The background is a complex wireframe illustration of a construction site. It features several tall cranes and building structures. The scene is divided into three main color zones: a dark blue upper section, a red lower section, and a white diagonal section that separates the blue and red areas. The wireframe lines are rendered in white and red, creating a technical, architectural feel.

Five key strategic formulas to DISRUPT CONSTRUCTION

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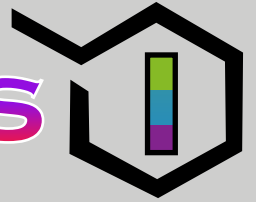
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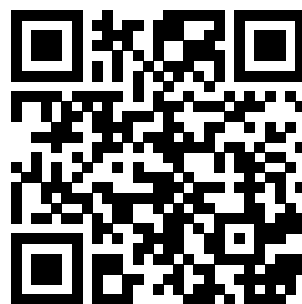
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FIVE KEY STRATEGIC FORMULA TO DISRUPT CONSTRUCTION

The construction industry has traditionally had a conservative approach to technology adoption. Now, more than ever, the sector appears ripe for disruption. The industry needs to define a more sustainable-growth business model based on digital transformation.

Given the narrow profit margins, investing 1 percent in technological advancements seems an action with huge risk. Nevertheless, digital innovations are able to boost significantly the overall productivity. According to the World Economic Forum, an increase of 1 percent in the industry's productivity is capable of leading to savings of USD 100 billion per year¹.

Infrastructure is anticipated to be a major driver for the Construction industry. Governments across the world will have to spend USD 57 trillion on infrastructure by 2030 in order to progress at the same rate with the global GDP growth. This is a huge determinant for Construction firms to implement a strategic plan so as to transform productivity through new technological advancements and improved business models.



Fig 1 Digital construction organization. McKinsey & Company. (2016). Imagining construction's digital future.

FIVE REVOLUTIONARY SOLUTIONS, BASED ON WIDESPREAD TECHNOLOGY INNOVATIONS PICTURE THE FUTURE OF THE CONSTRUCTION INDUSTRY.

1. HIGHER-DEFINITION SURVEYING AND

GEOLOCATION Five trends picture construction's future

New technological advancements and techniques significantly improve accuracy and speed, enabling rapid digital mapping and advanced geographic estimating.

2. NEXT-GENERATION 5-D BUILDING INFORMATION MODELLING

This advancement analyzes projects' cost and schedule along with the spatial three dimensions and allows owners to evaluate the effect of changes on project costs and scheduling.

3. DIGITAL COLLABORATION AND MOBILITY

The shift from paper to online, rapid sharing of information offers improved cooperation, time, quality and risk management. The digital-collaboration and mobility-solutions sector reached approximately 60 percent of all venture funding in the -technology related-construction industry.

4. THE INTERNET OF THINGS AND ADVANCED ANALYTICS

The Internet of Things enables construction machinery, equipment, materials, buildings to connect through a central data platform in order to increase work productivity. Sensors and near-field- communication (NFC) systems monitor the work process and staff performance.

5. FUTURE-PROOF DESIGN AND CONSTRUCTION

Innovations in structural materials along with technological advancements (self-healing concrete and 3-D printing for example) are able to provide cost-and-time efficiencies while ensuring quality and safety².

Investment in technological advancements without a strategy for business models' improvement will not increase productivity.





Fig 2 4 key actions to be sustainable EY.(2019).Can digital secure the foundations of construction?

FOUR KEY ACTIONS ARE IDENTIFIED AS NECESSARY-TO-TAKE IN ORDER TO ACHIEVE SUSTAINABILITY IN THE CONSTRUCTION INDUSTRY:

1. CONCENTRATION ON THE LONG RUN

Key actions in order to achieve sustainability

Technological advancements go hand in hand with an applicable strategic plan. In order to generate a strategic plan which will succeed in the long run, the strategic direction should be challenged. In addition, essential is the estimation of the organization's future state, relied on the business models that will produce lasting value.

2. UNDERSTAND RAPIDLY THE PROFITS OF SYSTEM INTEGRATION

The process of generating and analyzing data is crucial despite the fact that the outcome of that procedure may not be easily visible. It appears, therefore, necessary to form a data strategy so as to optimize insight analysis and achieve operational efficiency.

3. WINNING THE TALENT WAR

Professionals, with the appropriate expertise, have the knowledge of obtaining and using the technological advancements. Firms, therefore, need to develop or attract talents in order to address key issues using predictive data analytics. Artificial intelligence and cognitive systems, which empower for better decision-making, can only be used by high-skilled talents.

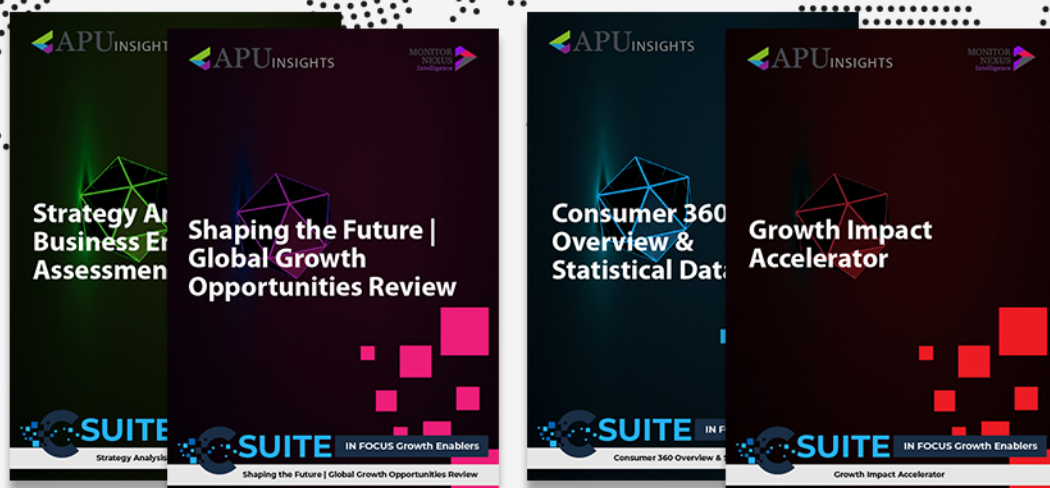
4. BUILDING TRUST THROUGH SMART WORKING

Challenges in the supply chain can be countered by the time trust is built. Trust is also able to form a vital setting where important efficiencies can be achieved. Interaction among players in the whole spectrum of the value chain can concentrate on sharing knowledge and improving productivity. The implementation of a trusted platform across the value chain will provide overall transparency and will offer their ability to compete in transformative environments.

The winner strategy of tomorrow will be the one which embraces digital adoption and innovation. Such a plan will dominate and will achieve sustainability. Resisting change is certainly a bad strategy to address digital transformation in the construction industry³.

REFERENCES

1. World Economic Forum. (2017). The Global Competitiveness Report 2017-2018.
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