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HP- finding HP's mojo post split.
Is 'it' likely to be found in HPQ or HPE or both?

December 4th, 2015

W&P reported earlier on the negative shift in HP's culture up to late 2011, well before the split which has just taken place. We compared HP's innovation culture, pre Fiorina and Hurd, with the culture post the period of their influence. The shift in culture had significantly impacted morale, innovation and the fine reputation HP had as a place to work. This is now history.

The question now is where does the culture reappear, or not, in the two newly- formed enterprises? Will HP's mojo – referred to by the old guard as 'The HP Way' - come back and where?

Contents

Appendix

Background to the shift in culture for innovation

Value deterioration occurred over a period of at least ten-years.

The company was formerly known as Hewlett-Packard Company and changed its name to HP Inc. in October 2015. HP Inc. was founded in 1939, incorporated in 1947, went public in 1957 and is headquartered in Palo Alto, California.

Since HP's inception in 1947 David Packard had the longest 'period of influence'[1] over HP affairs at 46 years, leaving in 1993. William Hewlett had the next longest tenure with 40 years ending in 1987.

Subsequent to these two leaders, the 'periods of influence' become ever shorter. John Young's period was for 14 years, Lewis Platt for 7 years, beginning in 1993 and ending in 1999.

There were two 'cliffs'[2] experienced by HP shareholders. One was shortly after its acquisition of Compaq and the other around the beginning of 2010.

Fiorina presided over the period from 2000 to 2005 and Mark Hurd over the subsequent period until his ouster in 2010. Meg Whitman replaced Hurd as CEO and remained as CEO, President and Chairman of the Board up until the split.

[1] Period of influence is a recognition that the individual continues in a position of influence as a CEO, COO or as a member of the Board of Directors.
[2] See paper on 'innovation cliffs' with notes on HP on the web site

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Periods of more recent influence.

- Platt; 1992 to July 1999
- Fiorina; July 1999 to February 2005
- Hurd; February 2005 – August 2010
- Apotheker; September 2010 – September 2011
- Whitman; September 2011 to date

Under Hurd, shareholder value increased – see chart - but, as most would now understand, this was done at the cost of its research and development efforts. HP's reputation for innovation and the loss of morale throughout the organization was catastrophic. Innovators left the corporation. Morale was negatively impacted.

From a shareholder perspective, value deterioration has occurred over a decade and a half and under the watch of CEOs new to HP.

There is some opinion that the decline in innovation type investment and thinking began during Platt's term.

The company, at this point, has been set back 15 years in terms of its shareholder value. Worse than that, HP's share value did not increase over the same period as it might have done if HP had been innovating successfully. The challenges have been enormous; both for strategic decisions and management practices.

Things began to change at the outset of this century under former CEO Carly Fiorina. Fiorina engineered a $25-billion acquisition of PC maker Compaq that angered many shareholders, including heirs of the company's founders. She cut more than 30,000 jobs before she was fired a decade ago.

Fiorina's successor, Mark Hurd, also lowered expenses through much of his tenure and orchestrated an acquisition of technology consultants EDS that many analysts believe did more harm than good. Hurd stepped down in 2010 in a dispute over his expenses and his involvement with an HP contractor.

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Recapping our conclusions pre split

For a decade from early 2000, HP lost is splendid reputation as a place to work. We set out to discover the reasons why. Which innovation-related management practices had changed?

Our first report on HP, published November 28, 2014, was based on interviews with senior executives, ex HP, their completion of our on-line survey respecting innovation management practices and research from other sources.

At its peak performance, HP had, in our opinion, a set of management practices not unlike those of 3M; our current choice for a diversified company with the best innovation management practices.

In days prior to Fiorina and Hurd, employees talked about the 'HP Way'[3], a proxy for what we can call HP's mojo. Employees stayed with the company, they enjoyed working there, and up until the late 1990s there was a sense that innovation was increasing. Shareholder value was on the rise.

Value deterioration and a shift in the culture occurred over a period of at least ten years. There were two periods of rapid decline; Fiorina's time from 1999 to 2005 and from the end of Fiorina's term until 2010 under Mark Hurd. HP's reputation for innovation and loss of morale over the decade was catastrophic. People left. Morale worsened. HP's repuation was tarnished to say the least.

The Board would have been fully aware of what it was doing in bringing in outsiders to run this complex enterprise. Culture, always an important characteristic with HP, as it is in many companies, is often most difficult for an outsider to understand. Passed down through generations of management, its texture and importance is often hard to discern.

On the other hand, a Board, may take a decision that culture is getting in the way of progress and is less of a concern than achieving an acceptable level of financial return. Outside help was the option chosen by HP's Board at the time.

Quick Summary

Before the split W&P had an opportunity to evaluate HP's culture for innovation as it had changed from its peak performance to 2011. We identified those management practices which changed over the period of decline.

Now, with HP split and with both units under pressure to take advantage of their new life, are there lessons learned from the earlier decline that might prove useful within each of the new companies.

More than any rationale for making the split, the main reason has to be simply size. HP, engaged in a dynamic and ever changing market, had become too big to manage effectively. HP is not alone!

[3] The founders, known to friends and employees alike as Bill and Dave, developed a unique management style that came to be known as "The HP Way". In Bill's words, the HP Way is "a core ideology ... which includes a deep respect for the individual, a dedication to affordable quality and reliability, a commitment to community responsibility, and a view that the company exists to make technical contributions for the advancement and welfare of humanity". The following are the tenets of The HP Way: We have trust and respect for individuals. We focus on a high level of achievement and contribution. We conduct our business with uncompromising integrity. We achieve our common objectives through teamwork. We encourage flexibility and innovation.

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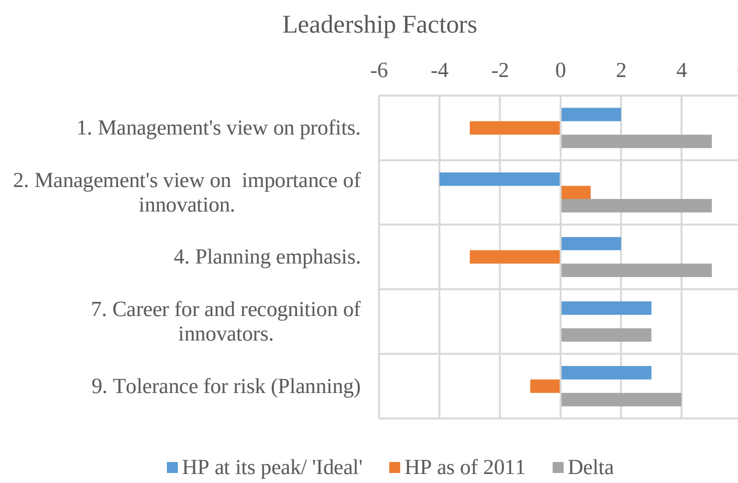
Perhaps the seeds of the decline were planted, as noted earlier, well before outsiders arrived. In any case, best innovation management practices, the subject of the earlier report and this one, were not in place at the end of the decade. What had changed?

Our conclusions, based on sources available to us at the time of publishing our report, was that the culture of HP had undergone a dramatic shift. Management practices had changed.

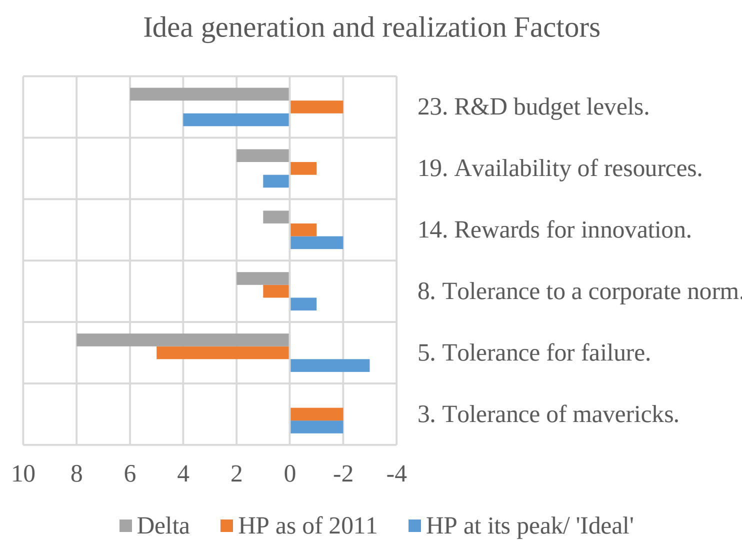
Our analysis examined management practices under three themes;

- leadership,
- idea generation and realization, and
- organization and management of day-to-day affairs.

Part of this research involved interviewing ex-executives of HP and, using our on-line survey tool[4], exploring the policies and management practices which impacted innovation in HP. Our purpose was to identify those management practices which were practiced by HP at its peak, and how these had changed from the peak to the reality in 2011; the last date where we could gain executive input.



Five Factors come under the heading of ‘Leadership’. The chart opposite illustrates the change from HP’s peak to up to 2011. Specifically, at its peak, HP management favored a longer term view of profits, explicitly called for innovation, was planning oriented, provided careers for innovators, and had tolerance for risk. All of these Factors changed over the decade.



The degree of change is noted as the ‘Delta’; the difference between HP’s peak and the ‘Reality’ in 2011. Leadership had changed the message, altered spending patterns, and dramatically shifted the agenda. People left, were demoralized, and HP became an organization which was no longer a great place to work.

[4] For further details on the on-line survey please go to http://www.corporateinnovationonline.com

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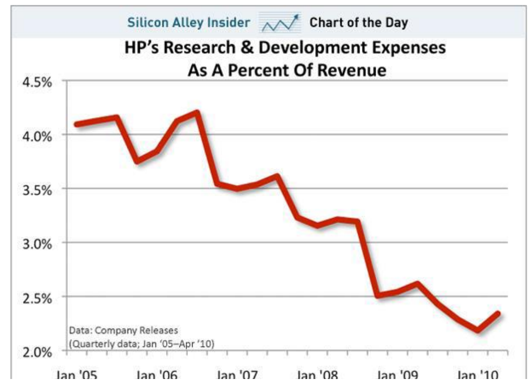
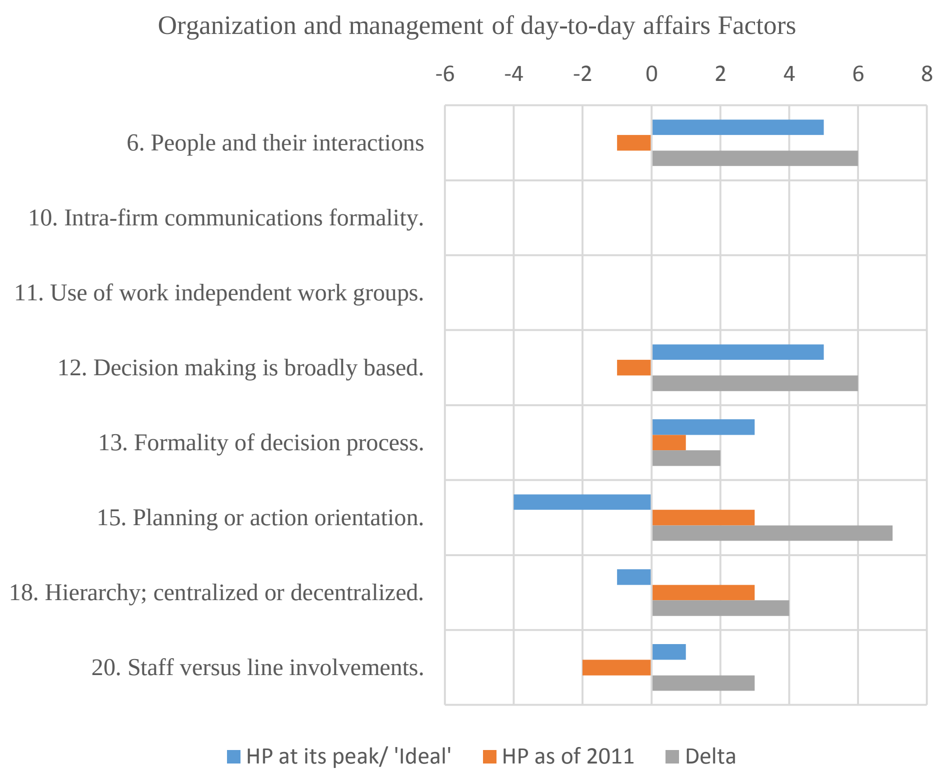
In addition to leadership Factors, we also examined a range of Factors which relate primarily to idea generation and commercialization. Again, there was a dramatic shift in management's emphasis. R&D spending levels were reduced, resources were not seen to be available – as they had been – for new good projects, tolerance for failure – a key attitude for innovative companies – changed. Failure was not as tolerated as had been the case earlier in HP's history.

One of the key areas where cost reductions took place was in R&D spending. The decline, as measured by spending as a percent of revenue, dropped over this same period – see the chart. R&D spending, particularly in companies such as HP, is a basic part of the culture. Cuts convey a message which can have a much greater impact throughout the organization than just in the R&D functional organizations.



In addition to shifts in the culture impacted by leadership and the encouragement of ideas, daily management practices underwent a dramatic change. Eight Factors are used to measure this shift; but our research was limited to six Factors where data was available.



People management (F#6) became less of a priority. Decision making (F#12) was no longer broadly based throughout the organization and collaboration (F#12 – decision making was not broadly based) diminished. HP, which had been known to take its time in planning by carefully assessing opportunities (a feature of engineering organizations), became quick to act (F#15) without the usual analysis. Hierarchy (F#18) increased as decision making became more centralized. A greater degree of autonomy had been a feature at HP's peak. In short, management started to take hold with a higher level of centralization than had been the case at HP's peak.

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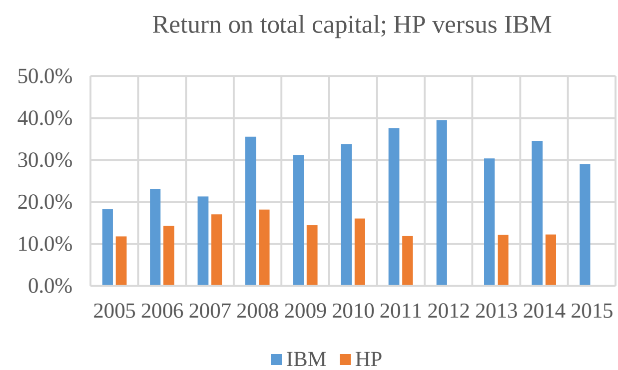
All of this analysis was, and is, available on line in our report dated November, 2014, published on the occasion of HP announcing their pending split into two entities. In summary;

- Management and the Board – i.e. HP leadership - shifted emphasis to achieving profits short term, looked less explicitly for innovation and sought out cost reductions.

- Tolerance for failure waned and spending on R&D dropped (mainly under Hurd) dramatically over this period and impacted the process of generating ideas and realizing commercial opportunities.

- HP shifted its people management practices over this same period. Consultation with 'others' in the organization was infrequent, lots of time spent on planning and less on taking action, and the centralization of decision making became extreme.

What is important in this analysis is the degree of change as represented by the 'Delta'. What was happening was different from the prior experience of HP stakeholders, particularly its employees. These were shifts away from the 'HP Way'.



HP's return on assets (ttm) was 5.28% at the time, well below IBM, for example, at 10.52% so there was certainly a rationale on the part of the Board and management for bringing about change and seeking to significantly improve financial performance. What might not have been appreciated was the difficulty of re-focussing such a large organization and doing so over a relatively short time. Two major events were happening at the same time, dramatic growth through acquisition and not organic growth and the introduction of 'outsiders' at the CEO level. But financial performance was not up to expectations so something had to change.

If there is a desire on the part of the new HP structures to not repeat the past and to encourage a new mojo, history can contribute some of the answers.

1. Invest in R&D but focus on effectiveness.
2. Take the time to communicate the new vision and its details throughout the organization. Secure a buy in from stakeholders.
3. Consider the rate of change, not just the absolute direction.
4. Carefully consider the impact of decisions respecting investment, people issues, and cost reduction plans, on the culture of the new organization.

Often referred to as 'lessons learned' these can provide future management with a view of what to do to avoid catastrophic results.

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Lessons learned or not?

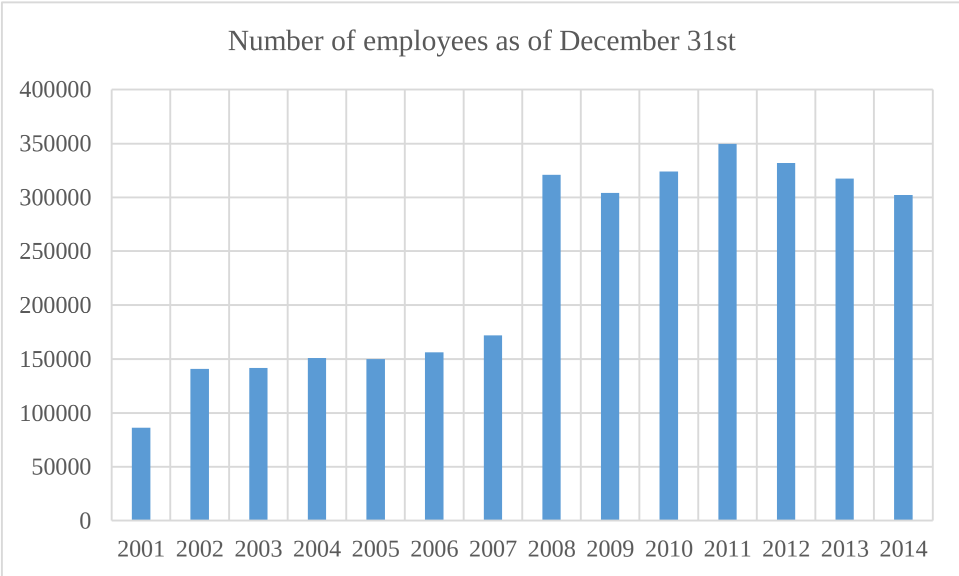
Early announcements portend a problem with morale and the likelihood of an early return of HP's mojo – particularly in HP Enterprises. Or. Will a quick set of cuts pave the way for both organizations?

At this point in the roll out of the new organizations there are indications of the direction that the Board and newly-appointed management are taking.

Cost reduction emphasis

'Hewlett-Packard (HPE) is preparing to shed up to another 30,000 jobs as the Silicon Valley pioneer launches into a new era in the same cost-cutting mode that has marred of its history. The purge announced Tuesday will occur within the newly formed Hewlett Packard Enterprise, a bundle of technology divisions focused on software, consulting and data analysis that is splitting off from the company's personal computer and printing operations. The target means 10 to 12 percent of the 252,000 workers joining HP Enterprise will lose their jobs as part of the company's effort to reduce its expenses by $2 billion annually'[5]. HP had already jettisoned 55,000 jobs during the past few years under CEO Meg Whitman.

The decline in numbers may be disheartening to current HPE employees but others may view changes in the context of a desire to make the company more manageable and improving financial performance and even offering a return to a more homogeneous and manageable organization. While this does not imply a return to the old 'HP Way' one should recall that the 'HP Way'[6] had highly desirable tenants to continue to observe. Perhaps the good parts of the old culture can survive even as the restructuring takes place.



Management no doubt takes the view that if there are to be cuts, it is best to get them over quickly and at the beginning so that the process of building a new structure can begin.

[5] CBC news[5] September 15, 2015.

[6] "The HP Way". In Bill's words, the HP Way is "a core ideology ... which includes a deep respect for the individual, a dedication to affordable quality and reliability, a commitment to community responsibility, and a view that the company exists to make technical contributions for the advancement and welfare of humanity".

Research and development

More recent increases in the R&D spend may be helpful to restoring HP's mojo.

Under the heading 'Research and Development' in the Information Statement, ***innovation*** is the first word noted. 'Innovation is a key element in our culture and critical to our success' as stated. 'Hewlett Packard Enterprise Labs, together with the various research and development groups within our business segments are part of the Corporate Investment Segments'. There could be no more specific reference to the importance of R&D to HP than this; pre split and post split. Elsewhere there is reference to a 'rich R&D heritage and roadmap'. This can be none other than a testimony to the importance of R&D to HP, obviously lost in the first decade of this century.

Recall that R&D expenditures as a percent of revenue declined during the decade up to about 2011 from over four percent to close to two percent.

R&D expenditures as a % of revenue were at 3.4% for fiscal 2013, 3.5% in fiscal 2012 and 4.0% in 2014 but still not up to the earlier rate of over 4%; but close. Now with the split of HP into two companies one might see a return to this earlier indicator of HP's culture – at least as seen by insiders. Elsewhere in the Information Statement[7] reference is made to 'historical' data which comes out as 4.36%.

HPE labs are part of its new structure. Their spending on R&D was 4.4% for the 9-month period ending in July of 2015. The implication is that R&D spending, as a percent of sales is to be higher in HPE than in HPQ.

Currently HP Inc.[8] is first in printing, first in the profitable commercial persona systems segment and number two position in the consumer personal systems (units shipped). HPE includes HP's best-in-class portfolio and innovation capacity. But while such performance is exemplary, the competition is intensifying in printing and related software, and significant sums are still required to compete long term.

To big to manage?

What does this split mean for corporate size? Has a limit been reached? Is HPE still to big?

Perhaps HP is the first of many large companies to conduct radical surgery on themselves in order to overcome issues related to size? For HP, the reasons for separation are explicitly stated but there is no reference to size. But is size an issue?

The separation is radical, complex, and costly; not only in the cost of bringing it about but also in the loss of synergy which would have been present pre split; estimated at between US$400 to $450 million annually[9]. All of this needs to be earned back by the now-split organizations.

[7] Page 44
[8] Reference the Information Statement, October 8, 2015
[9] Page 5

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HP's rationale, more specifically the rationale of the Board and senior management are spelled out in the Information Statement[10]. What is more interesting are the implications behind making this momentous decision.

- 'create two sharper, stronger, more focused companies by enabling the management of each company to concentrate its efforts on the unique needs of each business and the pursuit of distinct opportunities for long-term growth and profitability'

  This is the whole idea behind setting up business units, providing incubation space and skunk works; all of which are theoretically able to be managed within one umbrella-like organization by recognizing diversity, setting difference performance criteria and decentralizing.

- 'simplifying the organizational structure of each company, facilitating faster decision making',

  Faster decision making is tied to decentralization, use of independent work groups with authority, removing decisions from always being referred up the line.

- 'allow each business to more effectively pursue its own distinct capital structures and capital allocation strategies and design more effective equity compensation structures' and

  At one time, the idea behind embracing a larger number of businesses in one structure was to provide diversification and therefore spread the risk. Equitable compensation structures are easier to conceive when the type of businesses within one legal structure are more homogeneous.

- 'provide current HP Co. stockholders with equity investments in enhanced long-term performance for the reasons discussed in the sections entitled' etc., which goes on to repeat much of what was already stated.

  The assumption is that stockholders were not happy with the structure pre-split. Time will tell.

Other businesses which we have researched follow a different course by divesting non-performing units or where the business does not fit the culture of other parts of the organization. Segmentation might have been an alternative.

From a strategic perspective, this rationale can be applied to any large organization wishing to advance into new markets which present differing financial dynamics; expected rate of return, risk, etc.

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[10] Information Statement dated October 8, 2015

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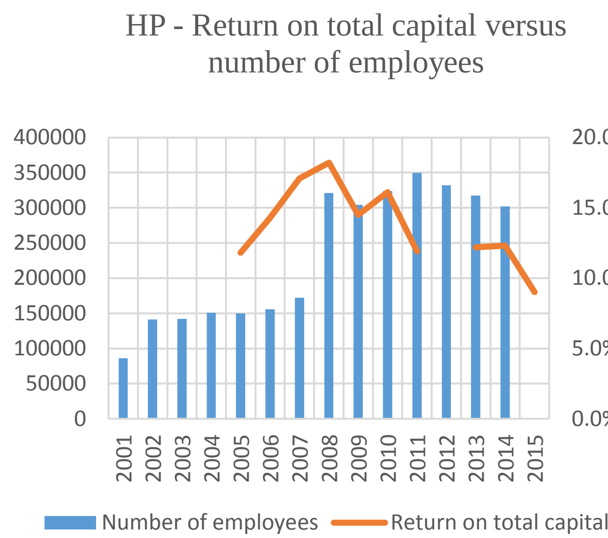
An argument presented is that each company will have a different set of competitors; a major criterion is setting up different business units within a large conglomerate. In many senses therefore the rationale for the split is more related to HP's absolute size than to the issue of diversification within a large corporate entity.

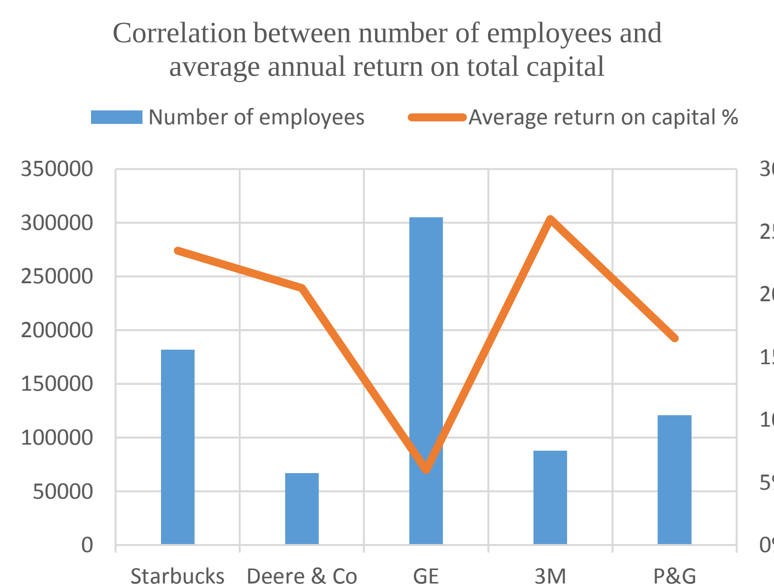


Size matters. One cannot help but be struck by the recent trends in some of the larger companies especially in the U.S. Size seems to be a factor which impacts the ability to manage.

W&P researches a small group of companies, all but one of which - namely Starbucks, are highly diversified. GE and P&G have announced as part of their strategy to have a much simpler company – translated this means more focussed enterprises under the same umbrella, more decentralization, faster acting and other management characteristics usually associated with smaller, nimbler, organizations.

HP's announced reasons for the split seems headed in the same direction, albeit with a complete split to accomplish the task and not with the usual establishment of a variety of business units within the same legal and stock entity.

In an earlier report[12], the results of our research showed a correlation between size and return on total capital. GE, of the companies which we have researched is the largest by far, but has the worst financial performance when measured against return on total capital. P&G is the second lowest and remains so to this day. Starbucks and even Deere & Co. are much more focussed enterprises than others in this group. Only 3M appears to have both diversity and a better-than-satisfactory return on total capital. 3M is an 'outlier' in the corporate world.



11 Courtesy Value Line

12 Available at http://www.corporateinnovationonline.com

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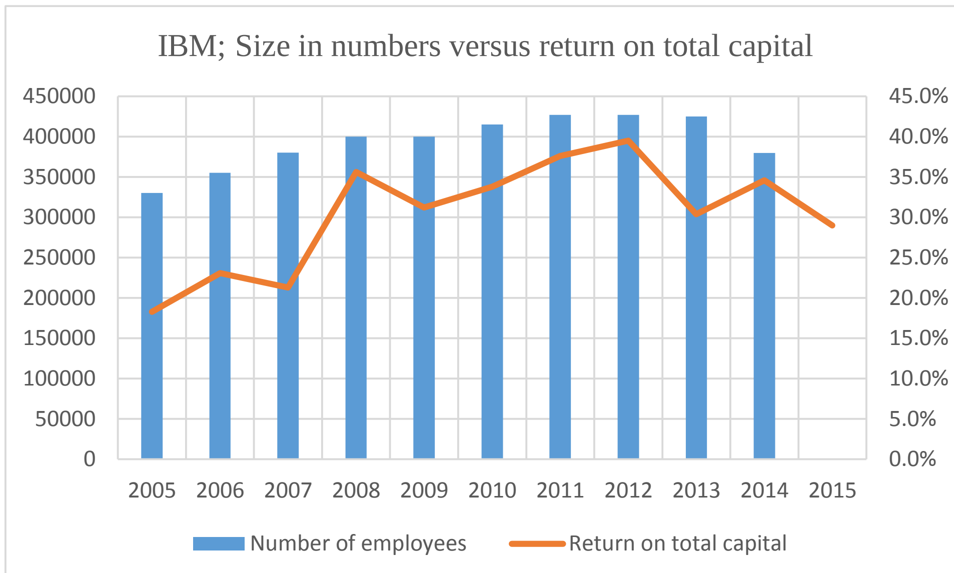
Both GE and P&G have, adopted as a major thrust of their new strategy, the notion of simplicity. HP is now following suit.

HP, the old HP, was less than 100,00 employees prior to their acquisition of Compaq. 3M employs less than 100,000, as does Deere. Take away the Baristas, along with retail staff, in Starbucks and one would have a much smaller company – in terms of number of employees, but the diversity of the business makes this a bad comparison. Massey-Ferguson, an old long ago bankrupt organization went out with 68,000 jobs. Nortel peaked out at 94,500 and RIM (now Blackberry) at 20,000. Microsoft currently has 118,584 employees and Dell, 108,000.

IBM, with its staff now numbering around 380,000 may be another example of a company that has become too large to manage, at least effectively.

The conclusion is that HPQ but particularly HPE are likely to become even smaller as strategic decisions are made to shed under-performaing assets. Size is becoming a management problem!



Innovation practices and people management

Under ‘Risk Factors’, there is a section devoted to attracting, retrianing, training, motivating, developing, and transitioning key employees’ and notes that negative consequences could ‘seriously harm us’. This is a little late in coming, judging what happened in the first decade of 2000.

If both organizations minimize what they now identify as risks, the return of the mojo could just happen.

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The New HPs

A summary of how the business has been split.

On October 6, 2014, Hewlett Packard[13] announced it was planning to break into two separate companies, separating its personal-computer and printer businesses from its technology services. The split, which was first reported by The Wall Street Journal and confirmed by other media, will result in two publicly traded companies: Hewlett-Packard Enterprise and HP, Inc. Meg Whitman will serve as chairman of HP, Inc. and CEO of Hewlett-Packard Enterprise, Patricia Russo will be chairman of the enterprise business, and Dion Weisler will be CEO of HP, Inc. The split is expected to be completed by the end of fiscal year 2015, in October 2015. This has happened. A thumbnail sketch of the new organization is set out below. Further information is provided in Appendix B.

	HPQ [personal computers and printing etc.]	**HPE [technology services; data storage, servers and software etc.]**
CEO	Dion Weisler	Meg Whitman; President and CEO
Target markets	Individual consumers and small-medium-sized businesses, government, health and education sectors globally.	Technology solutions for business and government.
Products/Services	Personal systems offers: PCs, workstations, tablets, point-of-sales systems, calculators and other related accessories Printing offers: consumer and commercial printing hardware, supplies, scanning devices, laser jet printing, graphic solutions. Software segment offers: IT management, application testing and delivery, information management, big data analytics, security intelligence,	Enterprise group offers: servers, management software, hybrid cloud solutions, storage platforms and networked solutions, Software segment offers: a range of services to capture, store, explore, analyze, protect and share information, operations management software products, Enterprise services segment offers: consulting services HP financial services segment offers: leasing and financing services, asset management services, markets through resellers, partners, independent vendors, and OEMs
Competitors	Canon. Epson, NEC, Hitachi, Ricoh, Seiko, Acer, Oki	IBM, Microsoft, Dell, Cisco, Oracle
Revenue on split	$57.3 billion	$57.6 billion
Business segments	Personal systems; 60% Printing; 40%	Enterprise group; 48% Enterprise services; 39% Software; 7% Financial services; 6%
Statements		"Smaller and more focussed than HP is today"; Meg Whitman
Employees joining	Approximately 50,000 at the outset.	252,000, as of July 31, 2015
R&D component		HP Enterprise Labs – part of the new HPE; 4.4% (unaudited results for 9 months ended July 31, 2015

In Whitman's own words[14], the split; 'Whitman is touting the splintering of HP as a way to breathe new life into two companies that will be better suited to innovate in their own product

[13] Wikipedia reference

[14] Several publically available sources; Yahoo Finance etc.

areas and take care of their customers'. According to the Information bulletin: a simplified organization structure, increased focus on the unique needs of the business, facilitating faster decision making and flexibility, and improving the ability to compete – respond quickly – are the sought after characteristics of the new construct.

The implication is not only that HP was not innovating effectively, nor taking care of its customers, but that it had become too big to manage effectively. Hewlett-Packard, like other PC makers, has been facing changing consumer tastes - moving away from desktops and laptops and toward smartphones and tablets. It has also faced revenue declines 11 of the past 12 quarters. HP was not keeping up.

The shared hope is that the two units will be worth more separately and be able to grow more quickly apart than they can together. "The decision to separate into two market-leading companies underscores our commitment to the turnaround plan," Whitman said. "It will provide each new company with the independence, focus, financial resources, and flexibility they need to adapt quickly to market and customer dynamics."

Mojo Found?

Not yet

It is too early to tell if the spirit, which had been present in HP much prior to the split, will return and quickly. W&P will follow developments.

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Appendix A
Outline of HPE and HPQ

HPQ - HP Inc.[15]

HP Inc., together with its subsidiaries, provides products, technologies, software, solutions, and services to **individual consumers and small- and medium-sized businesses** (SMBs), as well as to the **government, health, and education sectors worldwide**. The Personal Systems segment offers commercial personal computers (PCs), consumer PCs, workstations, thin clients, tablets, retail point-of-sale systems, calculators and other related accessories, software, support, and services for the commercial and consumer markets. The Printing segment provides consumer and commercial printer hardware, supplies, media, and scanning device, as well as laser jet and enterprise, inkjet and printing, and graphics solutions; and software and Web services. The company's Software segment offers IT management, application testing and delivery, information management, big data analytics, security intelligence, and risk management solutions for businesses and enterprises; and licensing, support, and professional services, as well as software-as-a-service. HP's Financial Services segment provides leasing, financing, utility programs, and asset management services, as well as investment solutions to SMBs, educational, and governmental entities. The company's Corporate Investments segment includes HP Labs and cloud-related business incubation projects.

HPE – HP Enterprises

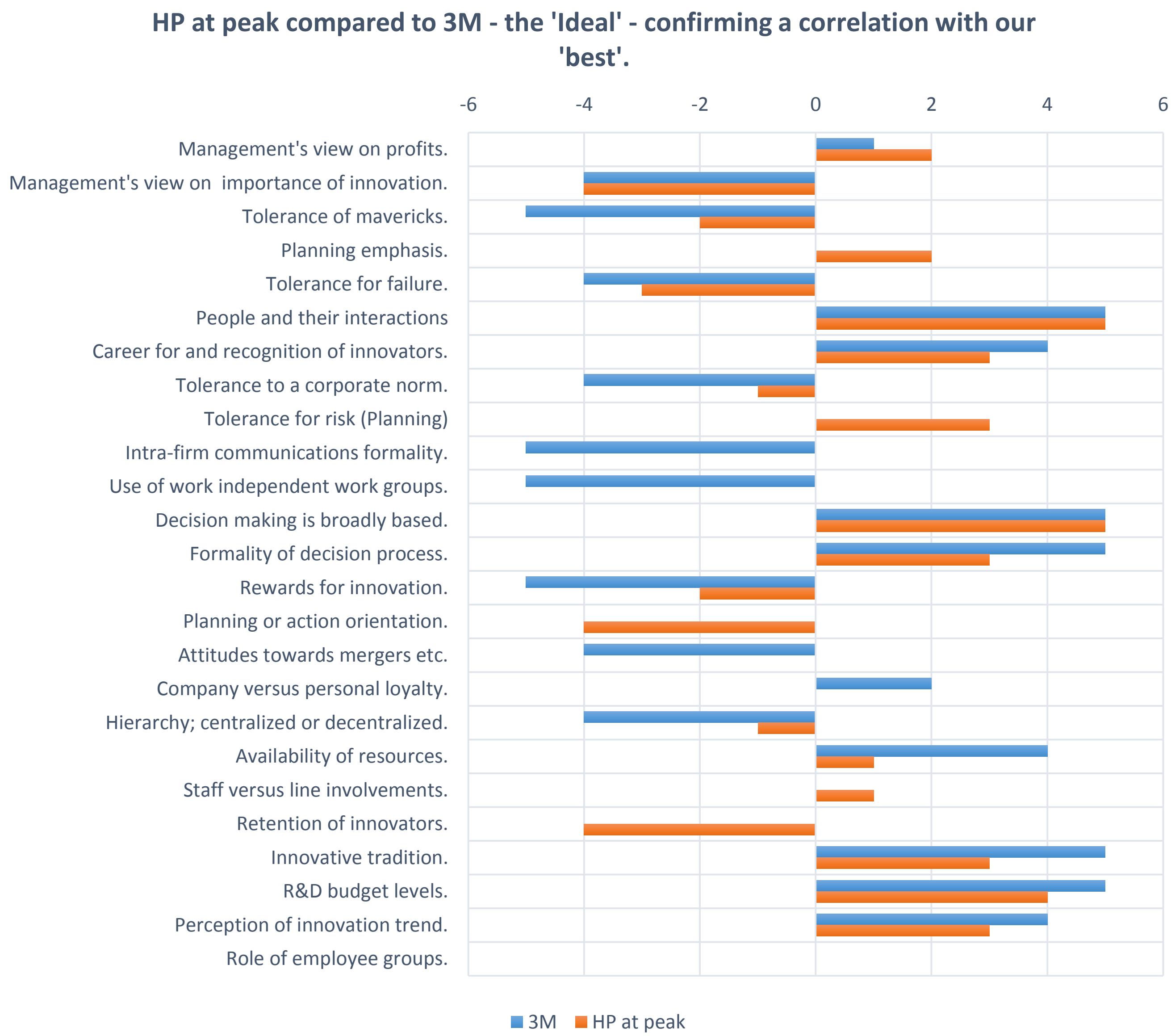
Hewlett Packard Enterprises (HPE) provides servers, storage, networking, consulting and support – its focus is on providing technology solutions to business and the public sector. Hewlett Packard Enterprise Company provides technology solutions to business and public sector enterprises. It operates through Enterprise Group, Software, Enterprise Services, and

Hewlett Packard Financial Services segments. The Enterprise Group segment offers servers, management software, converged infrastructure solutions and technology services; hybrid cloud solutions, including private cloud platform; business critical systems; storage products, as well as 3PAR StoreServ, a Storage platform; and networking products comprising switches, points, controllers, routers, and wireless local area network and network management products. This segment also provides software-defined networking and communications capabilities; network access solutions for mobile enterprises; and consulting services. The Software segment offers software to capture, store, explore, analyze, protect, and share information and insights within and outside organizations; enterprise security, application delivery management, and IT operations management software products. This segment provides HP Vertica, an analytics database technology for machine, structured, and semi-structured data; and HP IDOL, an analytics tool for human information, as well as solutions for archiving, data protection, eDiscovery, information governance, and enterprise content management. The Enterprise Services segment offers consulting, outsourcing, and support services across infrastructure, applications, and business process domains; and application and business services that help clients to develop, revitalize, and manage their applications and information assets. The Hewlett Packard Financial Services segment provides leasing, financing, IT consumption and utility programs, and asset management services. It markets and sells its products through resellers, distribution partners, independent software vendors, and original equipment manufacturers.

[15] Excuse the full list of services in each of the new businesses, but it is a complex business.

Appendix B
Comparing HP (pre split) to the ratings for 3M, our choice of the a highly diversified company with the best set of policies and management practices

This comparison was done as a check on whether HP responses regarding the 'Ideal' bore any resemblance to an actual high performing, highly-innovative, idea-intensive company – in this case 3M[16].



Rating for at least 15 of the Factors are closely correlated. Eight Factors are unable to be correlated due to lack of adequate information.

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[16] See CIOMAX report on 3M. Available on the web site under 'Research'