5. The Way Forward

The E&C sector will remain a cornerstone of the world's economy and of almost all other industries, since they rely so heavily on buildings or infrastructure assets. It will continue to define our daily lives in so many ways, because our homes, our workplaces and the means of travelling between them are all components of the built environment.

E&C has been far slower than many other industries to adopt new technology and is only now beginning to undergo a modern transformation. Its labour productivity, static for decades, is on the increase at last, and should surge once the new digital technologies are more widely adopted. 105 The industry has also been slow to adapt its business strategies, but companies are now starting to pay more attention to a building's total life-cycle cost, for instance, and to be more amenable to partnering with other companies. Project owners and investors will have an important part to play here.

The new era in construction will bring great benefits: for the wider society, by reducing construction costs and adverse social effects; for the environment, by improving the efficient use of scarce materials or by reducing the adverse environmental impact of buildings over time; and for the economy, by narrowing the global infrastructure gap and boosting economic development in general. This potential will blossom very soon, and very dramatically. In fact, profound changes are already taking place, though not yet on a sufficiently wide scale. More remains to be done.

Imperative for action

All stakeholders along the value chain - individual companies, the industry as a whole (and associated experts in civil society and academia) and governments - should take action to move the industry forward.

Private companies should actively shape the transformation. For their own purposes, they should assess the opportunities inherent in the new technologies and materials, and then adjust their processes, operations and even business models accordingly. If companies structure their organization optimally, they stand the best chance of success when implementing the opportunities on a large scale. The transformation areas of the E&C industry, ranked according to their importance, are listed in Figure 17, based on a survey conducted as part of the Future of Construction project.

Figure 17: Importance of Different Transformation Areas for the E&C Industry

Transformation areas 5 1 People unimportant important 2 Adoption of new technolimportant unimportant ogies, materials and tools 3 Industry collaboration unimportant important 4 Business models unimportant important 5 Corporate strategies unimportant important 6 Maturity of business unimportant important processes 7 Maturity of construction unimportant important operations 8 Corporate cultures unimportant important 9 Corporate organizations unimportant important 10 Creation of intellectual

Source: Future of Construction Survey; World Economic Forum; The Boston Consulting Group

unimportant

The industry as a whole should enhance coordination and cooperation across the value chain, and agree on common goals and standards. And to gain the support of society at large, the industry again needs to work collectively with all stakeholders, along multiple dimensions.

The government, finally – both as regulator and often as key project owner - should create a fertile environment for the transformation of the E&C sector. High-profile projects, such as Crossrail in the United Kingdom, show how public projects can spread and speed up the adoption of new technologies throughout the industry.

Many of the issues and challenges are common across the construction industry, but overall the industry remains very diverse and fragmented. Companies have very varied circumstances and starting points, according to their region, the sector they are active in and their size. So the numerous developments and measures discussed in this report, even though described holistically as parts of a single transformation framework, will not all be equally relevant to any particular company. Companies have to choose the innovations and action areas that best suit their own ambitions and their clients' needs. Provided they do choose wisely – and pursue the choices actively and astutely – they should secure their own future, and ensure a flourishing and exciting future for the entire industry that they represent.

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