Business Model Innovations in the Building Construction Industry, 2020

Technological Advancement and a Vision for Sustainability will Drive Change in Building Construction Business Models

Global Energy & Environment Research Team at Frost & Sullivan

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# Scope of Study

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<thead>
<tr>
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<tbody>
<tr>
<td><strong>Base year</strong></td>
<td>2019</td>
</tr>
<tr>
<td><strong>Study Period</strong></td>
<td>2019–2020</td>
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<tr>
<td><strong>Geographical Scope</strong></td>
<td>Asia-Pacific (with global companies profiled)</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>Building Construction</td>
</tr>
<tr>
<td><strong>Monetary Unit</strong></td>
<td>US Dollar ($)</td>
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### Building Segments in the Building Construction Industry:

<table>
<thead>
<tr>
<th><strong>Segments</strong></th>
<th><strong>Examples</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>• Landed housing, apartments, and condominiums</td>
</tr>
<tr>
<td>Non-residential</td>
<td>• <strong>Commercial</strong>&lt;br&gt;  o Office buildings, shopping malls, hotels, resorts, club houses, and theatres&lt;br&gt;  o <strong>Industrial</strong>&lt;br&gt;  o Industrial parks, warehouses, and factories&lt;br&gt;  • <strong>Public Amenities</strong>&lt;br&gt;  o Hospitals, educational institutions, government buildings, courthouses, religious buildings, sports facilities, and prisons</td>
</tr>
</tbody>
</table>

*Image Source: Flaticon.com. Source: Frost & Sullivan*
Definition of a Business Model

A business model is defined as part of a business strategy that explains the process and rationale of how a business creates and capitalizes economic value, thereby impacting its value proposition, offerings, organizational structures, operational strategies, and product positioning. To put it simply, a business model is a simplified representation of how a business makes a profit and manages its risks.

A company can operate multiple business models; this brings a high customer benefit and new revenue streams while also adding more complexity to the organization’s structure.

Four Fundamental Building Blocks of a Business Model

1. Customer-Value Proposition
   - This entails how a company fulfills its job to its customers, in a better and more unique way than its competitors.
   - The elements defining value proposition include the company mission, vision, core values, brand identity, and key activities.

2. Monetization
   - This factor lays out how the company makes money while delivering its value proposition.
   - It is important to identify the target customers and markets and the choices of offerings (products/services) the company provides.

3. Use of Technologies
   - This refers to leveraging technologies to boost the efficiency of internal processes and develop solutions or products that can be monetized.

4. Business Process
   - This includes resource management such as human resources, which make up teams in the company, vendors or suppliers that form strategic business transactions, and distributors with optimized outreach to customers.
Business Model Approaches

- B2C
- G2B/C
- C2C
- B2B

B2B Examples
B2C Examples
C2C Examples
G2G/B/C Examples

Source: Frost & Sullivan
### Key Variables of a Business Model

<table>
<thead>
<tr>
<th>Customer Segments</th>
<th>Key Activities</th>
<th>Customer Relations</th>
<th>Key Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Partnerships</td>
<td>Online Channels</td>
<td>Sales</td>
<td>Success Factors</td>
</tr>
<tr>
<td>Cost Structure</td>
<td>Revenue Streams</td>
<td>Distribution Channels</td>
<td>Value Proposition</td>
</tr>
</tbody>
</table>

For the purposes of this study, three business models are discussed:

- **B2B** refers to commercial transactions between businesses or between different participants across the value chain.
- **B2C** refers to business transactions directly between companies and the end users (individuals) of their products and services.
- **C2C** refers to business transactions between individuals who interact in virtual marketplaces or other online platforms.

Building Construction Industry—Outlook

General Outlook on the Construction Market

- As one of the main sectors driving the global economy, construction had contributed % to the world’s GDP (approximately $) in 2017.
- This sector constructs buildings and infrastructure for other industries to operate.
- The 2018 construction market noted building construction as its largest segment at %.

Building Construction Market in Asia-Pacific (APAC)

- APAC is the largest region in the global construction market; it constitutes approximately % of the market. The APAC construction market is expected to grow from $ in 2017 to $ in 2021, at approximately % per year.
- Rapid urbanization and suburban development in the region are the main market drivers; this is further supported by the strong presence of leading construction companies serving a large customer base in APAC, particularly in X.
- APAC is expected to witness an infrastructure and construction boom in the next five years with a healthy distribution of projects shared between the residential, industrial, and infrastructural segments.
- Governments and private third-parties in Asian countries are increasing their budgets on infrastructure projects, such as roads, railways, and residential buildings. In 2019, over $ was invested by several investment firms and large corporations in construction technology.
- Despite China being the largest country in terms of market value in the building construction market, the emerging and fast growing markets in 2020 in X, are also significant.

Source: Frost & Sullivan
Asia-Pacific Building Construction Industry by Country (continued)

<table>
<thead>
<tr>
<th>Country</th>
<th>Outlook from 2015–2020</th>
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| Japan         | • The industry has been experiencing revenue growth as a result of international sport events, such as the 2019 Rugby World Cup and Tokyo 2021 Olympics. There has been high demand for construction contractors and skilled labor for the sport facilities and infrastructure planned.  
• Japanese construction is highly regulated as it is prone to many natural risks such as earthquakes, typhoons, and heavy snow loads. Many apartment buildings need rebuilding because of their aging conditions and they do not meet current anti-earthquake standards.  
• Redevelopment work has been carried out in areas affected by the East Japan Earthquake in 2011.  
• There is an increasing number of abandoned houses due to Japan’s declining population.  
• There has been several renewable energy projects, such as the construction of offshore wind farms and solar power plants in rural areas, as well as the decommissioning and dismantling of nuclear power plants, due to the Japanese renewable energy scheme. |

Top Building Construction Participants (ASEAN)

Source: Frost & Sullivan

Countries Ranked by Forecasted Annual Growth (ASEAN Region) for Construction Industry Worldwide in 2019
Present Value Chain of Building Construction

Stages in a Building Construction Project

- Conception
- Design and Planning
- Procurement
- On-site Construction
- Completion and Delivery
- Operation and Maintenance
- Restoration/Demolition

Source: International Finance Corporation; Frost & Sullivan
Business Model 1—Multi-sided Platform (MSP)
### Implications of Business Model Innovations (continued)

#### Business Model

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Source: Frost & Sullivan
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