Dystopian science fiction, as well as recent dire warnings from industry, have sometimes pointed at the dangers of artificial intelligence (AI). Today however, the positive effects of AI have become pervasive in our everyday lives. In medicine, for example, neuropathologists are using it to help diagnose and quickly recommend treatment for brain tumours, and dermatologists to identify melanomas. AI can also be used to spot forest fires; it’s crucial to the study of climate change. AI is also a long-established reality within cars and smart homes.

AI is here to stay and clearly it will change the future of work. One OECD working paper indicates that 14 percent of jobs are at risk as they are “highly automatable”, and an additional 32 percent are likely to experience significant changes. How can we ensure AI is a force for good?

This year’s Global Talent Competitiveness Index (GTCI), which includes 132 countries, focuses on AI and talent competitiveness. Adapting to this new way of working is important for countries to grow their economies and stay globally competitive.

Over the past few years, an increasing number of countries have adopted AI strategies. To ensure that AI is a force for good, these strategies must be value-based and principle-led. From a labour market point of view, efforts should be geared to integrating rather than replacing the human factor. Adaptive talent – those skills that are exclusively human like creativity, curiosity, enthusiasm, leadership, empathy and compassion – is what makes the difference in addressing complex problems and seizing distant opportunities.

The top 10 of the GTCI 2020

The top 10 countries in this year’s rankings are high-income economies that perform well across both the input (i.e. market landscape, education) and output (i.e. employability, talent impact) pillars of the GTCI model. Stability among the highest ranked nations continues, with slight shifts amongst the top 10 and the addition of a third non-European country: Australia (10), a leader in formal education and talent attraction.

Table 1: GTCI Top 10

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Focusing on AI, the report aims to capture the level of technological adoption, investment in new technologies and robot density. Obviously these are not perfect measures, but they act as proxies that can be tracked at a global level. Not entirely surprisingly, the top of the rankings includes countries that perform well in these variables. For instance, the United States (2)* tops the list in technology utilisation and investment in emerging technologies. Singapore (3) leads in robot density. Switzerland (1) remains the leader across the input and output pillars, although it doesn’t score as well in terms of gender equality or tolerance of minorities. Sweden (4) continues to perform well in the rankings, especially in terms of both regulatory and market landscapes. Denmark (5) is a leader in retaining talent. Vocational and technical skills help both the Netherlands (6) and Finland (7) into the top 10. Luxembourg (8) scores well in innovation and entrepreneurialism but needs improvement in formal education. The last of the Nordics, Norway (9), is a leader in retaining home-grown talent.

### A longer term vision

The 2020 GTCI includes a longitudinal analysis (click to view) for the second year; it’s easier to spot trends when looking at a longer time frame. Now the report compares two time periods: 2015-2017 and 2018-2020. A widening gap between the talent champions and the rest is visible as talent inequalities appear to be broadening. Median scores from the three highest scoring regions (Asia/Oceania, Europe and North America) have increased over time, whereas overall scores for countries in Central and South America and Africa have declined.

The pacesetter over the two time periods is Indonesia (85), a lower-middle-income country that has improved across almost all pillars. When comparing the averages, Indonesia has climbed 20 positions.

Expanding on the time-series analysis, in the figure below, the evolution of countries’ scores is plotted over four talent quadrants: Movers, Champions, Laggards and Limpers.

**Figure: From Talent Movers to Talent Limpers**

Most high-income countries are talent champions. Each of the five top-ranked countries for the period 2018–2020 has either retained its position or improved it over the earlier three-year period.

Malaysia (26) and Costa Rica (37) are two upper-middle-income countries also in the champion quadrant while most other upper-middle-income countries are laggards. China (42) sits on the line between mover and champion. India (72) is in the mover quadrant and Brazil (80) is in the laggard one.

### Top 10 cities

This year’s Global City Talent Competitiveness Index (GCTCI) has grown from a ranking of 114 cities to 155 cities. This year saw improvements in methodology, which explains some significant shifts among the GCTCI top 10.

**Table 2: GCTCI Top 10**

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New York (United States)</td>
</tr>
<tr>
<td>2</td>
<td>London (United Kingdom)</td>
</tr>
<tr>
<td>3</td>
<td>Singapore (Singapore)</td>
</tr>
<tr>
<td>4</td>
<td>San Francisco (United States)</td>
</tr>
<tr>
<td>5</td>
<td>Boston (United States)</td>
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<tr>
<td>6</td>
<td>Hong Kong (SAR, China)</td>
</tr>
<tr>
<td>7</td>
<td>Paris (France)</td>
</tr>
<tr>
<td>8</td>
<td>Tokyo (Japan)</td>
</tr>
<tr>
<td>9</td>
<td>Los Angeles (United States)</td>
</tr>
<tr>
<td>10</td>
<td>Munich (Germany)</td>
</tr>
</tbody>
</table>

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Only three European cities are in this year’s top 10; with three in Asia and the US with four. Cities with a proven ability for future readiness tend to be towards the top, as are many large cities. Urban hubs with activity in AI or advanced technologies shine in these rankings. Indeed, the top 5 talent competitive cities are known for hosting emerging technologies, including fintech and medtech: New York (1), London (2), Singapore (3), San Francisco (4) and Boston (5).

Medium-sized cities improve their scores with quality of life factors like environment and safety. They too can capitalise on the new wave of technology.

Bilbao’s (83) successful AI-based talent strategy combined with adaptive talent is a recipe for success. Building on the Guggenheim effect, this city in Spain’s Basque Country has attracted and developed innovative digital services for the future. It has an entrepreneurship hub, as well as a strong local community of knowledge industry workers.

**A new narrative**

The degree of citizens’ acceptance of AI varies around the globe. In many respects, AI is frontier technology, ahead of the legal and regulatory efforts it calls for. Cities are the natural test beds where practical applications and social acceptability can be assessed. The examples of Bilbao and Berlin (39) in the report highlight the importance of successful development of AI talent and how these cities attract increasing international attention in this regard.

When creating a strategy for AI at any level, it is critical to create a narrative about the future of jobs that emphasises the possibilities (and limitations) of AI rather than instilling fear. The broader workforce – including older adults and women – will need the opportunities, skills and empowerment to fulfil these new ways of working created by AI. The hope is that the future of work will include AI giving more meaning to jobs and encouraging that very human characteristic of cooperation.

*All numbers in parentheses refer to the GTCI 2020 ranking.*

*The GTCI is an annual index created in partnership with the Adecco Group and Google; it aims to give governments and businesses the distilled data from 132 countries needed to inform their decisions about talent policies and strategies. The report itself has details about methodology as well as country profiles.*

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