The changing landscape of disruptive technologies

Boardroom questions

How are disruptive technologies redefining industries and business?

Innovation will remain a critical differentiator for many industries as organisations compete to develop the next generation of products and services to add economic value.

Top technology disruptors over the next 3 years:

<table>
<thead>
<tr>
<th>Current disruptors</th>
<th>Next disruptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data &amp; analytics</td>
<td>Mobile</td>
</tr>
<tr>
<td>Moving rapidly to</td>
<td>Artificial intelligence</td>
</tr>
</tbody>
</table>

Potential benefits

Embracing new technologies could lead to:
- Productivity gains
- Cost efficiencies
- Quicker innovation cycles
- Increased customer value
- Competitive advantage

Metric to measure innovation value

Top ranking metrics include:
- Revenue growth
- Market value
- Market share
- Return on investment

As emerging technologies continue to change business models it is critical to manage these issues proactively.
Barriers to technology innovation adoption include:

**Customer adoption**
- Gadget fatigue
- Privacy
- Competition
- Pricing models

**Security**
- New forms of cyber attacks
- Inefficient governance processes and control environments
- Dated system integration and architecture

**Technology complexity**
- Abundance of emerging technologies
- Integration of old and new technologies (at home and at work)
- Displacement of legacy systems
- Short supply of critical skills

**Regulation**
- New regulatory requirements
- Lack of international standards
- Speed to understand new business models i.e. hotels, taxis, currencies

**Boardroom Questions**
- Which emerging technologies will have the greatest impact on our customers, suppliers and partners?
- Which are the key emerging technologies that may disrupt the business in the next 24 months?
- What are the opportunities and challenges resulting from these new technologies?
- What are the implications to the business?
- Is our strategy future-proofed to enable our organisation to be ready for the accelerating pace of technology disruption?
- How are we proactively assessing technologies that may enable new business models and may signal the end of business-as-usual for market leaders?
- What is the organisational structure, expertise and process required to understand the scope of potential changes happening in the business and industry as a result of emerging technologies?
- Do we have the expertise and agility to respond to a superior alternative?
- Are we fostering a culture of innovation? Are we enabling experimentation? Do we have the right incentives?
- Are we prioritising investments in the people, partnerships and resources to capitalise on new opportunities driven by tech innovation?

**What actions can the Board and management implement to potentially take advantage of the disruptors?**
- Develop a strategy that enables the organisation to be ready for the accelerating pace of technology disruption.
- Identify and evaluate the top emerging technologies that may impact the business and industry.
- Assess opportunities and challenges.
- Identify which technologies may enable the organisation to capitalise on the greatest economic value.
- Align resources to capitalise on the value of adopting these technologies: talent, partners, funding, incentives.
- Assess if change management is necessary to create a culture that embraces innovation.
- Review the business plan and consider a transformation strategy: people, process, technology.

Leaders, across industries, need to keep up with and outpace existing and new competitors to a much higher degree than in the past.

**Contact us**

Lyon Poh  
Head of Digital + Innovation  
T: +65 6411 8899  
E: lpoh@kpmg.com.sg

Irving Low  
Head of Risk Consulting  
T: +65 6213 2071  
E: irvinglow@kpmg.com.sg