Strategic Business Risk

2008 – the Top 10 Risks for Business

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Quality In Everything We Do

The Next Five

> "Individual companies need to consider the potential impact of a global pandemic on their workforce, infrastructure, supply chains and operational capabilities."
>
> Dr. David Shotton, University of Oxford

Will the Pandemic Make You or Break You?

Dr. David Shotton
University of Oxford

Pharmaceutical companies are well accustomed to dealing with frightening diseases. Think of it this way: the ability of pathogens to evolve rapidly into forms that can evade the adaptive defenses of the human immune system is, in a sense, a biological arms race. In any form of warfare, arms manufacturers stand to make significant profits. In the fight against infectious diseases that present a risk of epidemics, pharmaceutical companies provide the front-line weapons for the defense of humanity.

However, an influenza pandemic is different. It is different because it will present overwhelming operational challenges that will cause many companies, including pharmaceutical companies, to fail. Flu pandemics occur on average once every 30 years. The last one, the 'Hong Kong flu' of 1968, was relatively mild, killing 'only' one million people. The last severe influenza pandemic was the 'Spanish flu' of 1918, which killed an estimated 40 million people. The most likely candidate for the next pandemic is the current H5N1 strain of avian influenza, which is highly pathogenic to birds. This has spread rapidly (more than half the countries in which it has appeared first reported the disease in 2006), and can infect humans, in whom it is abnormally deadly, killing roughly 60% of confirmed patients. The number of human deaths that might occur if H5N1 became easily transmissible between humans is impossible to estimate, but may far exceed the 67 million deaths caused by the Black Death.

A flu pandemic differs in three principle ways from most other forms of natural disaster. First of all, it is of extended duration, with two or three successive waves of infection each lasting 10-12 weeks, separated by several months. Secondly, it will disrupt all aspects of society, causing a breakdown of most normal services and, most likely, widespread civil unrest (e.g., looting). Thirdly, because of its global nature, there will be no 'outsiders' to come to the rescue and thus recovery by the survivors will be slow. The potential economic cost of the global recession such a pandemic would trigger is put in trillions of dollars.

Individual companies need to consider the potential impact of a global pandemic on their workforce, infrastructure, supply chains and operational capabilities. How will you continue to function when key staff are ill or dead, absenteeism is at 50%, normal travel and trade have been severely curtailed, and there are national shortages of food and energy? The decision to make adequate preparation for a flu pandemic must come from the highest levels of management and involve every department – this can make the difference between the survival or the collapse of companies. Pharmaceutical companies must develop contingency plans detailing what to do in preparation *now*, how to cope *during* the pandemic, and how to survive *afterwards* during the long recovery process, where the well-prepared will have large commercial advantages. Critical functions must be defined, and plans made for backup, cross-training and working from home, using decentralized IT. Essential supplies including emergency generators, fuel and raw materials may need to be stockpiled if work is to continue. Provision must be made for illness and deaths on the work premises, and for the care and quarantine of those affected. Clear criteria are required concerning who will trigger the emergency plan and under what circumstances, and any plan must be tested in reality and refined iteratively.

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