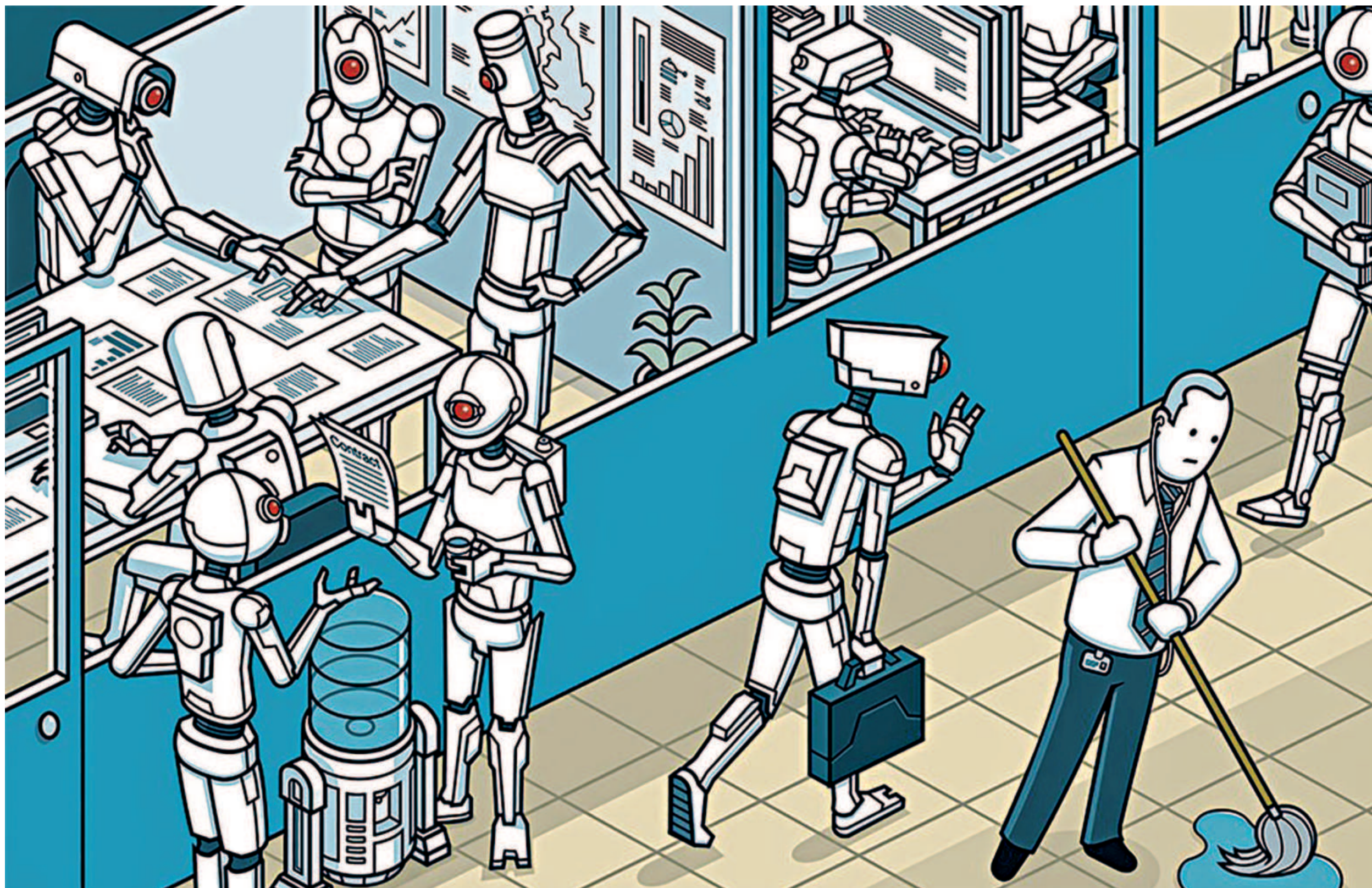


# DIGITISATION AND INCLUSIVITY: TAKING EVERYONE ALONG

DHAKA TUESDAY FEBRUARY 18, 2020, FALGUN 5, 1426 BS

26



## Digital revolution: Prospects and preparations



**RASHED AL MAHMUD TITUMIR**

The digital revolution is shaping ways and means of people and planet by blurring fence lines amongst physical, digital, and biological worlds. This fourth industrial revolution or Industry 4.0 is characterised by fusion technologies in artificial intelligence (AI), robotics, internet of things (IoT), virtual reality (VR), 3D printing, genetic engineering, quantum computing, and other technologies. The unprecedented scale and associated complexities of digital systems also test capabilities of governments in their commitment to “leave no one behind” of the Sustainable Development Goals (SDGs), particularly concerning sustainable growth, reduced inequalities, decent work and responsible consumption and production.

The First Industrial Revolution of 17th century changed the traditional production system with the invention of steam engine. The Second Industrial Revolution was driven by new sources of power such as electricity, oil and gas in the beginning of 19th century. The Third Industrial Revolution in the post-second world era heralded computer technology, semi-conductor and microchips, and other electronic and electrical devices, besides newer sources of energy like nuclear power. The penultimate one brought huge changes through likes of internet, mobile communication technology, etc. as well as massive progress in medical technologies, biotechnologies, pharmaceutical industry etc. Nevertheless, the changes and effects of Industry 4.0 on peoples’ lives are in no match to the three revolutions.

### WORK AND MARKET

The digital transformation is espoused as an “open access opportunity for all.” This forceful tagline suggests digital revolution’s supposed intrinsic

promises of creating more job opportunities and reduction in hours of work. Such a milieu pronounces less work as an expression of freedom and self-fulfilment. The World Economic Forum (WEF), however, states that about 800 million people could lose their jobs worldwide by 2030. In Bangladesh, approximately 5.7 million unskilled labourers are projected to be redundant at home and abroad due to requirements of technological skills. This is further vexed by historic tracking of developing countries moving away from manufacturing into services at a faster pace than those observed in cases of developed counterparts. This process of premature “de-industrialisation” is evinced

by indicators such as lesser share of employment of manufacturing along with its value addition to economy compared to those of service sectors. There is a long-held consensus that manufacturing is the primary channel of modernisation and creation of employment, especially by absorbing unskilled labourers. The stories of development in pre-and-post Second World War bear testimonies in this regard as underemployed from agriculture are pulled into manufacturing, thereby increasing consumption spending and resulting into growing national income.

Digital revolution has not emerged from a vacuum. Ceaseless amalgamation of human knowledge

and skills, funded primarily by tax payers, reached this level. Yet, publicly-funded innovations are constantly being usurped by a few tech giants, instead of those remaining as public or common goods. Secondly, these behemoths are profiting out of a rather radically changed workplace where producers are also transformed into consumers. The oligarchies are getting their work done by a few numbers of remunerated employees compared to traditional companies while bulk of production is created voluntarily by unpaid users who are too reduced as their consumers, amassing huge amount of surplus by two distinctive ways, besides much of innovations being subsidised

by public exchequer. One is seized as economic rent from volunteer producers while the other is generated out of sales of goods and services to them. The economic rent is generated from unpaid labourers, a factor of production, for which costs needed to bring them into production, are not paid. Thirdly, the digital markets are conceptualised as institutions to provide consumers with material well-being. Yet mounting academic research demonstrates evidences of consumers being systematically exploited through illusion, manipulation and deception due to asymmetric information, psychological weaknesses and unequal power.

CONTINUED ON PAGE 28

