Business Case for Safety: Building Support for Pandemic Planning

Most health experts think the occurrence of an influenza pandemic is a question not of if but when. Were a pandemic to occur, it would prove devastating. But while all companies prepare for fire, only a handful prepare for pandemics-even though, statistically, a workplace is more likely to experience a pandemic than a fire. So how *do* you persuade senior management to invest in influenza pandemic planning?

The Risk of Pandemic

A pandemic is a large-scale outbreak of a highly infectious illness to which few, if any, people are immunologically resistant. An influenza pandemic is expected to be significantly worse than the SARS-type epidemic that hit Canada a few years ago in terms of both health and economic impacts, such as worker absenteeism rates. And the SARS outbreak in Canada resulted in a $2 billion loss to the economy. So you can imagine the possible impact an influenza pandemic would have on the country's economy-and your company's finances.

Some experts estimate that during an influenza pandemic's peak, companies would experience absentee rates of between 15% and 30% due to sickness, quarantine, travel restrictions, family care obligations and fear of contagion.

Why Companies Don't Plan for Pandemics

Given the likelihood that an influenza pandemic will happen and the severe economic impact it would likely have, you'd think that companies would be investing in pandemic preparedness, much like they invest in, say, fire preparedness. Moreover, many companies have experience in planning for various types of disruptions to their supply of power (such as the 2003 ice storm in Central Canada), information technology (such as Y2K) and hardware and

materials (as in 9/11 and Katrina).

But for some reason, companies don't seem to be taking the threat of an influenza pandemic as seriously as other threats to their business. Why aren't companies planning for this potential disruption to their labor supply the same way they do for disruptions to other supplies?

A recent study by a researcher from the Schulich School of Business in Toronto poses several theories. One is that managers are making the assumption that their entire industry would suffer equally and thus no competitor would get an advantage over others in the event of a pandemic. But that assumption may be wrong. Many companies have, in fact, prepared for a pandemic. For example, Alcan and Sunoco have posted their pandemic preparedness plans on their corporate websites.

Managers may also underestimate the probability that a pandemic will happen. But experts have calculated the cumulative probability of an influenza pandemic over time as in the range of:

- 3-10% for 2008;
- 14-41% by 2012; and
- 26-65% by 2017.

A final theory is that executives are underestimating the impact an influenza pandemic would have on the company's bottom line. Studies have been done on the economic impact of a pandemic on a "macro" level-that is, on the overall economy. For example, one expert estimates that a mild pandemic would shrink Canada's Gross Domestic Product (GDP) by 2%, while a severe pandemic would shrink the GDP by up to 6%. But no studies had been done on the economic impact of a pandemic on a "micro" level-that is, on individual companies' finances. And the lack of data of the potential impact of a pandemic on an individual company has made it harder for safety coordinators to build a compelling business case for pandemic preparedness.

The Schulich Study

The Schulich study is the first to examine the impact of an

influenza pandemic on an individual company. The study focuses on a large public Canadian company with approximately 13,000 front-line workers (those who have contact with the public) and uses data showing the impact the SARS outbreak had on that company to estimate how an influenza pandemic would affect the company. The researcher assessed the impact of worker absenteeism on the company's income in 2008 and compared it to the expected costs for the company to prepare for a pandemic. He then evaluated the expected costs and benefits of pandemic planning using several accepted metrics.

Impact of pandemic. During the SARS outbreak in 2003, the company's net income declined by 17%. If an influenza pandemic caused the same 17% decline in 2008, it would reduce the year's estimated income by $73 million. But note that the absenteeism triggered by an influenza pandemic would be significantly greater than the absenteeism experienced during the SARS outbreak. So estimates of the impact of an influenza pandemic based on the impact of the SARS outbreak are very conservative.

Costs of pandemic planning. A key component of pandemic planning-and the costliest-is the stockpiling of antiviral drugs. An eight-week preventative dose costs about $250 per person. So stockpiling enough antiviral medication for the company's 13,000 front-line workers would cost approximately $3.25 million, plus an additional $500,000 for storage of the drugs. PPE would cost another $750,000. Planning, training workers and communication would cost an estimated $700,000. **Total outlay:** $5.2 million, about $400 per worker.

Cost/benefit analysis. Based on a straight cost/benefit analysis, a $5.2 million outlay for pandemic planning significantly outweighs the estimated $73 million the company would lose in lost revenue if an influenza pandemic hit in 2008. In fact, even if the company's estimated revenue declined by only 1.3% during a pandemic, the investment in pandemic planning would still be cost effective. But the researcher didn't stop there. He also analyzed the costs and benefits using:

Net present value metric. The most commonly used metric by

companies to justify investments is net present value (NPV). NPV is calculated using a complex formula that aggregates the amount to be invested and expected future benefits using the time value of money. The general rule: If the NPV > 0, the company should make the investment. Assuming the influenza pandemic was to strike within five years and that the firm's cost of capital is 8%, the NPV of investing in pandemic planning is $44.5 million-significantly greater than zero. The NPV is even higher if the pandemic strikes sooner.

Internal rate of return metric. Another metric companies use to justify investments is the internal rate of return (IRR) or the breakeven rate. A higher IRR provides a better justification for an investment. The general rule is to invest if the IRR is greater than the firm's cost of capital. Using another complex formula and again assuming that the influenza pandemic were to strike within five years and that the firm's cost of capital is 8%, the IRR of investing in pandemic planning is 70%-significantly greater than the 8% cost of capital.

The Study Results

Based on this data, the Schulich study concluded that investing in pandemic planning for the selected company would be justified. Of course, this conclusion is based on the assumptions that: 1) workers are the principal revenue and profit drivers in the company; and 2) pandemic planning will reduce the anticipated worker absenteeism in the event of an influenza pandemic. But the metrics discussed above don't incorporate some of the other benefits of pandemic planning such as:

- Reduced volatility of cash flows, resulting in lower actual and perceived risk and thus a likely rise in stock prices;
- Improved overall efficiency in the company;
- An enhanced reputation with workers, investors, customers and suppliers;
- Strategic advantages should a pandemic occur; and
- Reduced liability-if pandemic planning becomes generally accepted in the corporate community, courts may consider the identification and assessment of pandemic risk to be an

industry standard. In this context, companies that aren't prepared when a pandemic hits may be found negligent and thus liable to shareholders, customers and even workers for unsafe working conditions.

Conclusion

The probability of an influenza pandemic happening in the next 5 years isn't trivial. Such a pandemic will likely cause high levels of worker absenteeism, which will have significant impacts on companies' finances. The Schulich study shows that investing in pandemic planning is not only economically viable but also cost effective-no matter what metric you use to evaluate the investment. You should be able to use this study to convince management that spending the money to prepare for an influenza pandemic will actually improve the company's bottom line and shareholder value.

SOURCE

"Making a Case for Investing in Pandemic Preparedness," Dr. Amin Mawani, Schulich School of Business, http://www.schulich.yorku.ca/pandemic.