to €660 billion per year by 2025 in Europe. At the global level, the value is expected to be €1.3-3.5 trillion per year.

According to ADL, the market will be unlocked by three major families of “GIGAapps” that will maximize the opportunities that a GIGAWorld presents.

- Augmented Discovery is the advanced understanding of, and interaction with, an environment through a blend of digital content with the physical world, e.g. the broadcasting of holographic sports events or an augmented teaching session. By 2025, Augmented Discovery is expected to generate revenues estimated at between €80 and 175 billion per year in Europe.
- Virtual Telepresence focuses on overcoming physical or geographic boundaries or immersive presence in artificial environments, for example, a seamless retail experience or virtual social interaction. By 2025, Virtual Telepresence is estimated to create revenues of €20 - 60 billion per year in Europe.



- Automated Living is the delegation of human decision-making and task execution to technology and appliances, e.g. agriculture supervision by drones or patient health tele-monitoring. By 2025, this market in Europe is estimated to reach €150 - 425 billion of revenue per year.

Usage and smooth functioning of these apps will rely on the quality of networks, which will need to provide key service features such as high bandwidth, low latency, high reliability, high security, high resilience, widespread coverage and position accuracy (the ability to determine via the network the device's positioning in three-dimensional space).

ADL notes that the GIGAapps will affect most economic sectors: Industrial, Smart Home & Entertainment, Healthcare, Travel & Tourism, Public Planning & Administration, Education & Training, Retail & Commerce, Energy & Utilities.

Commenting on the report, Liberty Global SVP and Chief Corporate Affairs Officer Manuel Kohnstamm said: "This report clearly highlights the massive economic benefits and technological advancements that await us if we embrace GIGAWorld. Networks are an essential foundation of such an exciting future, and Liberty Global's investments, expansions and upgrades are making it possible. Society will benefit if businesses and governments and regulators collaborate to help drive the next innovation cycle, enable the use of GIGAapps and unlock new value."

Gregory Pankert, Partner, Arthur D. Little, said: "After 30 years of the Internet, we are entering a new era. The third industrial revolution leveraged the development of electronics, IT and automated production. The ongoing fourth industrial revolution is driven by cyber-physical systems and fueling a wave of technological innovation that fundamentally alters the nature of digital applications. It will be essential for regulators to ensure the innovation cycle functions well, iterates and creates value."

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding our networks and expectations with respect to innovation and the impact on markets and other information and statements that are not historical fact. These forward-looking statements involve certain risks and uncertainties that could cause actual results to differ materially from those expressed or implied by these statements. These risks and uncertainties include factors detailed from time to time in our filings with the Securities and Exchange Commission including the most recently filed Forms 10-K, as amended, and 10-Q. These forward-looking statements speak only as of the date of this release. We expressly disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statement contained herein to reflect any change in our expectations with regard thereto or any change in event, conditions or circumstances on which any such statement is based.

About Liberty Global

Liberty Global is the world's largest international TV and broadband company, with operations in more than 30 countries across Europe, Latin America and the Caribbean. We invest in the infrastructure that empowers our customers to make the most of the digital revolution. Our scale and commitment to innovation enable us to develop market-leading products delivered through next-generation networks that connect our 25 million customers who subscribe to 51 million television, broadband internet and telephony services. We also serve over 10 million mobile subscribers and offer WiFi service across 10 million access points.

Press Release



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Liberty Global's businesses are comprised of two stocks: the Liberty Global Group (NASDAQ: LBTYA, LBTYB and LBTYK) for our European operations, and the LiLAC Group (NASDAQ: LILA and LILAK, OTC Link: LILAB), which consists of our operations in Latin America and the Caribbean. The Liberty Global Group operates in 12 European countries under the consumer brands Virgin Media, Unitymedia, Telenet and UPC.

The Liberty Global Group also owns 50% of VodafoneZiggo, a Dutch joint venture, which has 4 million customers, 10 million fixed-line subscribers and 5 million mobile subscribers. The LiLAC Group operates in over 20 countries in Latin America and the Caribbean under the consumer brands VTR, Flow, Liberty, Más Móvil and BTC. In addition, the LiLAC Group operates a sub-sea fiber network throughout the region connecting over 40 markets.

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