THE 'NET' EFFECT

The sweeping changes that the Internet of Things (IoT) — digitising the physical world — can bring to companies, consumers and cities have thrown up myriad possibilities, inspiring a surge of innovation and enthusiasm. A report by the McKinsey Global Institute estimates the economic impact of the IoT could be $3.9 trillion to $11.1 trillion a year by 2025 — from improvements in productivity and asset utilisation as well as economic gains of reduced disease and accidents, among others. Here is a snapshot of the report:

Value potential of the IoT

Interoperability required to capture **40% of total value**

<1% of data currently used, mostly for alarms or real-time control; more can be used for **optimisation and prediction**

2X more value from B2B applications than consumer

Developing: **40%**
Developed: **60%**

A cross-sector view of the potential impact of **$3.9 trillion–$11.5 trillion per year in 2025**

Home
Chore automation and security
$170 bn–300 bn

Offices
Security and energy
$70 bn–150 bn

Factories
Operations and equipment optimization
$1.2 trn–3.7 trn

Retail environments
Automated checkout
$410 bn–1.2 trn

Worksites
Operations optimization/ health and safety
$160 bn–930 bn

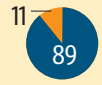
Human
Health and fitness
$170 bn–1.6 trn

Outside
Logistics and navigation
$560 bn–850 bn

Cities
Public health and transportatio
$930 bn–1.7 trn

Vehicles
Autonomous vehicles and condition-based maintenance
$210 bn–740 bn

More value from IoT could be created in advanced economies, but the number of deployments could be higher in the developing world



Higher penetration in advanced economies, higher value of time saved

Higher costs and wages in advanced economies raises value of impact

Larger investments in automation in advanced economies

Higher adoption in advanced economies, but large number of retail settings in developing markets

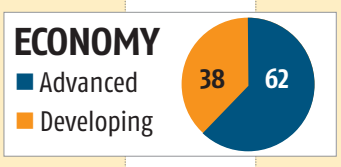
Higher adoption in advanced economies outweighs developing economy deployments

Health-care spending in advanced economies is twice that in developing economies

Transportation/shipping spending is twice as big in advanced economies

More autonomous vehicles in advanced economies, but larger number of cities and populations in developing markets

High number of vehicles and costs in advanced economies



NOTE: Numbers may not sum due to rounding

Source: McKinsey Global Institute analysis