IT'S TIME TO THINK DIGITAL

Like intelligence agencies, insurers need fewer James Bonds and more computer nerds

Arthur White

If you take the movies seriously, spies have exciting jobs. To get the low-down on their suspects – Cold War communist double agents, power-mad dictators and the like – they sneak into offices at night to photograph documents with miniature cameras, observe underwater lairs from mini-submarines, and tease loose pillow-talk from the beautiful girlfriends of cruel warlords.

Alas (for the movies), these hands-on "intelligence gathering" techniques are becoming obsolete. The explosion of data provided by the Internet, mobile phones, and global positioning systems has radically changed the sources of information that intelligence agencies rely on.

> When documents are stored on computers linked to the Web, there is no need to rummage through filing cabinets. A little hacking will do. When people show you where they have been by posting photos on Facebook, and when you can

track the locations of their mobile phones, you don't need to follow them around.

As a result, intelligence agencies need fewer exploding cigars and more mainframe capacity. Fewer James Bonds and more computer nerds.

Unlikely as the comparison may seem, the insurance industry is undergoing the same transformation.

Like spies, insurers seek to make informed estimates about things that are normally hidden – not espionage or Cold War battle plans, but the probabilities of insurable events: car accidents, ill health, living to 95 years of age, being burgled, and so on. And just like spies, insurers are finding that new information technology is making many of their traditional methods of discovery redundant.

Consider car insurance. Statistics about the age, sex, and marital status of claimants has allowed actuaries to work out that single 20-year-old men typically drive more dangerously than 40-year-old married women. But, of course, this is a generalization. Some 40-year-old women are wild behind the wheel, and some 20-year-old men are highly conservative.

That should be obvious to anyone aware of the difference between group averages and individual outcomes. But the point will be made even more obvious in the future by "telematics," technology that allows insurers to observe the actual driving behavior of policyholders. The controversy sparked by the 2012 EU ban on using gender as a factor in car insurance will soon look almost quaint. When

NEW BUSINESS SCORED LOSS RATIO

IN DIGITAL MARKETS, THE QUALITY OF LOSS MODELS DETERIORATES FAST – BY AS MUCH AS FOUR LOSS RATIO POINTS PER YEAR

Source: Oliver Wyman analysis.

Note: "Belief" is the predicted loss ratio for a tranche of new business at time period X. "Actual" is the eventual actual loss ratio for the given tranche of business.

insurers can observe driving habits directly, crude generalizations using gender-based predictions will be obsolete.

Telematics is but one example. Customers' activities are increasingly recorded electronically: what we buy from whom, where we dine out, whether we pay our debts, where we are interested in going on holiday, which articles we read in which newspapers, which movies we watch. Such information can paint an extraordinarily accurate picture of a person, her lifestyle and disposition, making the old socio-demographic but impersonal information that actuaries have relied on seem archaic.

Just as intelligence agencies today sort nuggets of valuable information from ever increasing torrents of data, insurers will similarly need to sift through huge and varied quantities of data to discover relevant behavioral insights – and they will need to make agile decisions as a result.

This is not just a theoretical, future problem. In markets such as the United Kingdom, increasing flows of information and rapid "aggregator-based" trading are already the norm in motor insurance. Our data suggests insurers who cannot adapt their models fast enough could lose out by as much as four percentage points of margin per year. Of course, not all this information will be available to insurers. But much of it will be, if only because low-risk people will benefit by making it available. Openness will be rewarded with lower premiums.

In this context, the historical insurance business model looks increasingly dinosaur-like. New commercial species – brand-led consumer-oriented companies and "information companies" such as Google, which were not merely born into this new environment but helped to create it – are better positioned to capture new opportunities. They have the right skills and cultures, and they are unencumbered by legacy assets devalued by the explosion of information and the growing willingness of people to transact online.

You only live twice, according to the title of a James Bond movie. If today's insurers are to thrive in the new world of abundant information and hands-off transactions, they will need to be reborn. They must transform into the very information companies that threaten to supersede them.

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http://www.oliverwyman.com/insights/publications/2015/jun/think-digital.html