

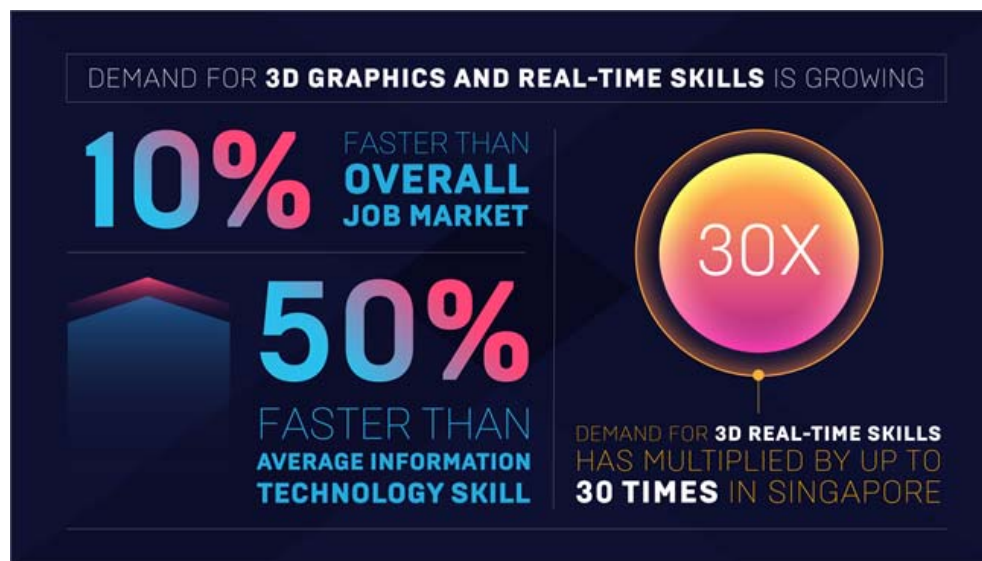
Real-Time Skills Wanted, Report Shows

The rapid adoption of real-time 3D technologies is redefining industries from film and TV production, to product design and manufacturing, to architectural visualization, to training and simulation, and beyond. As a result, the high demand for real-time 3D skills is making waves in job markets around the world.

Real-time 3D applies real-time rendering to 3D data, enabling the user to experience and explore a virtual world interactively, without the constraints of pre-rendered frames. With real-time rendering, frames are calculated and displayed in fractions of a second, allowing the scene to react almost instantly to changes in input. This level of interactivity is changing the ways in which both professionals and consumers create and interact with designs and concepts: surgeons are practicing critical techniques in VR; new car shoppers are configuring the ride of their dreams and seeing the results in an instant; broadcasters are using augmented reality to illustrate the dangers of hurricanes, floods, and wildfires to viewers at home.

The implications of real-time 3D technology on the labor market are significant. How and where do real-time skill proficiencies add value to the global market? How can the digital workers of the present world prepare for this software evolution? How can the employees in traditional industries prepare for the inevitable changes to their jobs from virtual reality?

A new report released from Epic Games and Burning Glass Technologies explores how 3D graphics and real-time 3D skills have impacted job markets globally, including: how different countries engage with real-time and 3D graphics skills, which jobs and industries are experiencing new transformations through 3D graphics skills, and in which jobs have 3D graphics and real-time 3D skills become foundational for the modern worker, including boosts in compensation for highly valuable skills. The data in this report is culled from international job postings from five English-speaking nations (the United Kingdom, Canada, Australia, New Zealand, and Singapore) and 20 nations of the European Union. (An earlier report focused solely on the United States.)



Here is an overview of key findings from this new report, titled “Visualizing the Future Globally: Demand for 3D Graphics and Real-Time Across the Economy.”

Rise of Real-Time 3D Skills: In the European and English-speaking non-US countries analyzed, there were almost 34,000 job openings looking for real-time 3D skills in 2019. Demand for real-time skills in 2019 was multiplied by up to 30 times in some countries, and grew at almost twice the pace of the US demand for graphic 3D skills.

Growth in English-Speaking Countries: Demand for 3D graphics and real-time 3D skills is outpacing overall job market growth in the non-US English-speaking nations studied. The market for these is growing more than 10% faster than the overall job market and over 50% faster than that of the average information technology skill. Across the world, real-time skills are pulling ahead of 3D graphics skills in terms of growth. In Australia, New Zealand, and Singapore, the market for real-time skills has grown over 450%, ten times faster than demand for traditional 3D graphics skills.

Emerging Industries: Demand for real-time 3D skills is rising in new industries that had not previously utilized the technology, such as multimedia design, fashion design, interior design, and urban planning. Real-time 3D is driving growth in these sectors and creating new types of hybrid 3D modeling occupations.

Salary Premiums for Qualified Candidates: Supply for major 3D graphics skills is not keeping up with growing job market demand, causing market salary premiums in the increasing number of jobs that are looking for these skills. As these skills grow in demand, 3D graphics salary premiums are growing higher, motivating job seekers to pick up these 3D proficiencies for higher wages. In Canada, the average 3D graphics job opening in 2013 offered a 33% salary premium over the average Canadian market salary; in 2019, this premium doubled to almost 70%. In Singapore, 3D graphics experts are in such high demand that the average salary premium offered for a 3D graphics skill has grown from 0% (i.e. average salary is consistent with the country's average worker) to a 40% average premium.

Overall, the research shows that the use of 3D graphics and real-time skills has grown from a narrow specialization in a handful of industries to a widespread driver of digital change across the board. For both professionals and students, gaining 3D graphics and especially real-time 3D skills provides a tremendous opportunity for advancement. As these skills move from a niche specialty to a core requirement in many fields, educators and training providers need to build real-time 3D into their curriculum, and employers need to take a more strategic view of how to acquire this talent in a competitive market.

Download the full report for further details and breakdowns by industry and country [here](#).