Paul Saffo, a technology forecaster and advisor to private and government clients worldwide, says “if you’re really determined to find that next big idea and time it right to make a difference, it typically takes 20 years from discovery to takeoff.”

One important forecasting lesson he learnt came during childhood when a rancher warned you should never mistake a clear view for a short distance.

The reason for the 20-year delay is because it takes time for new innovations to be embraced and woven into people’s routines.

The secret to success is to know how to fail in the right way, explains Saffo, citing the example of Silicon Valley where he says much of its success has been built on the rubble of earlier failures.

“If it’s been failing consistently for 20 years, go and get some venture money and hit it, it’s going to be a guaranteed success,” says Saffo.

In the 1950s, television was like the web today; entrepreneurs had shoestring budgets but big ideas. Society has shifted from the age of consuming information to one of personal experiences and networking with websites such as Facebook, YouTube, MySpace and Wikipedia.

The Stanford University professor adds we are now on the cusp of “the creator economy.”

“Creators are economic animals, who in the course of their day, are creating things and consuming things. The real indicator of this is Google; someone may think they’re consuming something, but actually they’re creating something of value for someone else.”

**A robotic society**

Saffo says innovators should be on the lookout for “indicators,” or those “little trends hanging down from the future that can instruct us.” He predicts that robots represent the next wave, building on the innovation known as Roomba, the robot-like vacuum cleaner known to many households.
He says Japan targeted this decades ago as they realised their society was ageing. The solution was to have more children, bring in immigrants or create artificial humanoids to do the work.

In 1992, when telecoms giant AT&T deployed its first operator system that recognised five words, it saved the company 200 million dollars a year in staff costs.

“When you see an indicator, look for clusters of indicators coming together,” Saffo says, citing one futurist’s prediction that half of the vehicle miles driven in the United States each year will at some point in the future be driven by robots.

In terms of today’s economic downturn, Saffo says “a whole pile of rubble has been created” and it can be turned into innovations so long as people are not afraid of failure.

The age of the biologist

Saffo says part of the innovators’ challenge is “looking for rhyming patterns in history’s cycle to see what might be ahead.” He uses the example of how chemistry and discoveries of the late 1800s set the stage for the development of new technologies. Later in the 1930s, physics replaced chemistry as the dominant field in science but it, too, was replaced by an era of electronics that began in the 1950s.

Today, biology is likely the field that will replace the dominant business focus that has been so centred on electronics. As interest grows in biological fields such as human genomics and DNA, Saffo says it is not about biotech rather ‘biothinking’, using nature as a kind of an inspiration to look at products in a whole new way.

Nike and Apple, for example, teamed up to create a running shoe that tells the iPod what to play, based on sensors that track a runner’s performance. As engineers and biologists merge ideas, more personalised innovations will continue to come about.

The power of social groups

The founding chairman of the Samsung Science Board explains: “Because our innovations occur in a larger context – be it social upheaval, political turmoil, a business shift, a move in consumer attitudes, or any one of myriad environmental conditions – the challenge is really, how you take a simple idea and connect with the zeitgeist so it really takes off.”

Though innovation is challenged by economic recession, it is no excuse to turn off creative energy. “Uncertainty is our friend at this time,” says Saffo. “From this uncertainty will come opportunity – that is, if we step back and get context to see it as opportunity.”

Paul Saffo spoke recently at the World Innovation Forum held in New York City.

Find article at https://knowledge.insead.edu/entrepreneurship-innovation/a-new-era-for-innovations-1597

Download the Knowledge app for free

Visit INSEAD Knowledge
http://knowledge.insead.edu