# **Ecosystem Vulnerability Assessment**

A *business ecosystem* is a dynamic structure of interconnected organizations that depend on each other for mutual survival. Today, companies' fates are more intimately tied to other organizations than ever before. To think about how business ecosystem interdependencies and relationships could affect your organization, start with a simple vulnerability assessment.

# **Assessing Vulnerability in Your Business Ecosystem**

#### 1. Brainstorm events.

Start by listing events that could disrupt your organization's operations, impede its ability to deliver, or undermine its profitability. Your list might include items like *Chinese company provides similar services at low cost* or *tech company introduces offering that make our product obsolete*.

### 2. Assess the consequences.

MIT professor Yossi Sheffi and MIT Center for Transportation and Logistics director James B. Rice Jr. recommend creating a map with two axes: consequences and probability. Start by assessing the consequences. If this event occurs, will it be a momentary distraction to your company? Or will it have devastating consequences? Rate each event on a scale of low to severe consequences.

#### 3. Assess the probability of occurrence.

Next assess the probability of occurrence. How likely is it that this event will actually happen? Rate each event on a scale of low to high probability.

#### 4. Create the chart.

Plot the events on a chart that has *consequences* on the x-axis and *probability* on the y-axis (see example on following pages).

## 5. Analyze your risks.

Now analyze your chart for red flags. What events are likely to happen and could have a severe impact on your business? What events are less likely to happen but also might have a severe impact on your business?

Once you've found your red flags, take a deeper dive into analysis. Whose actions can precipitate the event? Who can influence it while underway? Who can help clean up the aftermath?

### 6. Plan your strategies.

Now figure out what to do about your red flag risks. What can you put in place now in order to prevent or mitigate the impact of these events?



# **An Example of Ecosystem Vulnerability Assessment**

Adapted from "Planning Your Business Strategy in the Corporate Ecosystem," by Maya Townsend and published on CIO.com. Available at <a href="http://bit.ly/DqzDf">http://bit.ly/DqzDf</a>.

This example focuses on the hypothetical EdgeTek Corporation. EdgeTek produces ancillary hardware, most importantly the cords that connect MP3 players to car stereo systems. EdgeTek's ecosystem—the organizations with which it has interdependent relationships—includes its assembly plants in China, car manufacturers, MP3 manufacturers, and local universities that provide sources for new talent.

Here's the initial list of potentially disruptive events for EdgeTek:

- An increase in defects at the Chinese assembly plant forces recalls or increases production costs
- Shipping disruptions delay delivery to distributors
- MP3 players lose popularity and market share, reducing demand for company's cash cow
- Changes to MP3 technology force product reengineering
- Direct partnerships between MP3 player manufacturers and car makers diminish the need for EdgeTek's products
- Unionization of Chinese workers causes work stoppages and production shortfalls
- Product tampering brings negative publicity and imposes recalls
- Recession decreases market for luxury items
- Decrease in qualified labor inhibits ability to achieve sales quotas
- Loss of leadership talent inhibits company's strategic growth

With the list of disruptive events in hand, the next step for EdgeTek is to determine the likelihood any of these events will occur and the potential consequences.

Looking at the map (on the next page), we see a high probability for five events. Of those, four have severe consequences for the organization. That's where EdgeTek must focus its attention.

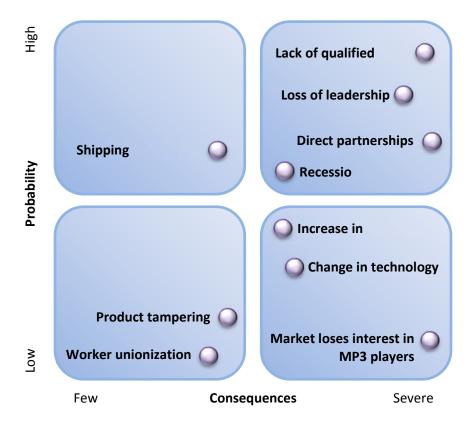
The next step is for EdgeTek to identify the players associated with each event. In the case of "lack of qualified labor," we might identify players as:

- Local universities that provide a source for high potential employees
- Local communities that develop opinions about the value of working in EdgeTek plants and encourage or discourage community members to work for EdgeTek
- Local trade unions that advocate for labor training, compensation, and safety
- Job training programs that build workforce skill and knowledge
- Government education departments that influence the quality and extent of learning provided to citizens



• Government trade bureaus that can provide incentives for companies seeking to train and hire unemployed people

Perhaps the organization has good connections with universities but only weak ties to local communities. Or, perhaps, the company's network shows strong connections to local organizations but weak links with government regulatory and support agencies. With this information, a company can put plans in place to develop the relationships that will help sustain the company in its ecosystem.



# **Learn More about Business Ecosystems**

This tool provides only a brief overview of business ecosystems. To learn more, try these resources:

- Adler, R. W. & Hiromoto, T. (2012). "Amoeba Management: Lessons From Japan's Kyocera." *MIT Sloan Management Review*. Available at <a href="http://bit.ly/PXyblK20">http://bit.ly/PXyblK20</a>
- Allee, V. (2003). *The Future of Knowledge: Increasing Prosperity through Value Networks*. Available at <a href="http://amzn.to/UJ5olB">http://amzn.to/UJ5olB</a>.
- Allee, V. & Schwabe, O. (2011). *Value Networks and Collaboration*. [http://www.valuenetworksandcollaboration.com].
- Hurst, D. L. (2012). "Why Walmart Is Like a Forest." *Strategy + business*. Available at <a href="http://bit.ly/T5JeIU">http://bit.ly/T5JeIU</a>. Iansiti, M. & Levien, R. (2004). *The Keystone Advantage*. Available at <a href="http://amzn.to/TahUi3">http://amzn.to/TahUi3</a>.
- lansiti, M. & Levien, R. (2004). "Strategy as Ecology," *Harvard Business Review*. Available at <a href="http://bit.ly/Pf5RiL">http://bit.ly/Pf5RiL</a>.
- Moore, J. F. (1993). "Predators and Prey: A New Ecology of Competition." <u>Harvard Business Review</u>. Available at <a href="http://hvrd.me/QPp06g">http://hvrd.me/QPp06g</a>.
- Moore, J. F. (1997). *The Death of Competition: Leadership and Strategy in the Age of Business Ecosystems*. Available at http://amzn.to/Uo1t32.
- Townsend, M. (2009). "Planning Your Business Strategy in the Corporate Ecosystem." CIO.com. Available at http://bit.ly/DqzDf.

## **Take the Next Step**

<u>Contact us</u> to learn more about how we can help your company work more effectively within its business ecosystem.

