The Fluid Core
How Technology Is Creating a New Hierarchy of Need, and How Smart Companies Are Responding

By Haydn Shaughnessy, in association with Cognizant’s Center for the Future of Work
Executive Summary

The 21st century enterprise will likely be defined by one overarching transition as organizations complete the journey to what used to be called a post-industrial enterprise – moving from a purely production-focused model to a hybrid production-and-services framework.¹

This shift is happening precisely as mobile and cloud² computing enable seamless, friction-free services development. These technologies are key shapers of the most pervasive changes we have yet experienced in the global economy – compelling enterprises to operate well beyond their comfort zone. Change is so pervasive that many organizations find it difficult to keep up, keep track and respond in a timely way.

To understand the nature of these changes and the way in which leading enterprises are responding to them, we interviewed 30 CIOs and chief innovation officers, as well as CEOs of service providers that capitalize on, or propel, enterprise disruption. We interviewed leaders from some of the largest players in IT (Dell, SAP), financial services (ABN AMRO, Chubb) and media (The Washington Post Company, Forbes).

Our findings suggest that successful organizations are claiming the future by understanding a new hierarchy of enterprise needs, and adopting a new, adaptable infrastructure where technology, humans and competitive conditions intersect and can interact in real time (see Figure 1).

Ironically, as service-based models grow, companies that were born in the services era (Google and Amazon.com, for example) are rapidly developing their own device-manufacturing strategies and capabilities. These businesses are seeking to integrate production and services for what might be called the “deviceware age,” in which we create and consume what is at once product and intelligence, product and software, content and connections.
The “services” economy is in fact becoming an embedded ecosystem, where content, intelligence, service, connection and transaction are incorporated into an object or device.

At a strategic level, this is changing how companies must envision and plan the capabilities they will need to be successful. In place of the old concept of business core and context, organizations must adopt what we call a “fluid core,” which enables companies to continuously redefine what is core to their competitive advantage.

These changes are also making it possible – even imperative – to complete the transition to “deviceware,” which compels organizations to segue from a production focus to a production and services orientation, and from hardware to software plus hardware. In this way, companies can build the core necessary to help ensure a highly adaptive strategic competence and succeed in the global marketplace.

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**The New Hierarchy of Need**

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Figure 1
Thinking Beyond the Core Competency

At a strategic level, the relentless pace of technology is forcing companies to think beyond their core competency. Getting there requires mastery of the following:

- **The Fluid Core:** In place of a rigid “core” the fluid core adapts to new strategic priorities, primarily the need to seek out new markets and opportunities.

- **Radical adjacency:** We call the pursuit of new products and markets radical adjacency - the powerful strategies that adventurous companies develop to dominate or capture markets where they have little or no prior experience.

- **A new service infrastructure:** This is made possible by the second level of the new hierarchy of need, where cloud and mobile enable rapid new service development and new innovation paradigms.

- **Drivers and strategy:** Sitting above the service infrastructure in the new hierarchy are human innovation and radical adjacency.
  - On one side, trends such as bring your own device (BYOD) express personal empowerment through technology. They disrupt systems and organizational expectations.
  - On the other side is the power of some companies to address entirely new markets, and their willingness to work with a fluid concept of what is core to the business.
  - Taken together, the need for radical adjacency and the tendency of the labor force to become more empowered is making it increasingly difficult for management to make critical calls around brand and employee loyalty.

- **Externalization:** A new labor ecosystem - one that is global and transformative - has emerged. It is capable of providing for most enterprise needs. But it requires companies to strategize around where and how to secure skills and creativity, and for how long.
  - The new labor ecosystem is part of a broader externalization process, since companies have to externalize many essential processes that they cannot excel at internally. Literally, in this environment, companies go outside their walls for functions that are absolutely central to their identity and success.

The rest of this report examines these themes in more detail, and characterizes them in a way that can be understood and addressed by senior leadership teams.

**New Times, New Rules**

In this period of profound change, many of the current orthodoxies about business opportunity, business models and the technology tools used to run enterprises are under significant stress. Executives looking around their own or their competitors’ organization recognize that there is significant work to be done in terms of re-thinking what the business does and re-wiring how it does it.

At the core of the challenges and opportunities that face senior leaders is the need to adapt to a new chapter of competition by infusing new skills, new tools, new management models and new faces into the business.

Our research suggests a far different reality on the ground – and in the boardroom – one that is not the same as simplified explanations from the outside might suggest. There is no single, linear driver of change; it is constant, multifaceted and overwhelming in many cases.
The overarching change that we are witnessing in the market is the transition from a pure production-based to a production- and service-oriented enterprise. After an extended evolutionary period, companies are finally integrating services into their product offerings, at the precise time that mobile and cloud computing are enabling seamless, friction-free service development. At the same time, companies born in the services era — for example Google — are now rapidly developing device strategies in pursuit of deviceware.

The Nature of the New Service Economy

Companies are experiencing a fundamental change in how enterprise business is organized. In fact, over the past 30 years companies have transitioned from a product-centric to a service-centric organizational form.\(^5\)

One might think that this transition is over. After all, western economies have largely shed manufacturing-based, production-type jobs and replaced them with service roles that require minimal training. However, there is a profound misperception about this transition.

Organizations must reappraise the evolution of the services-based economy; what we are now experiencing is in fact a new phase in its development. Businesses are being forced to rapidly complete this transition because mobile and cloud technologies are key enablers that competitors are fastening on to. But that is by no means all.

Rick Kreifeldt, who heads innovation at Harman, the leader in in-car infotainment systems, puts it this way:

“Traditionally, in our U.S. and European centers we did not pay attention to emerging markets. New car-makers are doing that now. There is also technological change. Open source software and cloud computing are bringing new competitors such as Pandora and Spotify into the market. These ‘service’ models mean that we have changed from being a company that was hardware-driven to being one that is software-driven and one increasingly focused on delivering a ‘service’ by working in the cloud. Twenty years ago we had a very large hardware component with little software. Now in a large project we might have 50 software engineers to one hardware engineer.”

What Kreifeldt is alluding to is the presence of the “device” — an object, often a smartphone, but increasingly an embedded processor through which products or services are delivered and transacted. The device is no longer just hardware; it is hardware, software, services and connections. To move into deviceware quickly, to complete the transition to service, companies are looking for on-demand skills in key areas of their businesses.

This trend is characterized by extensive externalization of key processes, many of which, such as product development or UI/UX design or product design, would previously have been considered “core” to the organization, and would have therefore been executed by internal staff on the company payroll.

The trend towards service and externalization is seeing enterprises become almost entirely “porous.”\(^6\) As Kreifeldt says:

“We have big discussions on what is ‘core’ vs. ‘non-core’ in our operations, for example, in the area of speech recognition, where there is an engineering focus.”
Take the whole business of industrial design. Our consumer division has now gone to outside design firms— for even things that are part of our brand identity— so that we can get best of class. And we think that is okay.”

The externalization of business operations enabled by and requiring more production-service integration is seeing enterprises reconsider both what they do and how they do things. Many are consequently looking to change their strategic focus, pursue new opportunities and shed incumbent legacy parts of their business.

One key tactic to achieve this is through a much greater focus on partnership-building.

Aaron Levie, the 27-year-old CEO at Box, an online file sharing service, sees it this way:

“Partners for us are distribution, and recently we partnered with Deutsche Telekom in Europe where we see a lot of growth ... We also partner with companies like HP, Dell, Salesforce.

Secondly, our platform is a developer platform that third-party developers can build on top of our technology and take us into different verticals.”

Radical adjacency occurs when companies must step outside their core competency or core markets in order to innovate or grow in adjacent markets.

And Oren Michels, CEO of Mashery, a company that provides API management, adds:

“We often try to interpret our clients’ externalization of their processes as APIs. We don’t generally use the term ‘externalization.’ Also, people think of APIs in terms of a developer community but we use the term ‘partner.’ Our clients are trying to accomplish making their world and yours better, and the real root of it is a partner strategy, internal or external.”

Globalization and new waves of non-western competition are creating new competitive threats, which compel western enterprises to search out new areas of business both in emerging fields and new territories (for example, Microsoft and Google moved into telephony through the acquisition of Skype and the development of “Hangouts,” respectively. Ericsson pushed into various service-centric business lines, competing with service companies such as IBM in the managed services arena).

The Rise of Radical Adjacency

Together, these trends are creating much more intensified competition and much less predictable competition. They are also driving a new behavior: radical adjacency.

Radical adjacency occurs when companies must step outside their core competency or core markets in order to innovate or grow in adjacent markets. In reality, that is precisely what the new service orientation facilitates. Radical adjacency becomes easier and more necessary.
Traditionally, these types of moves have been the toughest call in business; consequently, many enterprises have shied away from making them. But being able to manage adjacencies is now a core skill; Apple’s move into mobile is but one example where a radical adjacency play worked out spectacularly well.

Externalization, the rise of the device, radical adjacency and ecosystems are all manifestations of the core underlying changes happening across the technology landscape.

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As Fabian Schlage, who heads up innovation at telecom infrastructure provider Nokia Siemens Networks (NSN) puts it:

“... We need stickiness in our products and to do that we look for technology from other business sectors to create unique products. In an ecosystem we can help to shape what is happening and we can integrate other people’s inventions.

We need to make savings in R&D costs also, and we recognize it is not so important to own the patent now. We need product development to be faster so a lot of our work is about utilizing the patents of our partners and in working on projects where we co-create IP.”

Nokia-Siemens, previously a patent-driven company, now thinks in terms of partnerships — using other organizations’ or individuals’ technologies; adopting technologies from adjacent sectors; not owning the patent, and developing strategies to speed development. This represents a profound shift for a giant old-line business and is a clear indication of the pressing need to adapt to these new dynamics.

AT&T recognizes these dynamics, but also sees the importance of the role customers can play within new business ecosystems. The company’s focus, as John Donovan, SEVP of AT&T Technology and Network Operations notes:

“... is on the intersection of product and customer. A small company with consumer activity would be having a product release every Tuesday, already knows which features work and which do not. It is an adaptive pattern focused on usability. It turns the product manager’s role into price and place rather than the product.”

You can’t get much more externalized than that. AT&T is signalling that it needs to operate like a small company and operate at the pace small companies can operate. Traditional large-company product development and release cycles are a thing of the past. “Co-innovation;” “partnering;” the use of specialists for core competency tasks; dual innovation models; narrow innovation, and highly adaptive product processes are all highly externalized and all key to the new operating principles required for success in the new markets emerging all around us.
Box’s Levie believes that:

“Enterprise architecture will look vastly different in the future, especially the role of IT and of tech, and of what becomes do-able in the enterprise. The cloud makes a lot more possible. IT can move away from managing servers and data centers to ask how do I manage or contribute to a world class enterprise.”

The service layer that will enable this vision is already emerging in old-school organizations like The Washington Post Company. As CIO Yuvi Kochar relates:

“At The Washington Post we are moving more towards a platform business with a lot more content providers in addition to Reuters and AP. We associate with a lot of smaller companies or individuals.”

This dual theme of needing new skills and increasing personal responsibility runs through most companies’ analysis of the challenges they face.

Lewis Dvorkin, Forbes Media’s Chief Product Officer, also sees a completely different model of content production emerging in the field of media – but these changes are applicable elsewhere, too.

“Technology is a very daunting driver, especially mobile, tablets, smartphones. The move from print to the use of the desktop for content took 20 years but the shift to mobile is lightning fast. The economics of journalism are broken and in order to find a new model, we need to look at new labor models and new processes to create quality content. Anybody, theoretically, can publish; anyone who is smart can find an audience, very cheaply, without a printing press. And yet in digital, advertisers do not want to pay for an audience in the same way they pay in print. So the question is how do you use the tools? How do you find the talented people to create content for this world?”

Staking the Claim: Finding Skills, Increasing Personal Responsibility

Executives interviewed for this report commented on many aspects of the structural and secular changes they see occurring around them. One of the most important, that all agreed on, is that the nature and type of skills that their organizations need are changing materially, at every level of their organization.

From the graduate entrant to the top of leadership – in every aspect of enterprise activity – a new skill, approach or philosophy is now needed. And it is not just about qualification levels or experience. It is about personality, attitude, creativity, maturity and responsibility, and finding people who can respond to and lead their enterprises through an array of transitions in nearly every activity imaginable – driven by technology, new behaviors, a new competitive environment and many additional factors that we will describe later.
The Washington Post Company’s Kochar explains it this way:

“Finding the talent that can deal with all these technologies and be savvy without increasing our costs is a huge challenge. We are up against all the mobile companies and the product companies. Although we have an interesting brand, talent remains a huge challenge.

It goes beyond technology and is related to product developers who can also deliver a new business model. People who are exposed to social [media], for example, they are emerging and there is not a lot of experience out there.

There’s a more general issue of how you prepare people for jobs as jobs are changing so quickly. Kids coming out of college are already under-prepared and don’t have the skills needed. That’s why ongoing education is so much more important. People must take on the responsibility of educating themselves.”

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There are companies that have mastered this new dynamic, but they tend to be start-ups and highly adaptive. Levie of Box points to the sheer velocity of change. He notes:

“I think talent management is changing but the core philosophy is the same. We are working on a faster cycle time, innovating every month or two months. We have built an organization and a model that can respond to change very quickly. It’s an extreme discipline that we have, not just in engineering but also in, for example, partnerships.”

How are more established players dealing with change? Alberto Prado is responsible for high-performance innovation at European consumer electronics giant Philips. He alludes to Philips’ pressing need for a more open research environment to advance its innovation agenda:

“For me open innovation is first and foremost an attitude that requires behavioral change – apart obviously from requiring the right tools. We have been training and coaching our engineering teams across all sites as part of a multi-year program to turn Philips into a more outward-looking organization.

These skills can be as basic as knowing how to pick up the phone and have a conversation with an external company/individual, understanding what to share and what not to share at each stage of the relationship.

If you dive into research it is even more challenging. And I think it goes as far as our educational systems – we are educated to solve problems, and not to work with others to solve them. This is particularly the case in science and engineering, where people tend to be naturally introverted. There is a lot of inertia from those formative years [when] taking the solution of a problem from somewhere else is equal to failure – reaching out does not come naturally. Researchers and engineers have a tendency as a result to become skeptical about the validity of solutions coming from outside – [the] not-invented-here syndrome.”

Research is the lifeblood of a company such as Philips, but attitude changes are also on the agenda at companies such as National Geographic. As Digital President Declan Moore notes:
“We have reoriented around three key areas: kids, travel and the core. In these areas now we are 24/7, 360 degrees. For kids we are 24/7, 360 across the Web, mobile app and TV. In travel it is the same with the addition of products and events. And with the core also we are thinking print, digital and events.

We’ve also changed from siloed groups, there is much more engagement and cross-working.... We absolutely need people who can self-develop. There are a lot of opportunities but that is for people who can be 360 and take an interest in the Twitter feed, the blog, the online edition, etcetera. They have to be multitasking and they have to have their finger on the pulse of what other people are saying.

If you are nimble and can navigate all that there are a lot of opportunities. It has been a challenge.”

These observations are not confined to companies with an obviously high degree of creative input such as media and research. In the relatively slow-moving world of train transportation, Bombardier is struggling with talent. Chief Innovation Officer Martin Ertl comments:

“It’s a challenge for every company to find the right talent. The real question is finding the right people for the right purpose, which is different from getting the top grads. We have programs, in all large facilities; we are in constant contact with universities, and local suppliers, to be an attractive employer.”

But in the world of R&D there is considerable change. At global telecom infrastructure leader Ericsson, Head of Innovation Magnus Karlsson notes that the company is now forced to operate two innovation models. The first is the familiar ten-year journey to create new telecom infrastructures, although that value chain is being disrupted as Asian competitors commoditize the technology far more quickly than in the past.

To compensate for this, Ericsson is developing a second model focused on innovation around services. Karlsson makes the point, though, that there is very little slack left to double up on innovation:

“The second model is more insight driven, so [it] needs constant attention to new opportunities. It is an extremely difficult management challenge – can you create new stuff while delivering what you have?

Ten years ago companies had some kind of organizational slack, stuff happening under the radar. This is no longer the case – that slack is gone because we use Six Sigma or operational excellence. R&D is more factory-like and less exploratory.

So we are becoming more assignment driven as the space to discover is taken away. Going forward we need to pay attention to exploration and where we can design in the resource. The management challenge for us is this type of manager who recognizes the need for an innovative strategy while delivering on what has to be done.”

The skills challenge extends into the new geography of the organization. Says Andre Durand at Ping Identity, a 300-person software development company in Denver:

“The first thing that comes to my mind is the talent war or the hunt for the right talent. If you follow the logic of “hire the best” it soon makes you very distributed. So we got on to the idea of a talent pool and
researched where talent pools exist and why. For example, in Halifax (Nova Scotia) there are several universities, they are very isolated and yet people tend to stay there, and they had employment from RIM (Research in Motion). For those reasons there is a talent pool.

We can't find talent in one place so we are distributed. It's a common theme among CEOs in Denver. We don't have a Google or a Facebook or a Stanford so our conversation soon focuses on our struggle to hire.”

On a more generic level, Jon Bidwell, Chubb's Chief Innovation Officer, sees middle management skills changing:

“There's a different set of skills starting to emerge. Going back thirty years you had a whole layer of middle management that functioned as an information filter. They figured out what information was needed by whom and they distributed it pretty much like the World War II model of organization.

We’re experiencing these networks tools now, business intelligence tools, and information visualization tools that can give you a good read on information and get a much better feel of the pulse of what is happening in the organization rather than relying on someone filtering it down. The virtual company can exist because the high trust, low control element is there. In our innovation group we do a lot of work virtually with people who may have worked for Chubb in the past or with colleagues or with people we bring in for an assignment.”

Up from middle management, the new enterprise is demanding news skills of leadership too. As Box's Levie puts it:

“Leaders need to expect a world where everyone you are working with will have access to the strategy, to customer feedback, and other types of information. People will expose information, share and consume, and create and distribute ideas.

This changes the dynamics of leadership. It's no longer about going into a corner and deciding strategy. It's about many ideas that you become the curator of and which you help people to execute.”

These executive views are directly in line with findings from a recent Forbes magazine survey of skill requirements, which found that the following attributes are key to the new types of jobs that enterprises are looking to fill.

- **Critical thinking** (found in 9 out of the 10 most in-demand jobs), using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- **Complex problem solving** (found in 9 out of the 10 most in-demand jobs), identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
- **Judgment and decision making** (found in 9 out of the 10 most in-demand jobs), considering the relative costs and benefits of potential actions to choose the most appropriate ones.
- **Active listening** (found in 9 out of the 10 most in-demand jobs), giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate and not interrupting.

Enterprises need people who are self-educating, and able to re-educate fast; who are able to work in small teams that can generate new business models alongside
technological or service innovations; who can create and execute; who have their “finger on the pulse,” and who can generate new insights into new customer needs. They need middle managers who can redeploy away from being simply “gatekeepers” into leading the newly emerging global service economy; and leaders who can act more like peers — extending higher levels of trust to people in their teams.

In other words, a new skill set is essential to thrive, and also to make the key transitions implied by the new hierarchy of need.

**Externalizing the Core**

Mobile and cloud computing are accelerating a number of paradigm shifts. For instance, the ability to quickly create new service offerings by combining cloud services into one new master service. The shift to BYOD... the acceleration of the open or porous enterprise... and the more general “consumerization of IT,” for example, have reduced the power of the Wintel monopoly — the alliance between Microsoft and Intel that sold millions of desktops, laptops and notebooks for decades.

As Box’s Levie suggests:

> “In the past 95% of desktops and laptops were controlled by Microsoft. Now Microsoft controls less than 50% of the devices that people use to work and share information. So enterprises need to source a whole range of new applications, which is a huge change for the business.”

Mobile and cloud computing are accelerating a number of paradigm shifts. For instance, the ability to quickly create new service offerings by combining cloud services into one new master service.

The growth of cloud computing is not only allowing enterprises to access key processes as external services; it is also enabling them to incorporate users into product development initiatives, to access original ideas and to make use of new labor pools. In summary, the cloud is allowing enterprises to redefine innovation.

The cloud provides ubiquitous access for trusted collaborators, often through application programming interfaces (APIs). This requires the development of software platforms that have multiple access points for members of the extended partner base/workforce (also known as the ecosystem), and a more open mindset by senior executives.

This approach can be seen widely across a range of enterprises and industries, including media (where Forbes, as an example, now uses 1,000 external contributors, this white paper’s co-author Haydn Shaughnessy among them, and only has 200 employees) and also in auto manufacturing, consumer electronics, retail and heavy industries.

Bombardier’s Ertl explains:

> “On APIs we have a first attempt in the EU to obtain funding for API development. We are looking for one billion euro there. We are looking for new ways of interacting with each other on an integration level, open standards and then APIs.”
In consumer electronics too, category leader Philips is conscious of the need to move in a similar direction, as outlined by innovation head Prado:

“If you are referring to opening up the APIs of our device software and letting app developers create applications for our devices – we are still not there. My other role within Philips is head of digital innovation and I lead a program to digitize our portfolio, i.e., integrate sensors, connectivity, analytics and leverage on smartphones and tablets to enhance the product experience of our consumers. Strategically I know that, taken as a reference for what happened with smartphones, household appliances could benefit from having external app developer ecosystems that target our device hardware to create choice of experiences for our consumers.”

Many aspects of the SMAC Stack are actually a more profound externalization of processes, often core processes. One expression of that externalization model is the rapidly developing notion of “crowdsourcing.”

Many aspects of the SMAC Stack™ (i.e., social, mobile, analytics and cloud) are actually a more profound externalization of processes, often core processes. One expression of that externalization model is the rapidly developing notion of “crowdsourcing” (obtaining services, ideas or content by soliciting contributions from a large group of people – especially an online community – rather than from traditional employees or suppliers).

ABN AMRO has pioneered the use of the crowd in both ideation and funding through SEEDs (the company’s crowd funding platform) and Dialogues (its crowdsourcing platform). Notes Jaspar Roos, Chief Inspiration Officer:

“We are also outsourcing key processes and building suppliers into partnerships. We are also looking into data APIs but that will take time. We are talking with Kodak about opening up a picture API with maybe a Pinterest type of development. The banks see all industries doing this (API) so we will look into it.”

This is a view heavily endorsed by Box’s Levie:

“We do think about the crowd and our platform because the old Bill Joy saying that there are more talented engineers outside your organization has to be true. We have only 700 employees and there are millions out there in companies that we want to sell to, so there is a huge focus for us in working with the ecosystem, mostly via our APIs, and so they can build distribution out.”

A platform/cloud/crowd/API approach affords phenomenal flexibility for enterprises to build partnerships, to access new labor pools and to increase the speed of business, but for many, is going hand in glove with a more radical view of an organization’s core purpose.
Reassessing Core vs. Context

At the heart of the impact of these new approaches lies a reassessment of what is "core" and what is "context" – what is a core competency and what can be handed off to suppliers. The idea of core competency has been central to corporate strategy for two decades. But that is now changing – to be replaced by the idea of a fluid-core strategy and competency.

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Box’s Levie sees core as a highly flexible concept:

“If you follow trends in different ecosystems you can see this concept change. For example ... in 1995, if you had said that Apple would be big in retail with the highest value per square foot no one would have believed it, but now retail is an essential part of its distribution.”

Patrick Reynolds, who runs radio audience measurement company Triton Digital, adds:

“The advance of technology brings incredible financial pressure to define what core competency is. In the radio game, players have to decide whether they are in distribution or in content creation or in building audience engagement.

Some still want to build towers, some want to get down to the real core, having programming at the heart of it. New Internet pure play providers have real digital chops. Social, search, etcetera, is what they do. Old-line terrestrial companies think content building is their core. In Boston, WFNX [was] a seminal rock station that broke big bands. The Boston Globe bought the talent, root and branch, and put it online and called it Radio BDC. Very similar to Pandora. They wanted to increase engagement with the audience who could now read the Globe and listen to Radio BDC (Boston.com).”

What was core to a radio station – the tower, ownership of the distribution network, DJs, even content – is increasingly becoming irrelevant. What becomes core is having serious knowledge of how to connect with audiences through digital channels, how to stimulate audiences to create their own playlists, and how to stimulate use and sharing.

Just as with Harman, the assessment of what is the enterprise’s core competency is changing. For Harman, it is no longer hardware, it is software. Along with software goes service. Even more important, it’s no longer even the design of its products.

To secure success, companies are adopting radical adjacencies – like Apple moving into retail, a competency that given its PC and consumer device design heritage it has no right to dominate.

Harman illustrates that same point, but also shows how virtual products, assembled with multiple partnerships, are an important part of this process. As Kreifeldt notes:
“Certain Web services we just do externally. We use Amazon for example. But it is also a capability thing. As we build our services we need partnerships. I don’t know would our previous leadership have embraced that. We typically wanted to develop everything ourselves. Now, increasingly, we are building partnerships.

We partnered with Nuance for speech recognition for example. We didn’t really have the wherewithal to make the investment to be excellent at it so we sold a speech recognition unit to Nuance and now license from them.”

And this has allowed Harman to build out a next-generation platform that is unlike anything it has produced in the past. Kreifeldt continues:

“Our cloud acquisition, AHAA mobile, is a content aggregation service for automotive. AHAA provides a comms API to the car so what’s coming from say Spotify and other content services, AHAA provides a common interface. Eventually we will have it so that you can self-publish content to the platform – say for example podcasts – and the driver can select.”

The mixture of platform, radical adjacency and a new, fluid vision of “core” is allowing companies to redefine themselves by allowing enterprises to be flexible about what they define as core and therefore what products will win in the marketplace.

This virtual platform comes from a company that used to produce radios. By abandoning a traditional view of core competency, engineering, Harman has rapidly made itself more relevant to its market.

The mixture of platform, radical adjacency and a new, fluid vision of “core” is allowing companies to redefine themselves – not in some transitional sense by replacing one identity with another or one competency with another, but by allowing enterprises to be flexible about what they define as core and therefore what products will win in the marketplace.

The Hyper-importance of Creativity and Responsibility

The most pressing demand generated by all of the change discussed and outlined in this report is for a new generation of leadership and employees.

We have come a long way from the old days of truly hierarchical management. But it is nonetheless likely that many leaders still underestimate the changes required to make today’s highly externalized, hyper-innovative enterprise function well. The first requirement is to be more hands-off. As AT&T’s Donovan puts it:

“Leaders need to create a vision and inspire without managing in a ‘traditional’ sense. If you try to manage it, it will not scale at speed. You have to breathe life into it. You have to prioritize the framework, the structure and initiative, and downgrade process and project management.”
This goes hand-in-hand with being more peer-like. And the reason for that is simple. With today's highly educated, creative workforce it is imperative that leaders see themselves as first among equals. Box exemplifies this. As Levie notes:

“It’s no longer about going into a corner and deciding strategy. It’s about many ideas that you become the curator of and which you help people to execute. We want ideas shared across the organization. My role is to enable and to be a force multiplier; absolutely more of a peer. I spend a lot of my time as a peer and in projects contributing like everyone else.”

As Forbes' Dvorkin comments:

“We are working in a space where we cannot afford to have clones working for us – we need people who think differently, who challenge us, are quirky. We need to figure out how to make them successful.”

The need to change management cultures and mores is widespread. As Chubb's Bidwell notes:

“.... leaders need to understand that high control can't work. They need to set the guidelines with their roles limited to setting the outcomes, and articulating principles, and then find and allow people to execute to that.”

In an environment in which many enterprises have taken away “bench time,” when employees used to swap ideas and innovate on the fly, there is also a challenge for leaders to reinstate space to take risks and innovate.

But in an environment in which many enterprises have taken away “bench time,” when employees used to swap ideas and innovate on the fly, there is also a challenge for leaders to reinstate space to take risks and innovate. Here is how NSN's Schlage frames it:

“I try to create an environment where people can own what is an appreciated behavior within the company – to participate in new things and to have the freedom to do this.”

This is exemplified by the need for managers to take on more of a leadership role, even in enterprises where middle management has long held discretionary roles. Ericsson's Karlsson captures it well when he says:

“In the area of management and leadership there is a strong sense that leaders have to be less like managers and managers have to be more like leaders. A manager delivers while a leader looks at the horizon. It is difficult to incentivize the manager to get their eye on the horizon. We want our managers to become leaders and focus on both things, also on team work but not by the numbers but through leadership, empowerment, collaboration, focused on delivery but also on innovation and ideas from employees.”
The new character of good leadership that emerges from our interviews can be summarized as:

- **Being able to lead and innovate simultaneously**, exhibiting the fluidity needed in strategy through leadership behavior. In other words, taking responsibility for bridging the execution-innovation gap.

- **Being openly networked and transparently open** in the networked economy, so employees get the value of less hierarchical connectedness.

- **Developing a peer-centric leadership style**.

- **Allowing employees to determine desired behaviors**, especially in innovative environments, and creating space for peers to interact on innovation.

- **Focusing on empowerment rather than command and control**, realizing that to manage is to limit scale.

- **Externalizing the core** wherever it offers world-class participation.

**Conclusion: Creating the Fluid Core**

The fundamental nature of the changes we see all around us demands changes in how people think and act, lead and manage. This extends to how enterprises respond, react and adjust to a completely new environment.

While today’s successful companies are becoming “service first,” they are also looking to integrate services with products, and to create devices – products with services and content built in. In essence, their businesses have to integrate devices and services because the service has to be delivered, improved or analyzed via some object.

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As the nature of this new objective becomes clearer, and as global competition intensifies, companies are pursuing radical adjacencies in order to seek and execute on opportunities beyond their core business. This introduces the concept of a fluid core, which executives can adapt to suit circumstances and opportunities. This is why, for example, Google is pushing into telephony and tablets (to sustain its primary service businesses), or Apple builds out its apps store to complement its iPhone and iPad devices. These leading companies are acting on operating platform strategies, exploiting radical adjacencies and re-analyzing their views of their core competencies.

To maximize flexibility, they are offloading processes to service providers in the cloud, and also often offload what were formerly core competencies. They are redefining what is core and what is not – redefining it in some cases as a flexible asset.
As software “eats the world,” more and more enterprises are aiming to focus more on technology-enabled services, which in turn means they are now operating to software industry rules of rapid and accelerating innovation. But time does not stand still, as Apple and Google reveal. The new game is software companies launching into devices.

The changes discussed in this report are enabled in large part by the rapid development of mobile and cloud technologies. The collision of these technologies, new expectations by consumers, and transforming business models is forcing enterprises to reconfigure themselves and the way they attract, retain and use all assets, including the new labor ecosystem, the external ecosystem and new strategic insights. All in all, it adds up to a new operating system that is powering success – the fluid core.

Footnotes

6. There is no established literature on the idea of a porous enterprise but the idea has wide circulation. In general it means companies do not wall themselves off from the outside world and instead collaborate with new partners, experts and even crowds.
About the Author
Haydn Shaughnessy is a 25-year veteran of the innovation and transformation business as an advisor and writer. He has worked in technology management at the EU, supervising an early project in broadband applications, as well as mobile. He was previously a partner at the first social agency, The Conversation Group, where he wrote the first social media playbooks for global corporations. His contributions to Forbes.com attract six-figure audiences each month. He has worked with many major corporations and has written for The Wall Street Journal, The Times, Harvard Business Review and GigaOm, as well as produced TV for the BBC, Channel 4 and RTE. He is a research fellow at the Center for Digital Transformation at UC Irvine, where he is also an advisory board member. He can be reached at Haydn@cogenuity.com | LinkedIn: www.linkedin.com/in/haydn.

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