

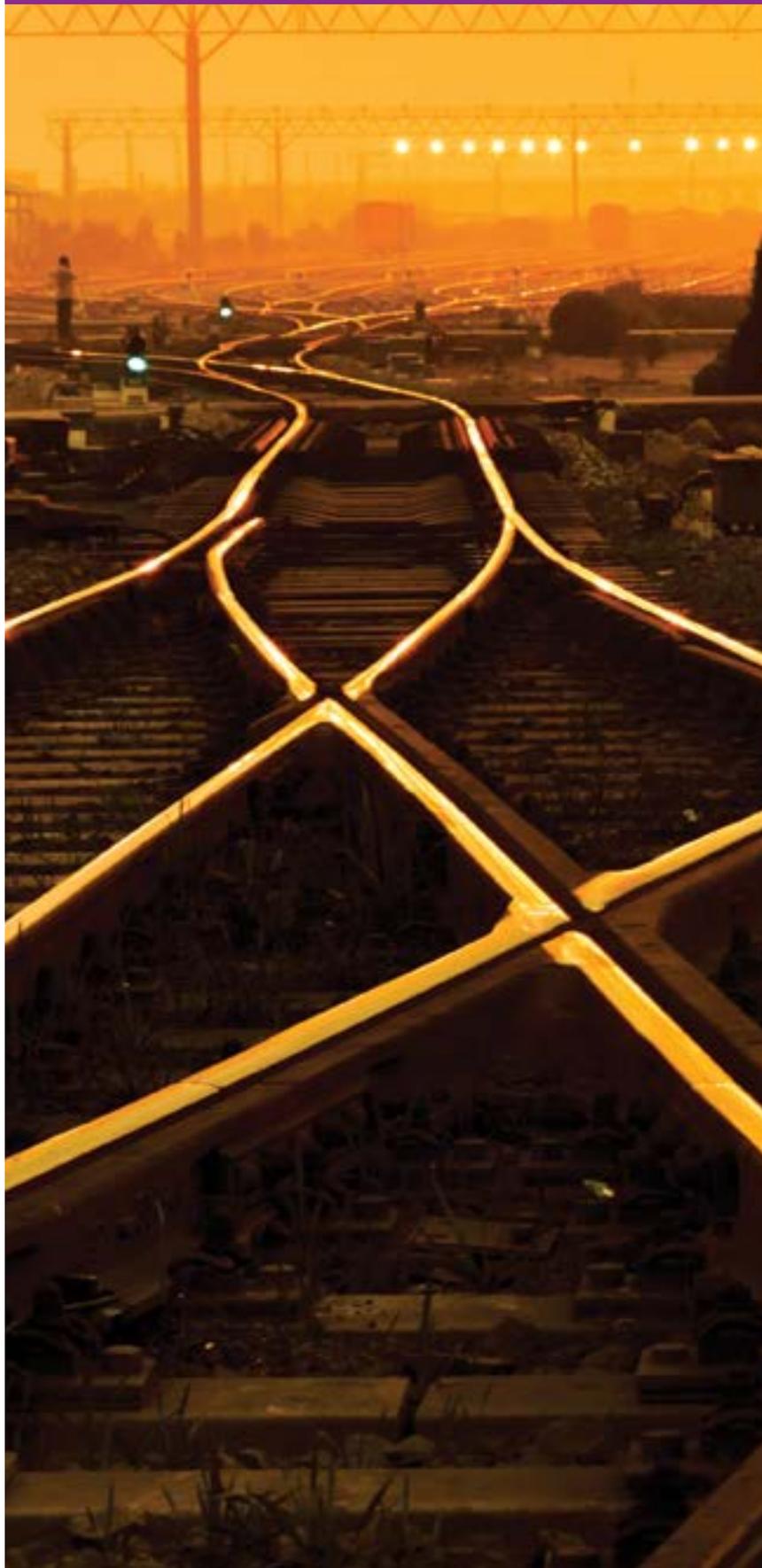


# RENEW AND NEW: THE MANTRA FOR COMPETITIVENESS IN THE HIGH-TECH INDUSTRY

## Abstract

Traditional high-tech companies, to stay ahead, must leverage the opportunities that are arising from changes around them. To compete effectively, they need to pursue a dual 'Renew-New' strategy – renewing the business to compete better in existing markets while embracing new capabilities to compete strongly in future ones. In this paper, we outline the possibilities that are in the offing for high-tech companies.

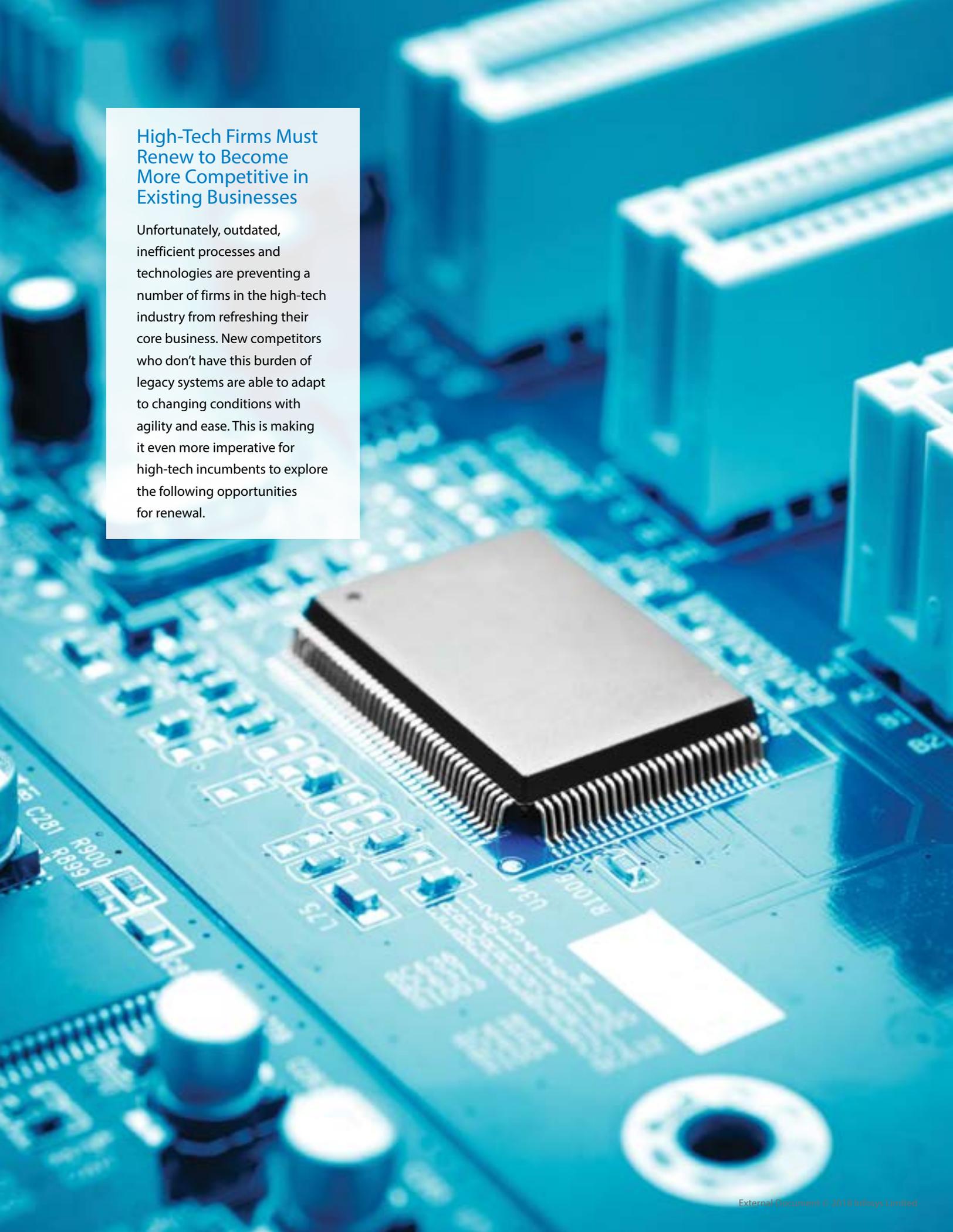
## Renew and New: The *Mantra* for Competitiveness in the High-Tech Industry



The high-tech industry is no stranger to change. But what it is witnessing today is unprecedented in terms of scale, speed, complexity, and opportunity. Three developments are driving this hyper change: technological advances in storage and computing, maturing adoption of mobility, exploding power of data analytics, and advancements in sensors; new economic models from emerging value chains that leverage new sources of scale and scope, more granular and flexible pricing and consumption models, and a continuing improvement in our ability to take advantage of the long tails; and finally, the ever-increasing expectations of digital natives are pushing high-tech companies to invent faster than ever before to attract their attention. These three drivers are reinforcing each other to set a scorching pace of change, further accelerated by the industry's desire to make up for time lost in the wake of the last economic crisis.

Amidst this, high-tech companies are facing a new challenge from other industries that are increasingly using invention in their own business. An example is Homeplus, a South Korean grocery chain, that is reinventing its sales by setting up the world's first store that allows customers to place orders through LCD screens set up at various locations which are then delivered to their homes. Of greater concern to high-tech firms are the traditional companies that are now launching high-tech products that might take away both consumer mind- and wallet-share – think TAG Heuer's plans for an Android-powered smartwatch.

Traditional high-tech companies must leverage the opportunities that arise from changes around them to stay ahead. To compete effectively, they need to pursue a dual 'renew and new' strategy – renewing the business to compete better in existing markets while embracing new capabilities to compete strongly in future ones.



## High-Tech Firms Must Renew to Become More Competitive in Existing Businesses

Unfortunately, outdated, inefficient processes and technologies are preventing a number of firms in the high-tech industry from refreshing their core business. New competitors who don't have this burden of legacy systems are able to adapt to changing conditions with agility and ease. This is making it even more imperative for high-tech incumbents to explore the following opportunities for renewal.

- Renew at the critical endpoints of the organization:** The *raison d'être* of any enterprise is to create or procure great products and make them available to customers. Accordingly, high-tech firms must ensure that the two end points, namely manufacturing and sales, perform efficiently and in a manner that differentiates their organization from competition. Here, they can draw inspiration from Apple which provides an in-store customer experience that is hard to beat and for which it earns the highest per square foot productivity known in retailing. Consider some other examples: a leading semiconductor company which is building a state-of-the-art service management platform to enable service providers close service requests; a high-tech distributor which created a platform to improve its ability to generate design wins through better collaboration with both hobbyist and commercial system designers.
- Renew through decision granularity:** The size and range of available data and the evolution of big data and machine-learning technologies have

renewed decision making into a proactive, predictive, granular, and highly personalized science. Amazon has honed its ability to make uncannily accurate recommendations based on browsing and buying behavior. Companies across the high-tech spectrum have huge volumes of data at their disposal to make better recommendations to customers based on insights at a granular, individual level that eventually contribute to revenue and profitability than on 'deadweight loss' creating averages. But this is not the only area of application. Companies should leverage analytics to renew their approach to all types of decisions whether they are in product design, procurement, manufacturing operations, and more.

- Renew to compete on 'time':** Speed of response to various stimuli is a significant competitive lever for high-tech companies that are increasingly adopting technologies that enable them to act faster during regular times as well as crisis situations. Intel has recently adopted a specialized

technology which allows it to track critical components as they travel between factories and thereby prevent disruption to the production line. Another global high-tech firm is creating systems cutting through organizational silos in the hope of obtaining information on quality issues faster so that it can minimize the time to detect a defective product in the assembly line and make real-time design changes as it gets insights from its customers. In a business where usually the winner takes all, the importance of agility cannot be overstated.

- Renew the commercial models:** Next-generation technologies and the cloud, in particular, are throwing up new commercial models that benefit both high-tech businesses and their customers. Industry players must take every opportunity – like Microsoft has done through its Next Generation of Volume Licensing (NGVL) model – to simplify their commercial structures, allow greater flexibility in the purchase decision, and make their services more accessible and affordable.

## High-Tech Firms Must Embrace New Capabilities to Compete in Future Markets

Where renewal is all about refreshing what exists, the 'new' element of the strategy needs organizations to introspect on the disruptions at play, and gear up to meet the demands of the future. In doing so, high-tech firms need to ask themselves what business they believe they are in, what the end-game would look like, and how they could prepare, or better still, define it. Often, this requires quantum leaps in new technologies, systems, and capabilities. Here are some of the opportunities that await them:



- **The bit is the new atom:** The world is witnessing what Nicholas Negroponte describes as the transformation of atoms to bits. Airbnb – the world’s largest hotel chain without a single property, Alibaba – the retailing supergiant with no inventory, and Uber – the biggest taxi service on the planet without a single car to its name, exemplify the possibilities that emerge when the world of atoms commingles with the universe of bits. High-tech companies must likewise step out of the physical paradigm to consider how they can leverage emerging technologies to digitize businesses and go on to generate unprecedented value.
- **Take advantage of technological discontinuities:** When new technologies create transformations, they also bring about discontinuities. These discontinuities are occurring faster and faster, leaving enterprises with a very short window for action. But there is an upside to this challenge that

smart-thinking high-tech companies can leverage. For example, we are in the midst of a convergence-divergence paradox in telecommunications where IP adoption has led to text, voice, and video being delivered on the same devices, but at the same time, the variety of devices providing these experiences has multiplied. Cisco has been bravely disrupting its own business to replace older technologies with unified communications. Yahoo’s (albeit delayed) acquisition of Flurry to compete in mobile advertising and ARM’s push for RISC-based architecture has led to its widespread adoption in mobile manufacturing.

- **Predict and play in the rewiring value chains:** Disruption is rewiring the high-tech value chains. With the returns from Moore’s Law plateauing, semiconductor manufacturers are grappling with the exorbitant research and capital costs of new innovation leading to the

winner taking all in the semiconductor segment. IDMs are increasingly outsourcing to foundries such as TSMC which in turn, are now competing on value propositions beyond price. Chip packaging too is increasingly being outsourced to assembly and test companies leading innovators to focus and differentiate based on design and selling. A similar war for value is happening in the Internet of Things with companies competing to define the industry value chains. Google’s acquisition, Nest, has launched Thread protocol in collaboration with Samsung and ARM, a fan and a lock company respectively. Qualcomm is pioneering AllJoyn and has enlisted Cisco and Microsoft. As the existing value chain comes under increasing pressure, it is imperative that the high-tech industry figures out the best way to deal with the change, and look for new opportunities. That will call for some smart bets and agile moves.

## Renew-New is Not an Endpoint, But a Continuous Cycle

High-tech firms will soon discover that the renew-new strategy is an ongoing journey – a journey in which they can push the boundaries of not just their business by becoming more efficient and productive but also their imagination to enter new territories, create new businesses, and define new end-games. But they must also take care to strike the right balance between the two. As the experience of Dell in the previous decade showed, a highly efficient operation can only take a company so far – like it did in this case – and might even lull the organization into a false sense of security against emerging threats. On the other hand, an enterprise that's always chasing the new without refreshing the old might end up living on the bleeding edge.

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