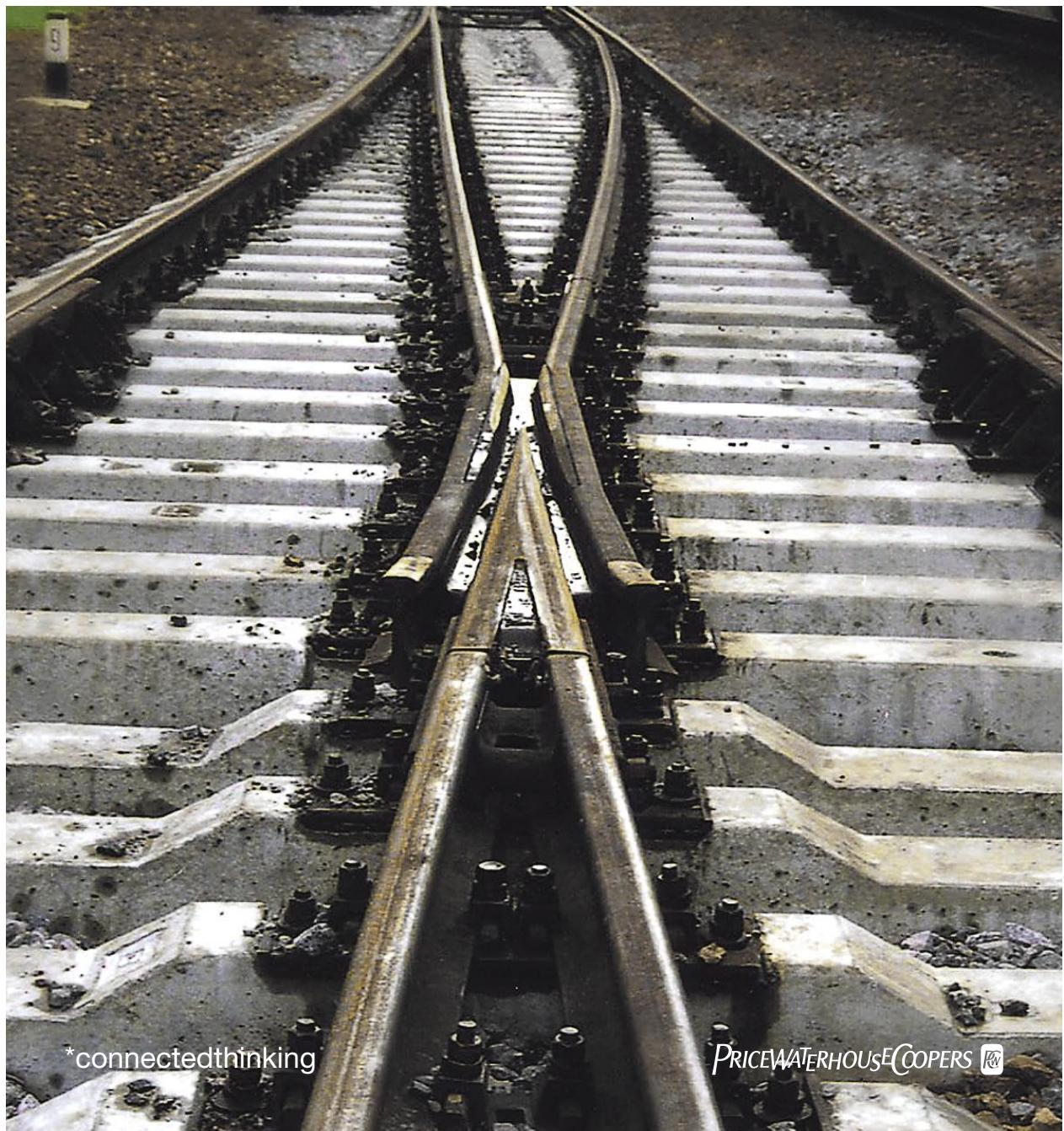


Technology executive connections

Shaping digital convergence through mergers & acquisitions*

Volume 2



*connectedthinking

PRICEWATERHOUSECOOPERS



The following report is global in scope and features analysis and commentary developed from a combination of survey instruments and in-depth interviews with senior executives.

The surveys

The quantitative findings presented in this report are based on two tightly integrated surveys. The primary survey, conducted by the Economist Intelligence Unit in February 2006, garnered 149 responses from senior executives: 32% from Asia, 25% from North America, 28% from Western Europe, 8% from Eastern Europe, 6% from the Middle East and Africa and 1% from Latin America.

Working in parallel, PricewaterhouseCoopers obtained an additional 46 responses from senior executives at start-up technology companies throughout Europe. These latter surveys are analysed in a separate section of the report.

The interviews

The EIU conducted over 30 in-depth interviews with senior technology executives to supplement the quantitative analysis:

On the record interviews conducted by the Economist Intelligence Unit:

Seth Alpert, Managing Director, AdMedia Partners

Kevin Conroy, Executive Vice President, AOL Media Networks

Dan Scheinman, SVP Corporate Development, Cisco

Richard Zannino, CEO, Dow Jones

Sarah Friar, Vice President, Goldman Sachs

Ed Graczyk, Director of Marketing, Microsoft TV

Pyrros Koussios, VP Corporate Development, NDS Group

Erwin Leichtle, CEO, Switchcore

Joanne Belanger, Global Manager, Corporate Innovation and Technology, Whirlpool

Gale Horst, Engineering Lead and Energy Project Manager, Whirlpool

Interviews conducted on the basis of anonymity:

AT&T

SAP

Motorola

Seagate

New York Life

Sun Microsystems

Nortel Networks

The Walt Disney Company

IEU conducted six additional interviews where the executives requested that neither their name nor their corporate affiliation be cited. These interviews were with large corporations headquartered in Asia (3), Europe (2) and the US (1).

To capture the convergence insights of fast-growth companies, PricewaterhouseCoopers additionally conducted interviews with:

Jean-Yves Leclerc, CEO, Ipanema Technologies

Joris Barendregt, CEO, Crystal Q

Francisco Maringelli, CEO, SR Labs

Stefan Andreasen, Founder and CTO, Kapow Technologies

Maik Stockmann, CEO, Econia Solutions

Jeroen Tabor, CFO, WCC

Both the EIU and PricewaterhouseCoopers wish to extend their gratitude to all who participated in the surveys. We are especially grateful to those senior executives who granted personal interviews.

(For more on the survey and interview methodology, see page 46.)



Dear executive,

I am pleased to present to you this second edition of Technology Executive Connections, a series designed to help executives in the technology, telecom and media industries better explore, understand and share ideas on today's pressing business and strategic issues.

In order to gauge the climate within the industry, gain insight into executives' opinions and promote leading analysis and thought on current issues, we are organising recurring surveys of senior leaders, holding interactive roundtables and conducting one-on-one meetings with major influencers and thinkers around the world.

The first survey asked technology executives what they thought about the challenges that a rapidly changing environment brought upon their strategy and tactics.

One ubiquitous change we are all observing in the industry is the rapid pace of convergence between telecom carriers, technology companies and, of course, the content owners. This convergence seems to be causing a flurry of transactions, particularly acquisitions of companies in one segment buying up companies in the other two segments, seemingly to gain access and control of the industry as a whole.

But is this M&A activity really brought on by the need to "converge or die" or is the pendulum swinging from organic growth to growth through M&A due to market conditions?

In order to try and shed some light on this question as well as to see who the potential winners of the convergence battle may be, we asked executives across the world what they thought about these and related questions. The answers can be found in the coming pages of this second edition of Technology Executive Connections.

We hope this report provides interesting, provocative reading and that it positively influences the strategic activities within your company.

Sincerely,

A handwritten signature in black ink that reads "Bill Cobourn". The signature is fluid and cursive, with a large, stylized "B" and "C".

Bill Cobourn
Partner and Global Technology Industry Leader

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Executive summary

Digital convergence and mergers and acquisitions (M&A) are changing the nature of today's marketplace. To assist executives in understanding both the opportunities and the pitfalls, the EIU and PricewaterhouseCoopers conducted a global survey of 149 executives in February 2006 and supplemented the findings with over 30 in-depth executive interviews. Examined through the collective eyes of executives, the opportunities and challenges come to the fore. Corporate strategies vary widely, but close inspection reveals a number of common elements of decision-making and execution.

Note de synthèse

Les fusions et acquisitions et la convergence numérique font évoluer la nature du marché actuel. Afin d'aider les dirigeants à appréhender les opportunités et les pièges, l'Economist Intelligence Unit et PricewaterhouseCoopers ont mené une étude globale auprès de 149 dirigeants en février 2006, complétée par des entretiens approfondis avec plus de 30 dirigeants. Les opportunités et les défis examinés par les dirigeants sont mis en évidence. Les stratégies des entreprises varient grandement, mais un examen à la loupe révèle un certain nombre de similitudes dans les processus décisionnels et exécutifs.

Inhaltsübersicht

Digitale Konvergenz sowie Fusionen und Übernahmen (M&A) verändern gegenwärtig die Marktstruktur in der Hightech-Branche. Um Führungskräfte sowohl mit den Chancen als auch mit den Risiken vertraut zu machen, haben die Economist Intelligence Unite (EIU) und PricewaterhouseCoopers im Februar 2006 weltweit eine Umfrage unter 149 Managern durchgeführt sowie die Ergebnisse durch 30 vertiefende Interviews mit Entscheidungsträgern ergänzt. Anhand der Einschätzungen dieser Führungskräfte treten die Chancen und Herausforderungen deutlich zutage. Die Unternehmensstrategien unterscheiden sich auf den ersten Blick zum Teil erheblich – eine genauere Untersuchung offenbart dennoch zahlreiche Gemeinsamkeiten bei Entscheidungsprozess und Umsetzung.

行政總結

数字化融合和并购正在改变着今天高科技市场的特性。为帮助高级管理人员理解存在的机遇及陷阱，经济学家信息中心和普华永道在2006年2月对全球149位高级管理人员进行了一项调查，并在调查发现的基础上补充了对30位高级管理人员的深入访谈。在高级管理人员看来，机遇和挑战并存。各个公司的战略不同，但是通过近距离的审视仍揭示了一些决策及执行过程中常见的问题。

The four principal observations are:

Les quatre principales observations sont les suivantes:

Die vier wichtigsten Beobachtungen in diesem Zusammenhang waren:

四个主要的观察是：

1 Acquisitions

Digital M&A will continue to surge.

Les fusions et acquisitions numériques sont toujours en plein essor.

Die Zahl der Fusionen und Übernahmen aufgrund digitaler Konvergenz wird weiter zunehmen.

数字式并购会持续涌现。

Digital M&A is alive and well. Notably, respondents to the survey say their companies are holding sizeable war chests and indicate high levels of likely transactions. Executives say a key driver in all of these corporate transactions is digital convergence, which is evolving from fable to reality on virtually all technology fronts. Overall, the outlook is almost exuberant, as executives insist that their companies are ideally positioned to profit from this dawning era.

But is this optimism realistic? Will over-exuberance lead to a broad technology crash? Or will abundant winners be celebrated and colossal failures, if any, be isolated?

2 Partners and alliances

Though they see the value of M&A, executives recognise partnerships and alliances as a worthwhile alternative means of profiting from convergence.

Bien que les dirigeants connaissent la valeur des fusions et acquisitions, ils considèrent encore que les solutions de partenariat et d'alliance sont satisfaisantes pour bénéficier de la convergence.

Obgleich über die Vorteile einer Übernahme oder Fusion Klarheit besteht, werden Partnerschaften und Allianzen dennoch als lohnende Alternativen angesehen, um von der Konvergenz zu profitieren.

尽管他们看到传统并购的价值，高级管理人员仍然认为要从融合中获利，建立伙伴关系或联合阵营是值得一试的替代方法。

The survey demonstrates that acquisitions and mergers will help drive the evolution of digital convergence. At the same time, the results indicate that companies view an acquisition or merger as a more dramatic, complex and potentially risk-laden approach, particularly when a partnership or alliance might suffice. Executives cite issues such as the difficulty of mastering multiple core competencies as well as the high price of potential acquisitions as factors favouring partnership over purchase.

But simultaneously, they note the shortcomings of partnerships and alliances and these issues weigh heavily in their evaluations of potential acquisitions.

3 Strategy

The deals that work start with strategy.

Les transactions réussies commencent par une bonne stratégie.

Am Anfang einer erfolgreichen Transaktion steht die geeignete Strategie.

可行的交易由策略开始。

The survey and interviews indicate that relative to partnerships or alliances, the decision to pursue M&A instead of partnerships and alliances tends to raise the stakes, placing the onus on executives to design a flawless strategy. Successful acquisition strategies are many and varied. Some are seeking scale in a single discipline or sector while others are looking to gain access to new technologies, products, services and markets. Still others are executing defensive transactions, for example, buying companies simply to prevent them from falling into the hands of competitors.

Given these factors, where are the revenue benefits from an acquisition? Where are the cost savings? How does this affect competitive advantage? How does a potential acquisition fit into a business strategy?

4 Execution

Winners in digital M&A need not only a great business strategy, but also a plan to integrate business models and cultures.

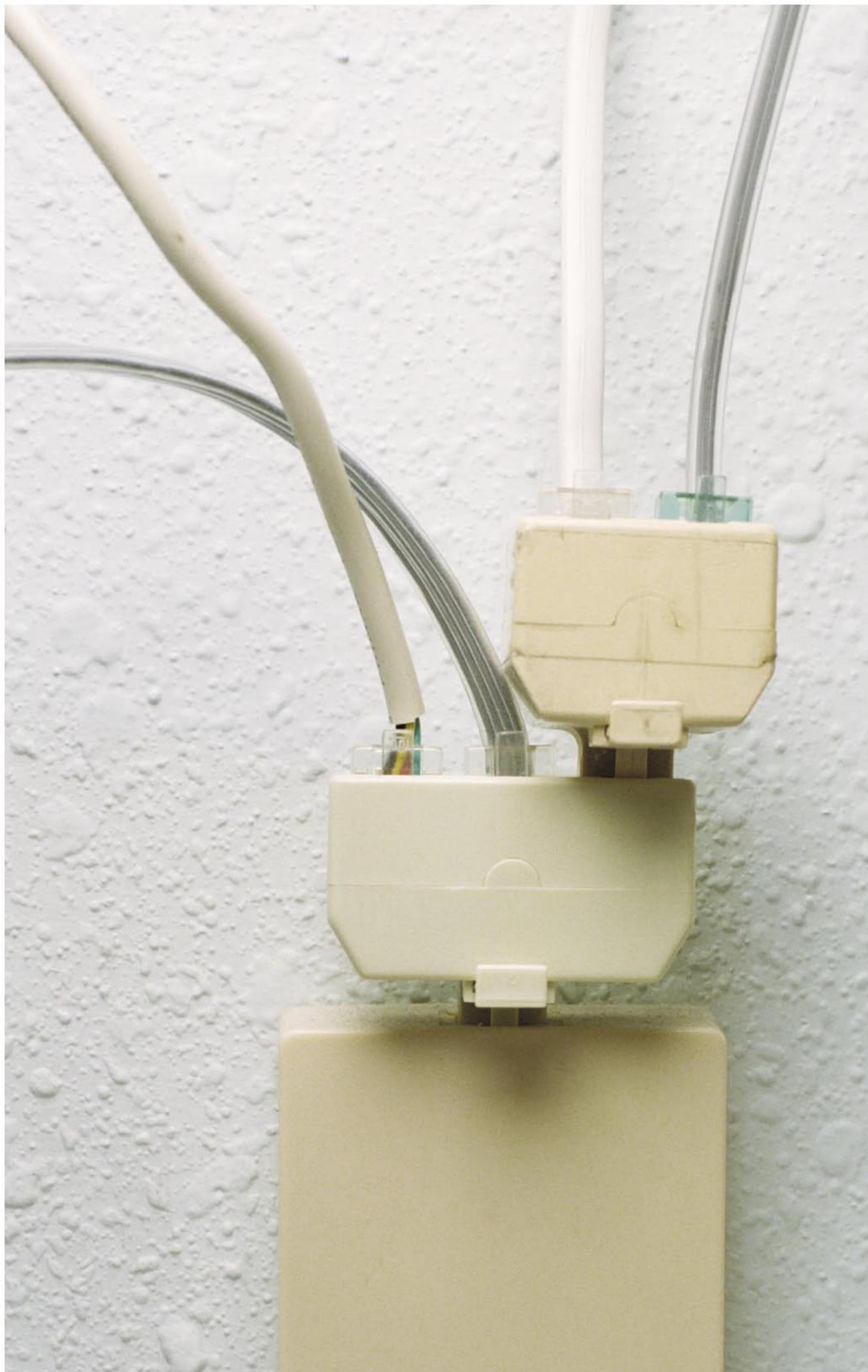
Dans le cadre des fusions et acquisitions numériques, pour être gagnant il ne suffit pas d'avoir une stratégie, mais également un plan d'intégration des cultures et des modèles d'entreprise.

Für eine erfolgreiche Fusion oder Übernahme ist nicht nur eine ausgereifte Unternehmensstrategie, sondern auch ein Plan für die Integration der Geschäftsmodelle und Unternehmenskulturen erforderlich.

数字化并购中的赢家不仅需要好的商业策略，也需要对商业模式及文化进行整合的计划。

For acquisitions large and small, the art is in the detail. Successful transactions may begin with sound strategy, but from there, the recipe requires equal amounts of pre-transaction due diligence, before-the-papers-are-signed planning and after-the-ink-dries follow-through. Integration should be rapid and thorough, addressing a range of issues including accelerating cost synergies, standardising accounting and financial systems as well as optimising product development portfolios, R&D and customer relationships. In particular, the research shows that cultural integration is a critical success factor.

In companies' pre-deal calculations, are they adequately weighing and effectively evaluating the degree of cultural fit?



Introduction

Is the convergence of digital technologies creating an urge to merge? Or will convergence lead to the age-old corporate pitfall of marrying in haste only to repent at leisure? Much hinges on the answer, not least the possibility of another digital bust.

Digital convergence brings together technologies, devices, protocols, standards, and companies. This survey asks top executives in the technology, telecommunications and media industries their opinion on the degree and manner in which firms are using mergers and acquisitions (M&A) as well as partnerships, alliances, joint ventures and organic growth to achieve their digital convergence-driven strategies.

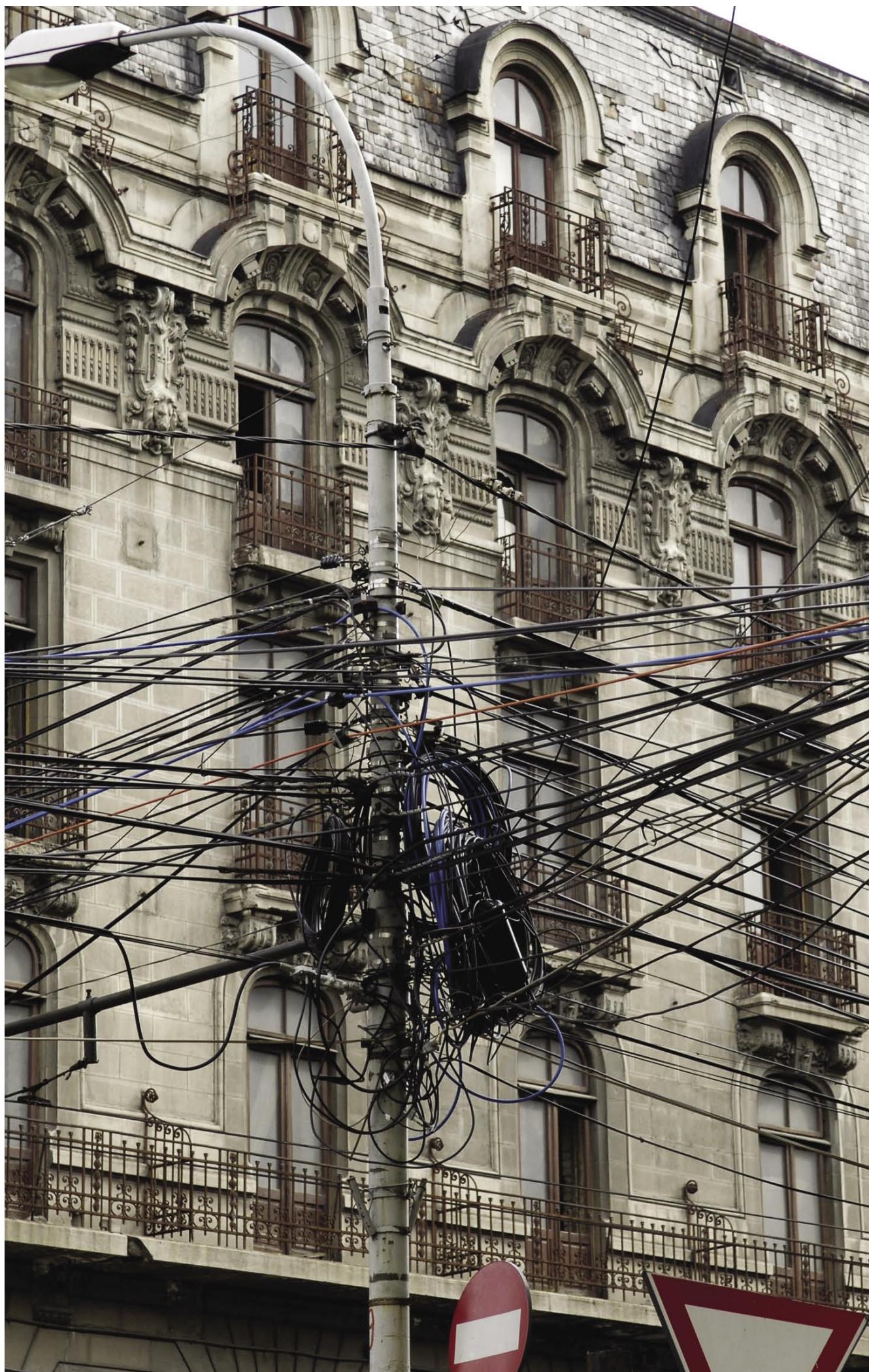
High-tech executives would like to think they learned a great deal from the tech crash of 2000. In February 2006 the Economist Intelligence Unit in co-operation with PricewaterhouseCoopers conducted a global survey of 149 executives plus in-depth interviews with over 30 executives. This research suggests that firms are now treading more warily than they did at the height of the dot-com bubble. Nonetheless, the research also found that firms are very confident about the value of M&A in creating strong business models that will enable convergence to flourish.

With understandably little desire to join the ranks of the fallen, executives seem to be asking the right questions. Is the M&A strategy reasonable? Will the combined entities achieve positive results? How difficult will it be to integrate operations? Will the merged or acquired cultures coalesce effectively? Are the markets ready to accept new product or service models? Will investors value the merged company appropriately? Could the same or broadly similar strategic objectives be achieved via partnerships, licencing or alliances?

Digital convergence is the integration of computers, telephones, recording and broadcast technologies within all-digital environments enabling novel uses of data products/services for faster, more flexible distribution.

This, of course, does not preclude the possibility that investors and managers will become a little exuberant. And if they do, rationality may be the first casualty.

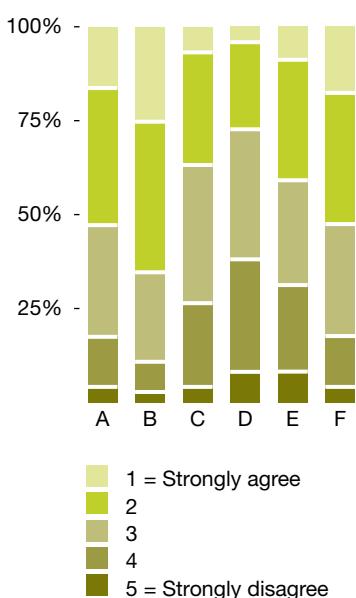
Whatever happens, one thing seems clear: M&A will help shape the evolution of digital convergence. This report considers the attitudes of technology, telecommunications and media executives as well as the challenges and opportunities they face.



Acquisitions

Digital M&A will continue to surge. Watch out for some messy results as acquirers over-reach themselves.

Figure 1. How strongly do you agree or disagree with the following statements?



Digital M&A is on the rise. The combined value of deals rose by 88% worldwide last year to \$122 billion, according to Dealogic, a research firm.

The trend is supported by responses to our survey: 53% of respondents say they have seen significant consolidation in their sectors in the past three years. And 65% say that industry consolidation will continue over the next three years.

Optimism abounds

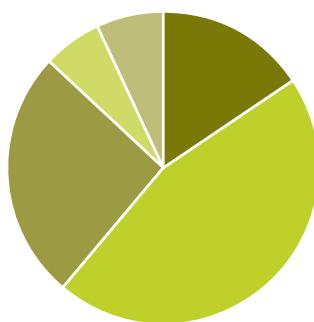
As converged devices proliferate, investor exuberance is palpable. Executives declare that the era of digital convergence has arrived—pointing to phones that take pictures, download music and play video games, PCs that emulate television receivers (and vice versa), home ovens and thermostats controllable via the Internet.

Erwin Leichtle, CEO of Switchcore, a supplier of ultra-fast network-to-network switching devices based in Sweden, sums up the view of many of those interviewed. “With the technology of the 1990s there was a lot of hype with no substance and it eventually burst.” But today, says Leichtle, “This is no bubble—digital convergence is real and it’s changing everything.”

- A The past three years have seen significant consolidation in our industry.
- B The next three years will see significant consolidation in our industry.
- C Convergence is driving up the price of acquisitions within our industry above their true economic value.
- D Convergence is merely a justification for industry consolidation.
- E Convergence will lead to significant corporate failures as firms attempt to extend too far beyond their core competence.
- F The most effective approach to convergence is a broader collaboration with new and existing partners, rather than mergers and acquisitions.

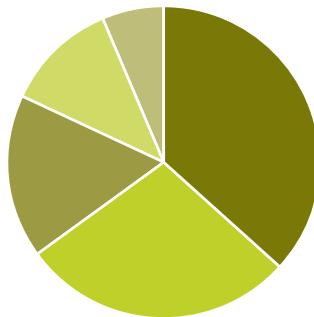
For full survey results, including percentage breakouts, please go to page 47.

Figure 2. Which of the following statements best describes your company's overall role in the evolution of digital convergence?



- 15.65% We are a principal driver of convergence.
- 45.58% We are an active participant in convergence.
- 25.85% The impact of convergence for our company is not yet clear.
- 6.12% Convergence affects many of our processes but not significantly.
- 6.85% Convergence is not an issue for us.

Figure 3. If you were to add up the total market value of highly-likely convergence-driven transactions by your company within the next five years, what would be the total amount?



- 36.84% Up to \$50m
- 28.42% Up to \$500m
- 16.84% Up to \$1bn
- 11.58% Up to \$5bn
- 6.32% More than \$5bn

Moreover, executives in the survey say their companies are well positioned to profit from digital convergence. No fewer than 61% describe their companies as active participants in digital convergence, with 16% saying they are actually driving digital convergence. Notably, 24% of the largest companies in the survey, those with over \$1 billion in revenue, say they are in the driving seat.

Companies say they are in the thick of things. As Pyrros Koussios, vice president corporate development of pay-TV technology provider NDS Group PLC (NDS) says: "We are playing an important role in much of the innovation you see now and will see taking place in entertainment and television." Adds an executive from Motorola: "Whether it's voice, data or video, whether it's wireless, cable or satellite, whether it's to a server network, PC, laptop, TV, phone or any of a growing number of intelligent appliances—somewhere in Motorola, we're right in the middle of it."

Acquisitions galore

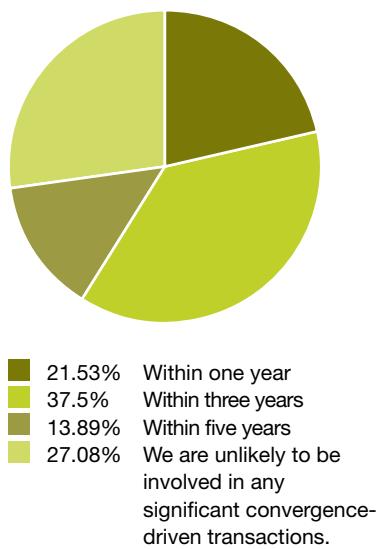
The mood is positive, and as a result, executives expect a lot more M&A in the sector in the future. Asked to tally the total market value of convergence-driven transactions likely to be undertaken by their own companies within the next five years, the figures reveal significant additional consolidation and diversification.

For example, focusing solely on the 34 largest companies in the survey (those with revenues over \$1 billion), 35% say their acquisitions are likely to reach as much as \$1 billion, 21% anticipate transactions of up to \$5 billion, and 12% say the total will exceed \$5 billion. Conservative estimates built on these responses alone total \$35 billion to \$65 billion over the next five years. Moreover, each sector in the survey, regardless of size, industry or geography, anticipates proportionate levels of activity. Extrapolate these findings to the sector as a whole and the implication is that the pace of M&A will continue to be rapid.

As for the overall sample:

- 37% anticipate spending up to \$50 million
- 29% will spend up to \$500 million
- 17% will spend up to \$1 billion
- 12% will spend up to \$5 billion
- 6% will spend more than \$5 billion

Figure 4. Over what timeframe is your company likely to be involved in a significant convergence-driven transaction such as a merger, acquisition, partnership or divisional spin-off?



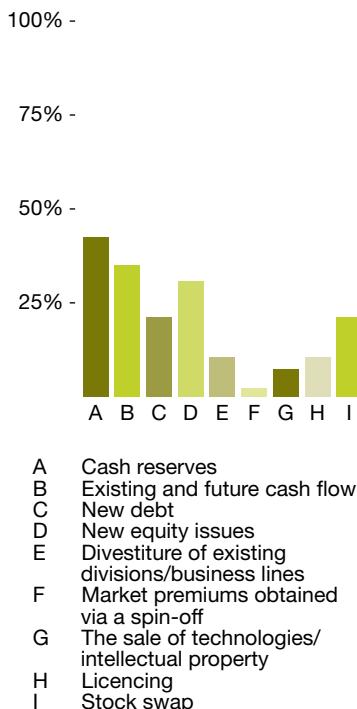
As for the timing of such deals, 22% of executives anticipate they will participate in a significant transaction within one year, 38% within three years, and 14% within five years. More than a quarter of respondents expect no significant deals for the foreseeable future. In short, the number and size of expected transactions is significant, and the timeframe is imminent.

In terms of financing acquisitions, executives prefer to use cash reserves, cash flow and equity over debt, divestiture and other sources of capital. The breakdown is as follows:

- Cash reserves (43%)
- Existing and future cash flow (35%)
- New equity issues (31%)
- Stock swaps (21%)
- New debt (21%)
- Licencing fees (11%)
- Divestiture of existing assets (11%)
- Sale of intellectual property (7%).

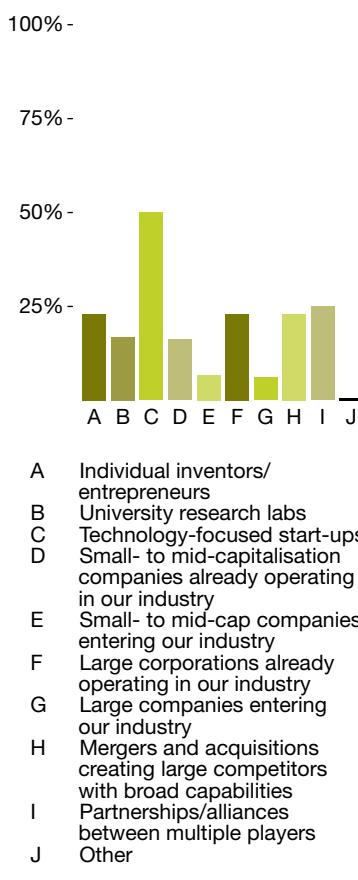
While multi-billion dollar mega-deals are becoming a prominent fixture in the high-tech marketplace, statistics from Dealogic show that smaller transactions are by far the most common. Over a three-year period through 2005, a total of 1,651 public transactions were completed at a total price of \$237 billion, making for an average deal size of just slightly over \$143 million. In addition, the Dealogic statistics do not report on deals under \$12 million—so the average publicly reported transaction is actually smaller.

Figure 5. How might your company plan to finance convergence-driven corporate transactions? Select the two most significant sources.



But at the same time, explains Koussios of NDC, the cumulative impact of even small transactions, taken in perspective, can be profound. Says Koussios, “If you look at the pattern of small acquisitions, and many large companies are buying up many small companies, they show you the strategic intention of the acquirers.” Indeed, the survey shows that overwhelmingly, respondents plan rather modest M&A initiatives: 63% say their highly-likely transactions over the next five years will total no more than \$500 million. (See Figure 3)

Figure 6. Which of the following will be the most likely sources of significant innovation in digital convergence? Select up to two responses.



A key driver behind the large number of small companies being purchased by larger entities is the perception among respondents that small, technology-focused start-ups tend to be the most likely sources of significant innovation in digital convergence. Overall, respondents rank the sources of innovation as follows:

- Technology-focused start-ups (cited by 50% of respondents)
- Partnerships/alliances amid multiple players (25%)
- Individual inventors/entrepreneurs (23%)
- Large corporations from within the technology industry (23%)
- Mergers and acquisitions creating larger competitors with broader capabilities (23%).

But a dose of reality

Market over-exuberance played a key role in the technology sector's crash in 2000. So how likely are today's digital convergence-focused executives likely to over-extend themselves through corporate transactions?

Overwhelmingly, the survey shows that executives view digital convergence in terms of opportunity rather than risk. Among respondents, 42% agree strongly that digital convergence presents their companies with significant opportunities.

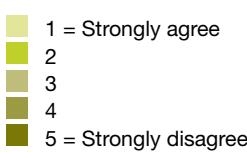
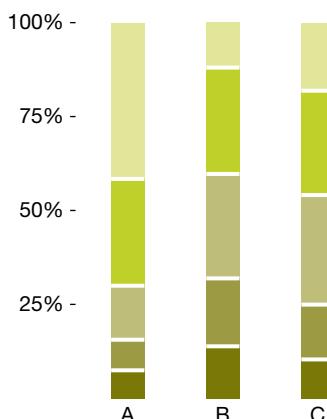
But these same executives simultaneously downplay both the risks (only 12% strongly agree that digital convergence creates significant threats) and the operating challenges (only 18% agree strongly that such issues will be significant in transactions).

Despite the apparent optimism, 41% of respondents say they anticipate significant corporate failures. They fear that firms will venture too far from what they know best.

The question arises: when it comes to convergence-focused mergers and acquisitions, as organisations expand their activities outside their traditional realms, how can technology executives avoid overplaying their hands?

Digging still deeper, a select number of start-up companies in Europe were surveyed separately and their views on these issues are summarised in a special section of this report starting on page 23.

Figure 7. How strongly do you agree or disagree with the following statements?



- A: Digital convergence presents us with significant strategic opportunities.
- B: Digital convergence presents us with significant strategic threats.
- C: Digital convergence presents us with significant operating challenges.

How to open your business to the benefits of convergence*

Convergence offers a new scenario in which the sum is greater than the parts. Walls around business units and partners limit this synergy. To succeed in this environment, companies must eliminate these walls and create an open business model.

Partnerships and alliances

In an open business model, the formation of partnerships and alliances is a requirement for growth.

One of the central constraints in partnerships is the wall of proprietary intellectual property (IP)—in other words, ownership of “trade secrets.” Dropping this wall must be done in a meticulous fashion so that what is lost in IP ownership is gained in return on investment. Transparency is crucial. Partnerships must show how they are using IP, how the IP is being monetised and how that money is tracked.

Revenue leakage

An open business model brings new issues that companies must address as they enter into complex revenue-sharing contracts. These include billing, licencing, intellectual property, contract management and royalties systems. As companies converge, they need to invest and develop processes and systems to protect revenue streams.

Consumer privacy and security issues

Continuous access to customer data is central to an enterprise without walls. Consumer-privacy laws must be respected, but recent events in other industries have created a public hypersensitivity to this issue. The open convergence model depends on finding ways to move past this hypersensitivity in an informed and controlled manner.

Content owners should understand technology solutions and controls so they can manage the risks and rewards associated with new business models.

Change management

The open business model we advocate has implications for virtually every internal aspect of a corporation. A company’s culture will have a major impact on its relative ability to realise this open model.

Change precipitated by convergence is fast-moving, broad-based, and, in many cases, uncharted. Since business convergence involves integration of existing organisations, alliances and partnerships, these changes are considered culture-change initiatives. The culture of an organisation determines its attitude toward risk, which in turn drives individual and team behaviour related to areas such as collaboration, innovation, empowerment and performance measurement.

The end game of an open business model is to produce shareholder value beyond the limits of what we know today.

For more information on how we help you develop open business models to take full advantage of converging technologies and for a copy of our white paper on open business models, visit us at www.pwc.com/techconnect.

Venerable Dow Jones dives deeper into the Internet

In November 2004, the world of printed publications took another leap in converging with the online universe. Though the *Wall Street Journal* is one of the few print publications that require a paid subscription to view its full content online, its parent, Dow Jones, purchased Marketwatch, a profitable online survivor of the dot-com era and one of the most popular financial Web sites. According to Dow Jones CEO Richard Zannino, the \$519 million acquisition is "a perfect fit for our company" and one that "absolutely enhances our strategies as they relate to digital convergence."

Zannino believes Dow Jones and Marketwatch is an ideal match. "Like Dow Jones, Marketwatch is a business information company that services the business and personal investment markets," explains Zannino. Moreover, both companies have revenue from "a well-established Web presence, licencing, television and radio." The two businesses, says Zannino, become a perfect complement to one another. By combining, a number of efficiencies are obtained—from streamlined editorial processes to cross-selling of advertising across all of the print, online and other media properties.

Be wary of slippage

Cost savings played a role in the Dow Jones decision to move forward on this acquisition. Zannino explains, "I've done 20 or 30 M&A deals, and one thing I've

learned is never to rely on revenue synergies, because they never seem to materialise. No matter how great the brands, no matter how great the match, you're going to lose some revenue in the process." For this reason, says Zannino, "I put more weight on cost synergies, and that's what makes up for the lost revenue."

How are revenues lost? One way is that for the months following the deal, "the workforce tends to get distracted rather easily," says Zannino. Change creates hesitation. "They get caught up in discussions about who's going to be assigned to which region? Who'll head up which group? It's human nature." A large acquisition can also dilute sales efforts. For the months that follow a large acquisition, "you'll have sales people calling on customers and they can't help it, they get caught up talking more about the deal and the changes than about the business they're there for."

Finally, says Zannino, when two large organisations combine, there's bound to be some residual competitive overlap. For example, prior to the acquisition, the individual companies' growth plans and strategies focused on the same customers and prospects. "They both assume they'll win that customer's business, so the revenue is in the budgets of both competitors," says Zannino. But only one can win.

Success to date

So far Dow Jones is very pleased with the performance of its acquisition. For example, says Zannino, based on measures such as EBITDA, cash flow and the impact on Dow Jones's consolidated earnings per share, "(Marketwatch's) profit in 2005 was well ahead of the expectations we set in the acquisition business plan." Still, there were a few surprises. For example, though revenue fell a bit short, the company was well ahead of its expected performance in synergy-driven cost reduction. But, says Zannino, "We've addressed revenue and are back on track."

Zannino is intrigued by convergence and by no means rules out additional transactions. "We're always looking," he explains. "But it's difficult finding strategically and financially attractive candidates in the digital space today because there's a lot of upward pressure on prices." As for Dow Jones and digital convergence, Zannino is confident his company is making the right moves. "The best companies will be those who have their products and content everywhere their customers want them, delivered within profitable business models. We have a very strong brand and we're delivering our content over every technology and medium our customers require."

Questions for further reflection

How is digital convergence affecting your company and its broader business sector? When it comes to digital convergence, what are the likely near-term scenarios? What are less likely but potentially tectonic long-term scenarios?

What are your core competencies? What broader set of competencies might be required in a digitally converged marketplace? What avenues are available to develop or acquire those competencies? How might competencies combine to generate even greater opportunities and value?

Are you transforming your strategies and business models? Have you developed contingency plans for dealing with potential change?

How are mergers and acquisitions affecting your sector? Is there a price for inaction? Is there a first-mover advantage?

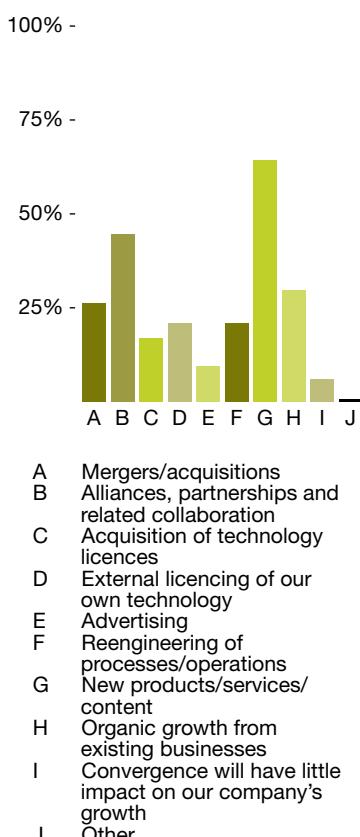
Are your competitors' actions evolutionary or revolutionary? How likely are they to succeed in their efforts? Where are they likely to encounter difficulty? What are the implications for your company?



Partnerships and alliances

Though they see the value of M&A, executives recognise partnerships and alliances are a worthwhile alternative means of profiting from convergence.

Figure 8. Within the scope of digital convergence, what do you believe will be the most likely sources of revenue growth for your company over the next three years? Select up to three responses.



The survey demonstrates that acquisitions and mergers will be a prominent and formidable force in the evolution of the digital convergence-focused competitive landscape. But at the same time, the results indicate that companies view an acquisition or merger as a more dramatic, complex and potentially risk-laden approach, particularly when a partnership or alliance might suffice.

Partnerships preferred

Throughout the survey, respondents tend to indicate they more highly value or perhaps prefer partnerships¹ and alliances relative to corporate transactions. For example, asked where digital convergence revenue is likely to be generated over the next three years, the three most commonly cited responses were:

- New products/services/content (64%),
- Alliance, partnerships and related collaboration (45%)
- Organic growth (30%).

Notably, mergers and acquisitions achieve a mere fourth place ranking at 26%, although it is important to mention that new products/services/content is not mutually exclusive with mergers or acquisitions.

¹ We define partnership to mean joining in a business undertaking with another enterprise and sharing the risks and benefits. The arrangement can be either semi-formal or formal, with contractual obligations. We exclude partnerships in which a company is owned by its partners, such as a law firm.

Similarly, asked to choose which is the more effective organisational approach for responding to digital convergence, 52% of respondents indicate a preference for partnerships and alliances versus only 18% for mergers and acquisitions, with a significant 30% not certain either way. (See Figure 1, Column F)

One reason for the prevalence of partnerships is market reality. Consider Project Lightspeed, AT&T Inc's (created by the acquisition of AT&T by SBC in January 2005) multi-billion dollar initiative to deliver ultra high-speed "fibre to the node" data pipelines to nearly 18 million homes in the southeastern United States by end-2007.

A spokesperson for the project describes the role of companies such as Alcatel, Microsoft and Scientific Atlanta as "vendors". But given the scope of this project, along with its requirements for tailored delivery of everything from set top boxes to node switches, the relationships are more akin to partnerships. Thus, with initiatives requiring such varied capabilities from a wide array of large corporations, acquisition simply isn't an option.

Stick to your knitting

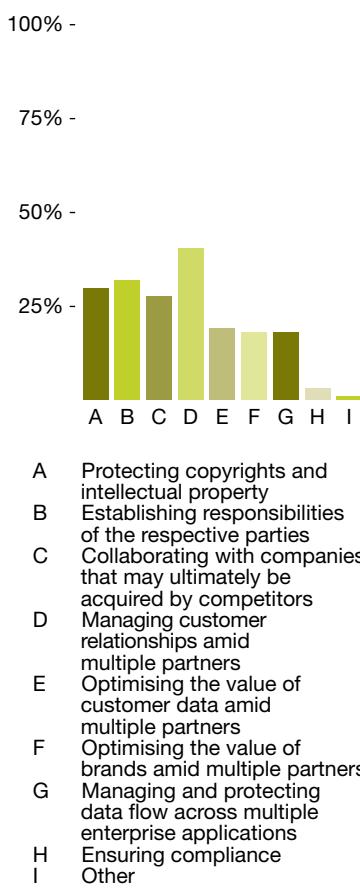
Another reason companies tend towards partnerships is the ability to remain focused on core competencies. As an executive from Cisco explains, "Partnership enables you to work with other companies who are expert in their particular area of the value chain." The challenge, the executive explains, "is relating the core competencies of the partners to one another." This aspect of partnerships can be challenging in its own right, but, says the executive, "it's often easier and less risky than executing an acquisition."

Almost by definition, convergence implies a coming together of previously unconnected core competencies. For example, consider the evolving partnerships between appliance maker Whirlpool Corporation and organisations as diverse as power generation and distribution companies and the US Department of Energy. As Gale Horst, lead engineer and energy project manager of Whirlpool explains, "We're participating in the Gridwise program, a collaboration between a large number of companies and agencies." The goal "is to find innovative ways to reduce energy consumption and to make (electrical) grids more efficient."

Whirlpool's role, says Horst, "is to develop smart appliances that can tell when the grid is looking to conserve power and then make an intelligent decision." For example, alerted to a near power outage caused by an excessive power draw on the electric grid of a city or region, a dryer or air conditioner might choose to reduce its energy usage or shut down altogether.

In addition to the Gridwise alliance, Whirlpool also actively participates in the Internet Home Alliance. This, explains Whirlpool global manager, corporate innovation and technology Joanne Belanger, is a constellation of diverse companies and organisations collaborating on "the connected home space." Members here include companies as diverse as General Motors, Panasonic, Microsoft, Cisco, Motorola and Hewlett Packard. "We recognise each company has its core competencies," says Belanger, "so we're happy to work with Microsoft or Cisco or other members of the alliance."

Figure 9. Regarding partnerships and alliances, what do you view as the greatest convergence-related challenges? Select up to two responses.



No panacea in partnership

Still, the shortcomings of partnership occasionally arise. “Sometimes there’s a heated debate defining an innovation and who will own which piece,” says Belanger. “Sometimes it’s lots of lawyers talking to lawyers, but overall, if it’s your idea, that’s documented, and the collaboration generally pays off for members and certainly for consumers.”

Overall, though tending to prefer the partnership route, the survey and interviews show that executives acknowledge numerous and significant challenges in managing alliances and partnerships. Some of the most significant partnership/alliance challenges noted include:

- Managing customer relationships amid multiple partners (cited by 40% of respondents)
- Establishing the responsibilities of the respected parties (32%)
- Protecting copyrights and intellectual property (30%)
- Collaborating with companies that may ultimately be acquired by competitors (28%).

These are by no means the only challenges created within partnerships. For example, another significant difficulty is obtaining accurate reflections of the value of partnerships within share prices. (For more on the challenges of partnerships, see the first report in this series, “Embracing Change in the Technology Industries” available at www.pwc.com/techconnect.)

So is acquisition the solution?

Unquestionably, the above and many other strategic and operating issues can be mitigated by the decision to acquire or merge with another company, as opposed to continued arm’s-length collaboration through partnerships or alliances.

In the end, the choice between partnership and purchase is a strategic decision of the highest order. As Sarah Friar, vice president of Goldman Sachs explains, “Partnerships, alliances and joint ventures are a preferred route in many cases and may often represent the best approach for any particular company or group of companies.” But, acquisition, properly applied, can be a powerful tool. “An acquisition or merger, something solid, strategically focused and right on target,” says Friar, “can send shock waves through an industry. Cisco’s acquisition of Scientific Atlanta is just one example.” (See case study page 38.)

Sometimes you don't have time for a partnership: AOL/Truveo

One of AOL's missions is to be a market leader in video. One of the elements needed to achieve this goal is the ability to provide video search capability that is comprehensive, relevant, and up-to-date.

AOL ventured into video search in 2003 when it acquired the technology of a company called Singingfish. But in January 2006, the company dove deeper into the marketplace with the acquisition of Truveo, a nine-person start-up known for its "Visual Crawler" technology, a dramatically different technique for searching the Web for video files. According to Kevin Conroy, AOL Media Networks executive vice president, the two acquisitions position AOL "to lead the video search market."

Acquisition vs. partnership

According to Conroy, AOL considered an operating partnership with Truveo, but in the final analysis, decided that an acquisition made the most sense. "Truveo had developed a product which clearly leapfrogged what was available in the market," says Conroy. "As soon as we saw the product in the marketplace, we knew that the Truveo team had solved some very challenging technical problems in new, original and compelling ways."

With AOL's competitors similarly focused on the future of converged video, the recognition became that Truveo might lose its corporate independence before an operating partnership could bear fruit. In short, AOL believed that a competitor might buy it first if it didn't move quickly.

Still, the company was careful. Conroy says, "Before closing the deal we spent an extensive amount of time working through post-integration issues around organisation, roles and responsibilities and reporting lines." It was important to both AOL and the Truveo team, says Conroy, to work out these types of issues in advance so that everyone would be comfortable with the transaction.

To keep Truveo executives and employees committed to the merger, says Conroy, "We have made them an integral part of the team focused on executing AOL's video strategy." Truveo will continue to be based in California's Bay Area.

Success factors

Though the deal was announced in January of 2006, by as early as the end of February, results were already evident. As Conroy explains, "We moved

aggressively to get Truveo integrated into AOL Video Search" with new, Truveo-enabled capabilities visible at aol.com/video. In the future, says Conroy, "We have a very ambitious roadmap and the Truveo team plays a key role in setting the course and direction for where AOL is heading in one of the most important areas of our business."

With the purchase and integration of Truveo, Conroy says AOL will be able to deliver a video experience "that is as good as consumers have come to expect with text search." While the Truveo team is being asked to continue driving towards new innovations in video search, ultimately, says Conroy, the deal will prove successful "when we see consumers coming to AOL to search for videos." Conroy believes that leveraging Truveo's technology, AOL will be able to attract and retain "a loyal audience of Web users who are looking to find the videos that they want to watch, when they want to watch them."

How to make a strategic alliance work*

Like pieces of a jigsaw puzzle, companies in a strategic alliance come together to take advantage of the differences in the skills and resources between the partners.

An alliance creates a third entity, separate from the two corporate parents, that works toward one shared goal. When that goal is achieved, the two companies emerge stronger, but still independent. The alliance is then dissolved or restructured. The road leading toward that common goal can be filled with twists and turns.

Common forms of alliances include equity investments, cooperative ventures, R&D contracts, licencing agreements and sales and marketing agreements.

A strategic alliance can be formed in four steps:

1. Conducting internal due diligence
Evaluate your own needs, goals and resources. Identify the gaps preventing you from achieving your convergence goal. Those gaps define your partner possibilities.
2. Finding the right partner
Ask the following questions:
 - › Is there a strategic and cultural fit?
 - › Is this company willing to commit the technical, financial and human resources necessary for long-term success?
3. Developing a plan
Document your shared vision and objectives, the concept and scope of the venture, milestones and deadlines, management controls, reporting procedures and the partners' roles and responsibilities.
4. Negotiating the details
This agreement will cover partners' obligations, termination and exit mechanisms, financial terms and intellectual property management details.

As seasoned professionals who constantly advise clients on the strategic alliance process, PricewaterhouseCoopers can offer a few DOs and DON'Ts for a successful alliance:

Do:

- › Understand your own and your partner's objectives
- › Establish a measurement/benchmarking plan early
- › Recognise and capitalise on cultural differences
- › Be flexible; problems may emerge, strategies may change
- › Ensure there are champions at both companies who are committed to success

Don't:

- › Have a hidden agenda
- › Oversell your product development capabilities or commit to unrealistic deadlines
- › Bet the future of your company on a strategic alliance
- › Neglect to have a back-up plan in case the relationship does not work out
- › Forget that you are opening yourself up to your partner

For more information on how we help you develop a sound, practical strategic alliance plan in this world of converging opportunities, visit us at www.pwc.com/techconnect.

Questions for further reflection

Is digital convergence leading you into partnerships with a broader array of industries? What are you learning from these collaborations? Are you obtaining insights into new growth markets and high-potential business models?

How satisfied are you with your participation in alliances and partnerships? Are these relationships delivering all the benefits you would like?

What are the shortcomings? Do you have adequate control of intellectual property? Do you have intimate knowledge of end-customers? Are the benefits of the partnership enjoyed on an equitable basis? What shortcomings might be addressed by an acquisition?

Observation three continues on page 27.

Special feature: Start-up tech sector speaks out

What's on the minds of start-up technology CEOs as they navigate global merger and acquisition currents? PricewaterhouseCoopers asked over 400 CEOs from high-growth start-up technology companies throughout Europe to complete a survey identical to the one conducted by the EIU for the main report. In addition, PricewaterhouseCoopers interviewed six senior start-up executives. The result is an alternative view from those executives who are more likely to be acquired than to be acquirers themselves.

Principal insights

Start-ups prefer forming alliances rather than being acquired.

But they realise they don't always have the clout to choose.

Executives at high-growth tech start-ups believe that larger companies' M&A activities tend to emphasise self-interest as opposed to a genuine concern for the best interests of customers—but is there an alternative?

Facing numerous challenges, young tech companies say that generating cash flow is the path to survival and growth.

Viewing life from the opposite end of the food chain from their bigger counterparts gives start-up companies a unique perspective on digital, convergence-driven consolidation.

Observation A: Start-ups prefer forming alliances over being acquired.

In an ideal world, start-ups would grow into mid-sized companies and eventually achieve highly capitalised global status. But for the time being, start-up companies prefer partnering or combining with other start-up entities rather than being acquired by larger entities. “When you’re a young company with technology, it can be very hard to get to the customer,” says Jean-Yves Leclerc, CEO of French-based application traffic management system developer Ipanema Technologies. “So, one way to remedy this would be to build alliances with many other companies then attack the market together.”

Over half of the start-up sample say that alliances, partnerships and related collaboration will be the most likely sources of digital convergence revenue growth for their company.

Start-up organisations fear the loss of autonomy if acquired, which they feel stifles agility and innovation. As Maik Stockmann, CEO of German supplier relationship management-focused Econia Solutions explains, “In an MNC, development inevitably moves more slowly because you have to wait for too many people to say ‘yes’. Working with other smaller companies, things go quicker.”

Similarly, start-up executives—entrepreneurial by nature—think that acquisition by very large companies could diminish any sense of shared mission. Mergers and acquisitions can be successful “if the size of the two merging parties is more or less equal,” says Francesco Maringelli, CEO of Italian-based, SR Labs, a company focused on developing computer applications that can be controlled through tracking eye movements, “each party has a real say in the workings of the company.” But when “one party is a thousand times bigger than the other,” he continues, “it becomes a case of one company giving orders and the other following,” a state of affairs which can stifle entrepreneurial initiative.

By contrast, as Stefan Andreasen, founder & CTO of Danish and US-based Kapow Technologies, a company active in the integration of browse-able content, data and applications, explains, “I could easily see a situation where you get 1+1=3: two small companies who have very complementary technology together creating something bigger than each of them separately.”

Observation B: But technology start-ups realise that they don't always have the clout to choose.

Even the main survey notes that start-ups more often than not hold winning hands in agility, innovation and cutting-edge technology. But these advantages are often overshadowed by two sets of needs: access to customers and access to cash flow and/or capital.

Start-ups know that they are not powerful enough either to go it alone or fend off the bigger players’ advances. As Joris Barendregt, CEO of Dutch-based specialty semiconductor developer Crystal Q explains, small companies often have little say in such matters. “If the shareholders want to sell, they will sell.”

Observation C: The perception of start-up company executives is that the M&A plans of big companies focus more on industry domination than on serving the best interests of the market or customers.

While acknowledging the potential benefits of being acquired—such as access to capital, customers or even complementary technologies—start-up executives tend to view the motivations of larger companies with scepticism.

In the eyes of start-up companies, the largest companies are not so much pursuing convergence as they are controlling convergence.

The pattern of big players snapping up disruptive technologies has a knock-on effect as the market becomes more uniform.

Jeroen Tabor, CFO of Netherlands-based search software provider WCC explains, “You see a lot of big initiatives just fading out because they’re taken over by a big company and then, basically nothing is done with them.”

But could these young companies realistically do any better than the big technology companies? The overall survey shows that the technology industry expects start-ups to lead innovation. But according to the start-ups themselves, there’s no revolution in sight. As Stockmann of Econia Solutions says, “These changes might be gradual. You won’t see a revolutionary change.” Andreasen of Kapow Technologies adds, “Transition, not disruption, will be the next big buzz.”

Observation D: Though jousting with numerous challenges, the principal concern for young companies is cash flow.

A full 50% of start-up executives cite cash flow as one of the greatest impediments to the realisation of convergence-driven strategies within their company, compared to only 14% of executives from the largest companies in the main survey.

Another difference appears when it comes to financing convergence-driven transactions, 42% of young companies rely on stock swaps, compared to only 21% of the largest companies in the main survey.

But there are also similarities in their thoughts. For example a significant number of the largest companies (37%) alongside the majority of start-ups (79%) estimate the total market value of convergence-driven transactions by their company over the next five years to be \$50 million.

Conclusion

Start-up companies see themselves on the cutting edge, with enough agility to roll along with the rough and tumble of a rapidly-changing market.

But the main survey clearly indicates that large companies covet the agility and innovation inherent in start-up technology companies to achieve their convergence goals. Like oil and water, how can the two combine? In the end, convergence is a coming together, for start-ups and larger organisations alike.

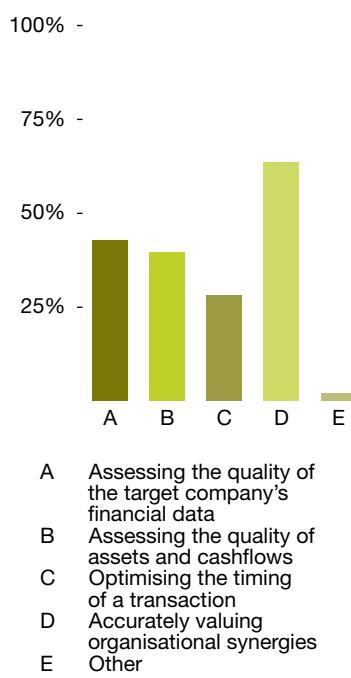
The complete findings of this start-up survey are available at www.pwc.com/techconnect.



Strategy

The deals that work start with strategy—and today those strategies are heavily focused on software developers and business content providers.

Figure 10. In terms of financial issues, what do you view as the greatest challenges for your company prior to convergence-related mergers & acquisitions? Select up to two responses.



Any business strategy is a form of bet. But the survey and interviews indicate that relative to partnerships or alliances, the decision to pursue M&A instead of partnerships and alliances tends to raise the stakes. This places the onus on executives to design a flawless strategy.

The risks are relative

The risks of any acquisition are relative. Certainly a large organisation can acquire a much smaller entity—many large organisations are active buyers and sellers of smaller companies and business units—and the risks weighed against the balance sheet are lessened. But when smaller companies combine, or when large companies combine with other large companies, the stakes are raised.

No matter whether the risks are large or small, the most important question to ask is why. “What’s the reasoning behind this transaction?” says Goldman Sachs vice president Sarah Friar. “How does this acquisition translate into a business strategy? Where’s the revenue from new products?”

Not coincidentally, the executives in our survey seem to recognise the importance of strategy. Far and away the most frequently cited pre-deal financial challenges surround accurately valuing organisational synergies (64%), a decidedly strategic focus, followed by the “getting to know you” issues surrounding assessing the quality of the target’s financial data (43%) and the quality of its assets and cash flows (40%).

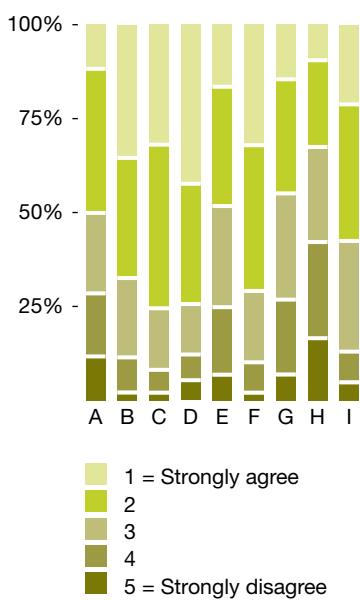
As noted earlier, most high-tech M&A deals are small. But beyond this, there are also a growing number of digital-convergence driven mega-deals, many with the potential to shift competitive positions and entire markets.

Enterprise software is one of many technology markets where several large and potentially industry-shifting acquisitions have already taken place. Oracle's acquisition of PeopleSoft, a move to consolidate a crowded segment, is a trend that is likely to continue. In software, "it pays to be big" says Friar. The reasons, she explains, are highly strategic. For example, "it can show commitment to a market or to a set of customers." But in addition, "There's this realisation that customers are looking to simplify their lives by working with an end-to-end vendor."

Size often becomes a win-win for both vendor and customer. "By acquiring more related capabilities, the vendor is able to address a broader set of its clients' needs," says Friar. This creates not only more revenue but also greater "stickiness" or "loyalty" in the relationship. Meanwhile, the customer gains simplicity and efficiency, not to mention the leverage that comes from being more important to a single vendor. Customers in this market, says Friar, tend to appreciate having "one throat to choke."

For these and related reasons, both large and small acquisitions are common in this sector, as well as others that are similarly structured. But as Friar points out, enterprise software companies aren't so much diversifying beyond their core competence as they are seeking improvements in the range and ultimately the quality of their services. Thus one could conclude that in this case, convergence is just an "excuse" for consolidation.

Figure 11. If your company were to pursue a significant merger, alliance, partnership or acquisition, what would drive the decision?



- A Access to new content
- B Access to technology
- C Ability to create/deliver enhanced products
- D Access to new customers/markets
- E Ability to bypass intermediate members of a value chain/more direct access to customers
- F Ability to gain market share/critical mass
- G To defend against competitor actions
- H Access to a brand name
- I Access to specialised skills/people

What constitutes strategy?

The survey sheds light on the importance of strategy, but it was the interview subjects who explained the types of issues that might lead to a specific transaction. Some of the questions these executives ponder before pulling the trigger on an M&A deal include the following:

- › Is this an appropriate strategic direction for us to pursue?
- › Is the technology viable? Will customers adopt this technology?
- › Will this help our organisation enter a high-growth industry?
- › If the path of this acquisition leads towards commoditisation, will we be positioned as a top performer?
- › Are we acquiring great skills? Can we retain them?
- › Are we acquiring leading-edge technology?
- › Will we be acquiring a well-developed and loyal customer base?
- › Will this turn our allies and partners into foes? Will we become a strategic threat?
- › Will added scale prove commitment to a marketplace and attract more partners and customers?
- › What needs to occur for this acquisition or merger to succeed?
- › What is a fair price for this acquisition—how can we avoid overpaying?
- › What's the story line for shareholders—and is this a credible scenario?

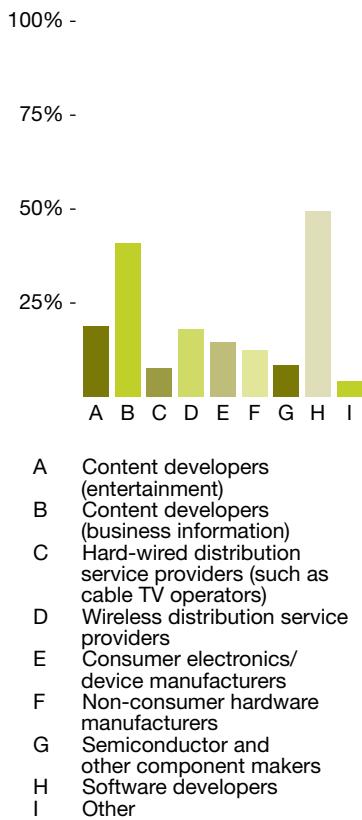
What they're buying

While interviewees would not share information about planned transactions, the survey reveals the elements technology executives believe will be most likely to drive their individual companies to pursue a specific acquisition, merger or even partnership alliance. These include:

- › The ability of the combined companies to create/deliver enhanced products (cited by 76% of respondents)
- › The ability to gain access to new customers and markets (74%)
- › The ability to gain market share/critical mass (71%)
- › Access to new technology (67%).

It is noteworthy that the findings are similar for both small and large companies alike.

Figure 12. If your company were to pursue a significant acquisition, which of the following segments are the most likely candidates? Select up to two responses.



Meanwhile, the most likely targets for acquisition—the companies that the CTO of a large US hardware maker describes as “having targets painted on their foreheads”—include:

- Software developers (cited by 49% of respondents)
- Business information content developers (41%)
- Entertainment content developers (19%)
- Wireless companies (18%)
- Consumer electronics device makers (15%).

In essence, it appears that technology companies are moving beyond existing core competencies.

Ultimately, strategy and intimate knowledge of the company to be acquired are inextricably linked. As NDS's Koussios explains, “My job is to perpetually look at start-ups that could become attractive for acquisition.” The executive and his team “consider around 100 companies a year, look very closely at maybe 10,” then ultimately acquire “one or two,” he says.

But the entire cycle, “begins with an understanding of our own strategy, which is to be an active driver in the transformation of television from analog to digital and from mass appeal entertainment to a highly individualised viewing experience and to benefit from all the opportunities this enables,” Koussios says. Only from this perspective, he explains, “can we be effective in determining how the two organisations might benefit from being combined. You must understand your own company and its strategies, capabilities and needs in relation to the capabilities of the company you’re acquiring.”

The real strategies behind today's M&A

M&A speaks directly to the core strategies of any given company. Moreover, interviewees must be guarded to ensure they aren't divulging any form of specific inside information relating to potential future acquisitions.

But on the condition of anonymity, a senior M&A executive from a large, well-known technology-focused organisation was willing to share a few insights.

What's behind today's transactions?

The answer, says the executive, "is that it depends on who you are as a company, what you really need to accomplish and how much you are open to subjecting your company to risk." Acquisitions, he says, "hold the promise of many benefits, but they usually entail significantly more risk than partnerships, alliances or joint ventures."

Rather than discuss the details of any one specific or even hypothetical transaction, the executive instead provided a short list of the factors that have, to one extent or another, driven more than a dozen of his company's transactions. The following are specific examples of factors the company relied upon in executing over \$5 billion in acquisitions over the past four years:

- The purchase of a complete and well-established technology that is a completely new venture for the acquiring company
- The purchase of a small or start-up company to gain control of R&D that might eventually threaten the acquirer's existing products
- The purchase of R&D the company could not afford to establish on its own
- The purchase of R&D in order to accelerate time-to-market
- The purchase of R&D at a well-established company simply to prevent the competitors from owning it
- The purchase of companies for no other reason "than the marketplace is saying you're sitting on large amounts of cash, you're a technology company, and you need to be more proactive."

The executive explains, "There's the strategy they'll announce to the press, and there's the strategy that's really behind the decisions."

How deal approach foretells success or failure*

The struggle of any convergence-driven deal is to preserve precious intellectual property, human capital and entrepreneurial drive.

Preserving value often depends on successful integration. To succeed, integration must be embraced as a business process—a series of disciplined steps that flow from a plan that begins long before the deal is inked.

Start with your deal strategy—it's got to be flexible enough to adjust for the unexpected, aggressive enough to win highly competitive business terms and broad enough to envision the challenges that will confront you from the moment the contract is signed.

Deal strategy includes deciding upon your integration approach. There's no one rigid path. Flexibility and quick action are central to any model. Here are three sample integration structures:

One team for both due diligence and integration

Members of this multi-disciplined core group are intimately involved, from helping to identify the target to conducting due diligence, negotiating the deal and then handling the integration. They may call on specialists from other departments to handle certain integration tasks, such as connecting email systems, but the core group stays in place throughout the integration. The benefit of this approach is consistency. Team members have detailed knowledge of the deal and are thus sensitive to nuances that might be missed by those who step in at the last minute.

Two specialised teams

Under this approach, one group handles the due diligence through the deal closing and then hands off the target company to a group of integration specialists. The integration group, led by a corporate development executive, includes staff members from multiple company units with integration experience. The benefit here is deep experience in the integration process.

Business unit leads

In decentralised companies, each business unit may assume a leadership role in making acquisitions while corporate development professionals provide support as needed. Here the benefit is that the business unit is clearly committed to the deal and has its own experience in deal making. It's up to the corporate development staff to fill in where the business unit may have weaknesses or lack special knowledge.

Regardless of the approach, all deals begin with due diligence. These efforts typically focus on the financial and operational risks of an acquisition, but often pay little, if any, attention to cultural differences, knowledge sharing and systems integration issues. Yet these are generally recognised as the most difficult and costly aspects of integrating two companies, especially if they are from different industry sectors. To beat the odds, integration issues such as potentially incompatible information systems, cultures and management practices must be evaluated and understood during the diligence phase.

Although the quest for lower costs is not a primary deal driver, most companies assume that these synergies will be captured. Yet most companies fail to capture all the projected savings. To avoid this, companies should define their objectives in terms of value creation through convergence, not just cost reduction, during the pre-deal discussions.

As you move down the path toward reaching agreement on your deal, you'll also need access to the right information at the right time. Tax issues, HR issues, technical accounting issues, legal risks, conflicts of interest, market fluctuations—all need to be taken into account with each decision you make.

For more information on how PricewaterhouseCoopers helps companies manage pre-deal processes to knit together a successfully converged deal, please visit us at www.pwc.com/techconnect.

Questions for further reflection

What is your strategy for profiting from digital convergence? Where is the low-hanging fruit? Where are the longer-term yet potentially breakthrough opportunities?

What are your competitors' strategies for benefiting from digital convergence? Do you proactively evaluate where conflict may arise? What mechanisms do you have in place to continually evaluate evolving marketplaces?

Have you taken stock of all the companies that could potentially assist you in achieving both your near-term and longer-term strategies? Have you evaluated what might happen if your competitors were to acquire these organisations?

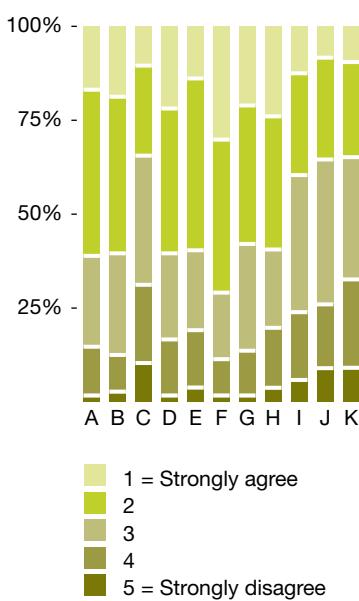
If financing was no obstacle, what company would you want to acquire? Why?



Execution

Winners in digital M&A need not only a great business strategy, but also a plan to integrate business models and cultures.

Figure 13. In which areas of your business will anticipated convergence-driven transactions affect the following elements of your corporate strategy?



Details are important, whether it's an industry-changing mega-deal or the modest acquisition of a needed set of technologies, products or capabilities. Successful transactions start with sound strategy. But from there, the recipe requires equal amounts of pre-transaction due diligence, before-the-papers-are-signed planning and after-the-ink-dries follow-through.

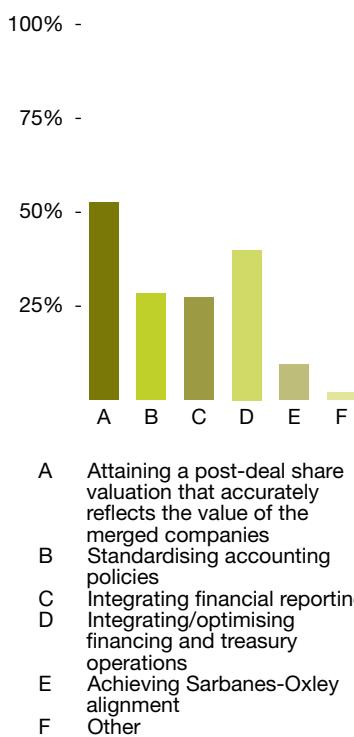
M&A's challenges

Our research shows that a merger or acquisition carries profound implications for corporate structures, business models and strategies. Here the survey focuses on a subset of executives, those 91 (of a total 149 respondents to the overall survey) anticipating significant convergence-driven transactions within the next five years. Asked to specify those areas of their businesses that would be significantly affected by a merger or acquisition, their responses include:

- Product development and portfolio (cited by 71% of this subset)
- Overall business model and structure (61%)
- R&D (60%)
- Customer relationships and strategies (60%)
- Technological footprint (60%).

- A Overall business model and structure
- B Customer relationships and strategy
- C Supply chain
- D Research and development
- E Technological footprint (e.g., capital-intensive, non-R&D technology investments in networks, satellites, manufacturing, data 'pipelines')
- F Product/service development and portfolio
- G Product/service demand
- H Sources of revenue
- I Capital structure
- J Advertising and promotion
- K Human resources

Figure 14. In terms of financial issues, what do you view as the greatest challenges for your company after convergence-related mergers & acquisitions? Select up to two responses.



In addition to the need to align the numerous processes and functions cited above, corporate transactions create the need to address a number of additional issues. For example, asked to select the greatest financial challenges following a merger or acquisition, the top concerns include:

- › Attaining a post-deal share valuation that accurately reflects the value of the combined companies (53%)
- › Integrating/optimising financing and treasury operations (40%)
- › Standardising accounting policies (28%).

Coalescing cultures

The survey results and interviews show that strategic, operational and financial concerns are vital to the acquisition process. But not to be overlooked are the cultural aspects of the marriage. Though the soundness of strategic and financial elements are needed for a successful merger or acquisition, “cultural fit,” says Koussios, can also “make or break” the transaction.

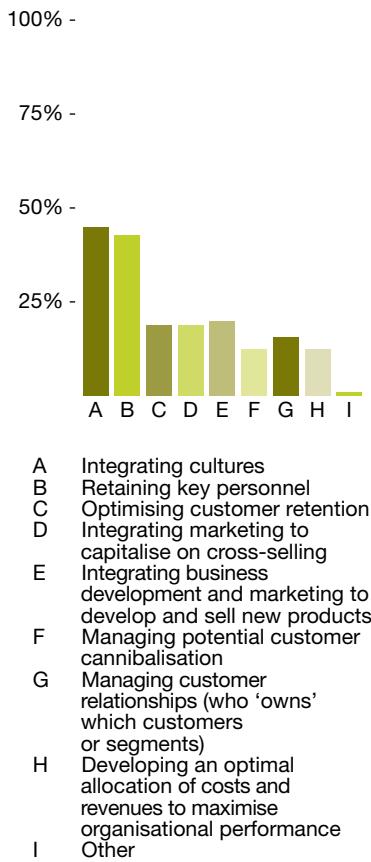
For this reason, Koussios says his company looks very carefully at the cultural fit of any acquisition. “You can buy lines of code any time,” he explains. “But if the people who developed the technology aren’t going to stick around—at least long enough for your own people to acquire their knowledge and expertise—you’re throwing your money away.” Not surprisingly, the top cultural challenges in terms of frequency of citation, the survey shows, are integrating cultures (45%) and retaining key personnel (43%).

Executives with significant M&A experience say that cultural fit is at once one of the most difficult and yet most vital intangibles in a transaction. As Koussios explains, “I wish I had a crystal ball or some objective criteria, but it’s just not that simple.” Still, as Seth Alpert, Managing Director of AdMedia Partners, explains, “If you can’t hold on to the personnel, and more importantly, if you can’t keep them engaged, you’re going to have problems.”

Fortunately, there are means to improving the odds for success. One of the simplest and probably most reliable approaches, explains a senior executive from Sun Microsystems, is to acquire companies only after you’ve had a relationship with them for some years, and even then, only when it makes sense for both companies. No hostile acquisitions, therefore.

But even if an acquiring company has a prior relationship with a target’s management team, it’s still vital, says Alpert, “to lock in their attention.” Key managers, says Alpert, “get a big pay check when their company is acquired—and that carries a strong psychological impact.” So it becomes vital, he explains, “to find a way to somehow keep it interesting so they’ll remain engaged.”

Figure 15. In terms of culture, customers or other remaining significant issues, what do you view as the greatest challenges for your company relating to convergence-related mergers & acquisitions? Select up to two responses.



The solution, he explains, “is to make it clear they’ll get an even bigger pay check a few years down the road, provided they continue working and contributing.” Private equity is one means to this end, “essentially locking them in to creating value.” But another common and effective approach is to offer “earn outs” to senior employees. These, explains Alpert, specify payments the size of which is dependent upon “future events or benchmarks.” In either case, says Alpert, “you have to know who the most valuable employees are, and then you have to make it very expensive for them leave.”

Post-merger, firms face an expensive choice: if they do not pay their executives well they will either fail to perform or leave. Or they can pay a performance-based “bonus” to create a shared incentive to succeed. As Alpert explains, “Earn-outs provide upside to the seller and protect downside for the buyer.” Essentially, a buyer is willing to pay more over time for deals that work rather than paying a set price at closing. “That,” says Alpert, “seems to be a fair trade-off for all concerned.” He further explains, “Buyers that employ earn-out structures typically model a range of projected values, not divulged to the seller.” In addition, “some buyers place a cap on the earn-out to protect against any significant upside surprise on the deal value—in fact, UK buyers are required to set a cap.”

The focus on culture and the need to retain key executives by no means minimises the importance of the other-cited cultural challenges. For example, integrating business development (20%) and integrating marketing (19%) translate into better performance on broader strategic objectives such as developing new products and cross selling. Similarly, optimising customer retention (19%) and determining who “owns” which customers (16%) are issues which can contribute dramatically to success but to which there are no easily proscribed models or solutions.

The same can also be said of designing an optimal allocation of revenues within any performance-evaluation scheme (13%). The fact is, all of the above challenges relate directly to both the integration of culture and the success of the merger or acquisition.

Hoped-for bliss amid disruption: Cisco weds Scientific Atlanta

One of the more compelling story lines in digital convergence M&A is the tale of the acquisition of cable and telco video experts Scientific Atlanta by networking pioneer/engineer Cisco Systems. From courtship to plans for happily ever-after, the \$7.0 billion February 2006 takeover weds a discernibly convergence-focused business strategy with “partners” uniquely suited to delivering a broad range of end-to-end solutions.

The strategy

It isn’t enough to pursue vague notions of digital convergence, says Cisco SVP of corporate development Dan Scheinman. “So when we’re evaluating opportunities, what we look for is specific markets in disruption.” In the battle for video provision to households, Cisco sees three disruptive forces leading to an opportunity to achieve high growth.

First, says Scheinman, “you have the battle between service providers, telcos, cable companies and satellite providers—and (in Europe and Asia) add wireless carriers, to deliver bandwidth to the home.” Second is the disruption over the delivery of video content. Displacing DVDs, traditional broadcast

television or even movie theatres, Scheinman continues, “the Internet can deliver digital content to consumers where they want.”

Finally, says Scheinman, there is disruption in video and other content players. Consumers, says Scheinman, “want to be able to use different devices for particular purposes.” So, he concludes, in an era of proliferating devices, the ability to deliver device-agnostic content via the Internet represents “a great opportunity.”

So video—a critical element in quad play (voice, data, wireless and video) consumer convergence strategies—is evolving rapidly. Consequently, says Scheinman, “We couldn’t wait for a partnership to develop. We knew we needed to move right away, and that meant finding the right acquisition, fast.”

The courtship

Scientific Atlanta was no stranger to Cisco. As Scheinman explains, “We’ve been talking with them for several years, and what we really like about Scientific Atlanta is their strong engineering depth and their culture, which are both very similar to ours.” Moreover, he continues, “We knew they had

a wonderful franchise in cable, but we wanted to know if they could cross the chasm into video for telecoms or whether some other company would step in and take away first mover advantage.”

Any doubts were erased in summer 2005 as Scientific Atlanta signed major deals with Verizon and SBC (a few months prior to their acquisition of AT&T). “That was a siren call,” says Scheinman. “If (Scientific Atlanta) is now building video networks for telcos, they’ve got it all and they became exactly what we needed to succeed with our vision.”

By the same token, Scientific Atlanta’s management team valued what Cisco could bring. For example, says Scheinman, “they and their people were excited about the idea of seeing their technology in global distribution—and that’s something we can deliver on.”

The marriage

Cultural fit can be a make-or-break proposition in M&A. For this reason, “cultural integration is a real core competence and a source of competitive advantage for Cisco,” says Scheinman. “We have a great track record—over 50% of the people we’ve

acquired over the past 13 years are still with Cisco,” Scheinman explains. As for more recent acquisitions, “the attrition rate is in the low single digits,” says Scheinman. “If you look at the industry (statistics), that’s remarkable.”

It begins with knowing the acquisition. “If two people are dating and they don’t like each other, getting married isn’t going to help,” says Scheinman. “So you have to get to know them, you have to like them and there has to be chemistry and a shared vision.” In the case of Scientific Atlanta, “we’d known their executives for some time,” and the level of compatibility “was clear.” Without evidence and confidence relating to compatibility, says Scheinman, “we wouldn’t even consider taking the next step.”

But, says Scheinman, there’s still a need for formal structures to engage the combining organisations. In particular, managers, engineers and strategic planners, even marketing staff, need to begin forming ties and coordinating efforts. Here, says Scheinman, “the formal process is chaired by a division head, and then there’s someone assigned to run the day-to-day integration,”

for example developing a plan for arranging introductions and meetings. Even so, much of the cultural coming-together remains informal. As Scheinman explains, “a lot of the engineers and managers started talking to one another on their own, and that’s fine too.”

The shared future

Scientific Atlanta and Cisco are now moving forward on a shared vision of the future of video to the home. “What’s next for us is to make sure we keep the (Scientific Atlanta’s) telco and cable customers happy. We want them to be happy and to stay happy,” says Scheinman.

But from there, says Scheinman, “we’ll be working to figure out how to combine the strengths of the organisations to improve the quality and expand the capabilities in video for telcos (and other providers) in the US and Europe.” For example, “right now we’re focusing on customer roadmaps and technology roadmaps so we can determine the things we can do together to deliver products and services for the marketplace.”

Essentially, Cisco knows networks and Scientific Atlanta knows video. Now, says Scheinman, it’s up to the

combined entities “to develop cool, new, end-to-end technologies.” The end game is delivering to consumers and content providers such as telcos and cable companies device-agnostic, anytime, anywhere video capabilities. “If we can execute,” says Scheinman, “it’s a win for our customers and for our customers’ customers.”

How post-deal speed wins the race*

Although companies are doing more deals than ever before, there is no evidence that recent deals around convergence will be any more successful than those done in the past. The literature is rife with postmortems on deals that failed to deliver the value intended.

Apparently, buying is easy, but owning is hard.

Melding divergent operating philosophies, management practices, administrative procedures and communication styles are post-deal hurdles. As companies acquire businesses from different sectors, the challenges expand.

Speed increases success rates, and deal-makers know it. When asked the one thing they regret most from their last deal, most will cite not moving fast enough. Companies that make fast transitions report better financial performance, morale, productivity and time-to-market, along with fewer systems and management integration problems. Reconciling differences in operating philosophies as soon as possible is pivotal to improving post-deal financial performance. Successful acquisitions quickly get beyond the “my practises are better than your practises” debate.

As mentioned on page 32, the early use of transition teams to execute transition goals helps speed integration. These teams dramatically improve employee morale, focus, initiative and decision-making, while reducing absenteeism, turnover and internal strife.

Communication is also a stabiliser. It keeps people focused, energised and committed, rather than distracted and perplexed. Successful companies communicate to all key stakeholders—employees, customers, suppliers, regulators and investors. Most importantly, early communication with employees drastically reduces uncertainty, allowing them to refocus on creating value.

Each party to a merger has its own way of doing business. Major differences in operating philosophies and vision, if not resolved early, will quickly drain deal value. A protracted integration of key systems will delay capturing deal value and can give competitors the opportunity to take market share. As mentioned on page 32, these issues should be explored along with financial soundness as a part of the due diligence process.

Companies that move quickly to integrate and communicate their new policies and operating procedures are more likely to report favourable gross margins, speed to market, productivity and profits. However, management must first make sure that the new policies and procedures support the overall business strategy, and that they are well understood throughout the organisation.

Over 2000 years ago, the Chinese general Sun Tzu wrote that cleverness has never been associated with long delays, and that speed often counts more than superior size and careful calculation. Centuries later this still holds true in mergers and acquisitions.

For more information on how PricewaterhouseCoopers helps companies manage deal integration quickly for success, please visit us at www.pwc.com/techconnect.

Questions for further reflection

How much experience do you have in integrating an acquisition? Does a particular business unit have more experience than the rest? Is there a corps of managers you can identify who have had previous success? How can you find and then harness this knowledge?

How important is leadership during implementation? What will the leaders in your organisation need to do in order to make the implementation successful? What resources and tools will they require?

What are the most prominent elements of your company's culture? Does it vary by business unit or function? Will it be essential for an acquisition to mirror this culture or will the combining companies lead to an overall evolution in culture?

What "quick start" mechanisms are essential for IT; for compliance; for R&D; for sales/marketing; for treasury and finance; for other vital processes/functions? How will these be organised and implemented?

What can be done to enhance communication and trust between the acquiring company and acquired workers and managers? What can be done to minimise the interval of uncertainty relating to the future? What can be done to create shared visions and missions?



Conclusion

And the winner is...

Is digital convergence redrawing the industrial map or merely a convenient excuse for consolidation?

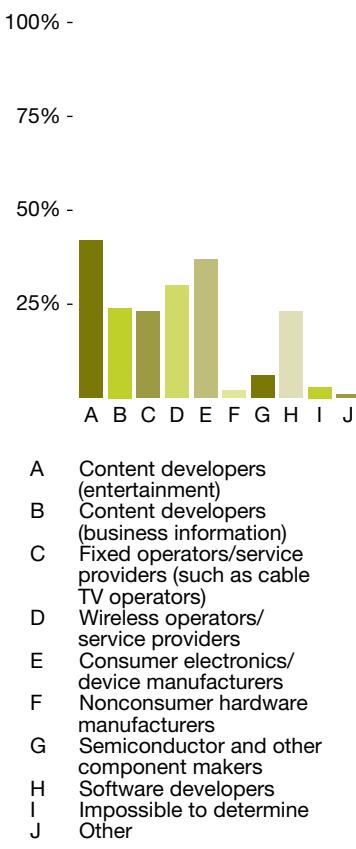
The survey and interviews demonstrate that convergence is driving M&A rather than an excuse for it. Partnerships and alliances can also help companies gain a foothold in other industries and markets. But executives see M&A as a means of capturing entire beachheads. There can be no doubt that in technology, media and telecommunications, the driving force behind today's rapid pace of acquisitions and mergers is digital convergence.

Market statistics suggest that the growth in the number of total transactions may have slowed in 2005. But at the same time, the average size of each deal is increasing. And as they grow, they tend to encourage other firms to enter the fray and to push up the size of deals still further.

Meanwhile, the responses of survey participants suggest that companies are likely to spend considerable sums to buy firms over the next five years. And so there's little chance that the pace of high-tech M&A will diminish—quite the opposite.

Many executives prefer partnerships and alliances as a less risky way to explore unfamiliar terrain. But there are shortcomings, including an inability to control relationships, either with customers or even with other parties in the alliance or partnership. And risk aside, alliances and partnerships may also move too slowly to capitalise on fast-moving opportunities. By failing to place a significant bet, executives realise, their companies may fail to maximise the convergence payoff.

Figure 16. Which types of companies face the most compelling opportunities from digital convergence over the next five years? Select up to two responses.



But for those organisations choosing the M&A path, the warnings from the research are clear. Be certain you're pursuing a realistic strategy—and then compare the value of that strategy versus the acquisition price. Markets today are heating up and few if any strategies in the history of business have been pursued successfully at any price.

Still, the good news is that technology, media and telecom companies appear to be approaching the current wave of M&A with their eyes wide open. Discussions with executives and the survey findings reveal a focus on fundamental strategic soundness. Moreover, executives are neither discounting the challenges of integrating operations nor overvaluing the revenue synergies of the combining companies. Instead they stress operational synergies and cost savings, and are even taking careful steps to ensure the cultures of the combining entities are compatible and sustainable. Executives realise that an acquisition becomes an empty shell if the creators of value either fail to embrace a shared vision or leave.

Which sectors do technology, media and telecom executives believe will become the overall winners in digital convergence? Whether through M&A, partnership, alliance, innovation, organic growth or by just being in the right place at the right moment, the survey participants handicap the race as follows:

- › Entertainment content developers (cited by 42% of respondents)
- › Consumer electronics manufacturers (36%)
- › Wireless operators and related service providers (30%)
- › Business content developers (24%)
- › Fixed operators and related service providers (such as cable TV—23%)
- › Software developers (23%).

As for the role of mergers and acquisitions amid the many likely success stories, the last word goes to a CFO from a large, US-based high-technology company:

“We know a lot of companies are going to stumble badly, but a lot more are going to do really well. I'd have to say strategy is important, but in the end, it's all in the execution. A great strategy, poorly executed, is a waste of everyone's time and cash. But a decent acquisition, well executed, with loads of cost synergies, can generate enormous returns. So in M&A, all you need is a good idea—not even a great idea but a good one—coupled with great execution and you can achieve amazing results.”

Appendix

The survey: Shaping digital convergence through mergers & acquisitions*

- 46 Survey methodology
- 47 Results of the survey
- 55 Profile of the survey respondents
- 56 Acknowledgments
- 57 PwC technology industry leaders

Survey methodology

The analysis of shaping digital convergence through M&A presented in this report is based upon the results of a survey conducted in February 2006 by the Economist Intelligence Unit.

Analysis

On a number of questions, respondents were asked to respond on a scale of 1 to 5, with 1 being 'strongly agree' and 5 being 'strongly disagree' or 1 being 'very important' and 5 being 'unimportant'. In the report, some analyses state percentages that are totals of two categories of the scale—the percent of respondents choosing categories 1 and 2 or the percent of respondents choosing categories 4 and 5. Although based on actual percentages, these analyses thus convey broad agreement or disagreement on a specific topic or question.

Industry sectors

The survey results come from across the technology industries as well as from the telecom and media sectors: 3% from Content Developers (entertainment), 4% from Hard-wired Distribution Service Providers (e.g., Cable TV), 14% from Consumer Electronics/Device Manufacturers. Also, 46% of the responses came from Software Developers, 17% from Content Developers (business information), 2% from Wireless Distribution Service Providers, 10% from Non-consumer Hardware Manufacturers and 4% from Semiconductor Manufacturers.

Seniority of respondents

A good cross-section of executives responded to the survey, including 18% of responses coming from CEOs/Presidents/Managing Directors. Another 9% came from CIOs/Technology Directors and 12% originated from Senior Vice-Presidents/Vice-Presidents or Directors. Also, 19% of the respondents said they were a Department or Business Unit Head, 6% said they were Board Members, 5% said they were CFOs, 6% said they were "other" C-level Executives and finally 17% were Manager level. Finally, about 9% did not fall into any specific pre-established category.

Separate survey of European start-up companies

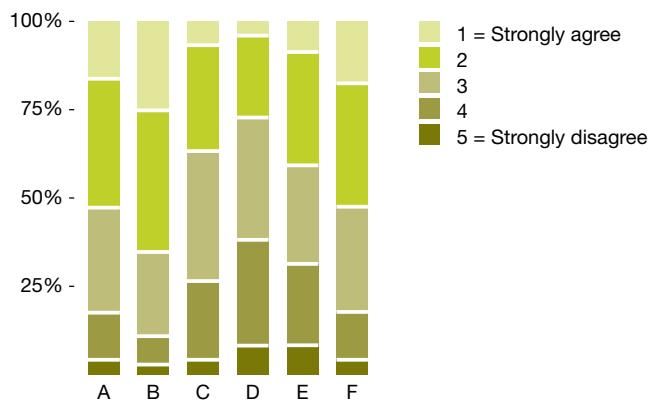
For this separate survey, over 400 start-up companies in Europe were surveyed directly by PricewaterhouseCoopers (as opposed to the main survey that was conducted by the EIU). Survey questionnaires were sent out either electronically (the majority) or by post (about 20%). Of the total population, more than 10% completed the survey questionnaire and returned it to PricewaterhouseCoopers. The results include data from the following countries: The Netherlands, Switzerland, France, Sweden, Italy and Germany. The details of this survey can be found at www.pwc.com/techconnect.

Results of the survey

Respondents' answers to the survey questions are illustrated in the following figures.

1

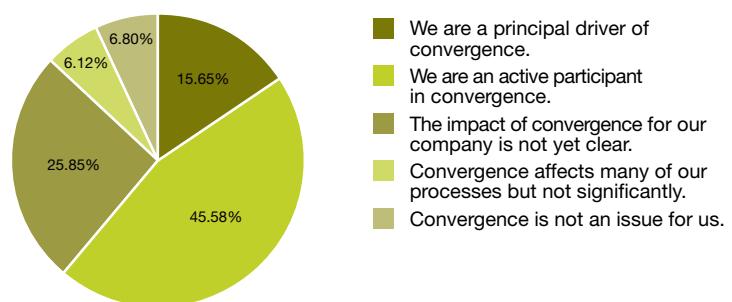
How strongly do you agree or disagree with the following statements?



	1	2	3	4	5
A. The past three years have seen significant consolidation in our industry.	16.22%	36.49%	29.73%	13.51%	4.05%
B. The next three years will see significant consolidation in our industry.	25.17%	40.14%	23.81%	8.16%	2.72%
C. Convergence is driving up the price of acquisitions within our industry above their true economic value.	6.80%	29.93%	36.73%	22.45%	4.08%
D. Convergence is merely a justification for industry consolidation.	4.08%	23.13%	34.69%	29.93%	8.16%
E. Convergence will lead to significant corporate failures as firms attempt to extend too far beyond their core competence.	8.84%	31.97%	27.89%	23.13%	8.16%
F. The most effective approach to convergence is a broader collaboration with new and existing partners, rather than mergers and acquisitions.	17.69%	34.69%	29.93%	13.61%	4.08%

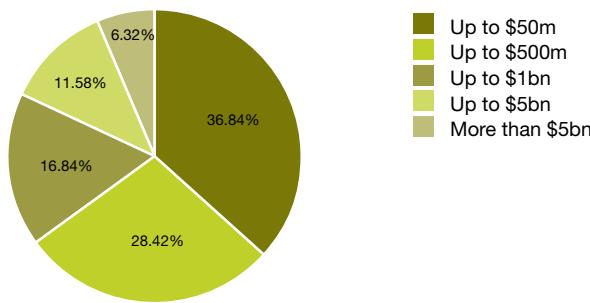
2

Which of the following statements best describes your company's overall role in the evolution of digital convergence?



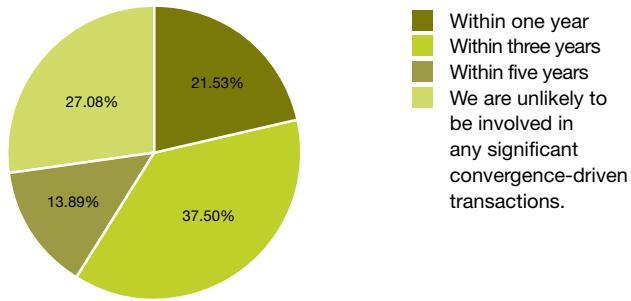
3

If you were to add up the total market value of highly-likely convergence-driven transactions by your company within the next five years, what would be the total amount?



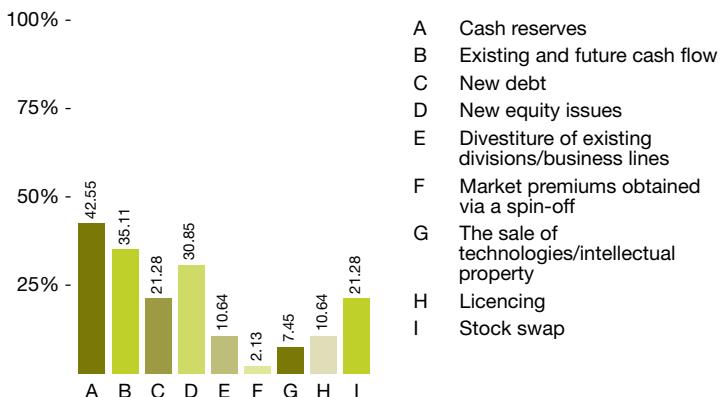
4

Over what timeframe is your company likely to be involved in a significant convergence-driven transaction such as a merger, acquisition, partnership or divisional spin-off?



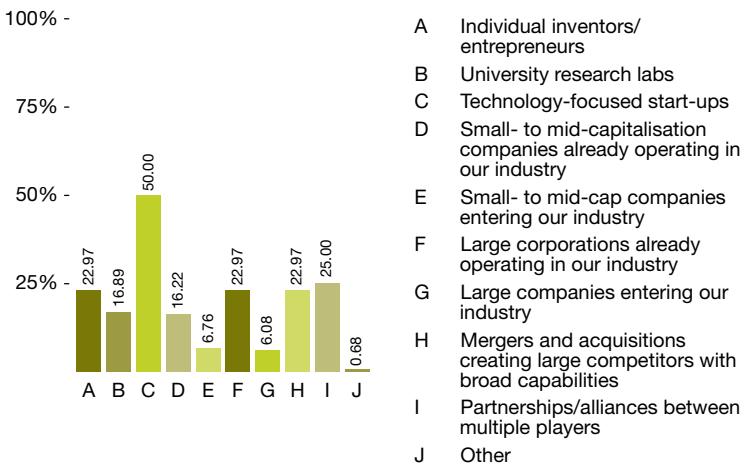
5

How might your company plan to finance convergence-driven corporate transactions? Select the two most significant sources.



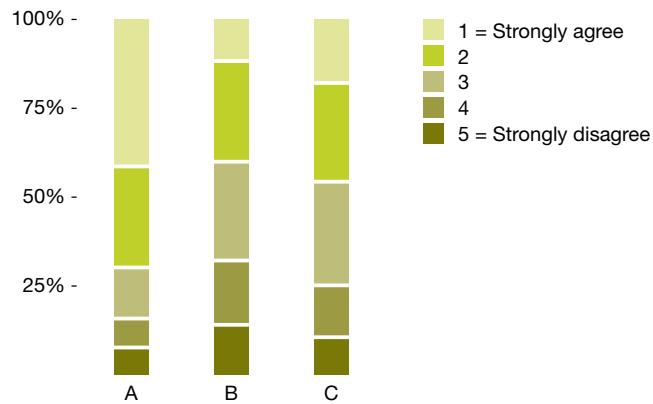
6

Which of the following will be the most likely sources of significant innovation in digital convergence? Select up to two responses.



7

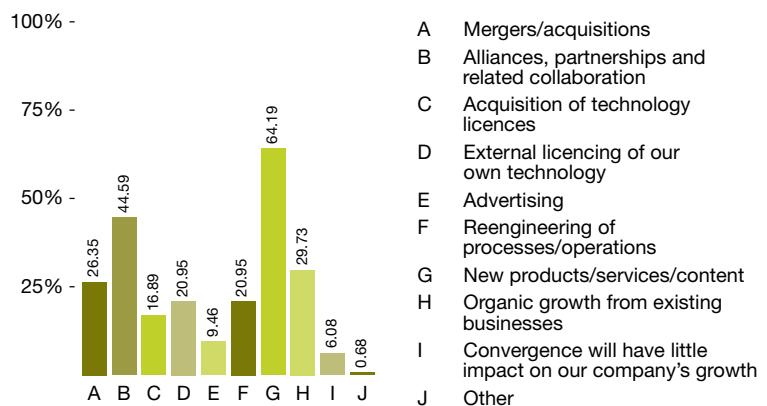
How strongly do you agree or disagree with the following statements?



	1	2	3	4	5
A. Digital convergence presents us with significant strategic opportunities.	41.50%	28.57%	14.29%	8.16%	7.48%
B. Digital convergence presents us with significant strategic threats.	11.81%	28.47%	27.78%	18.06%	13.89%
C. Digital convergence presents us with significant operating challenges.	18.06%	27.78%	29.17%	14.58%	10.42%

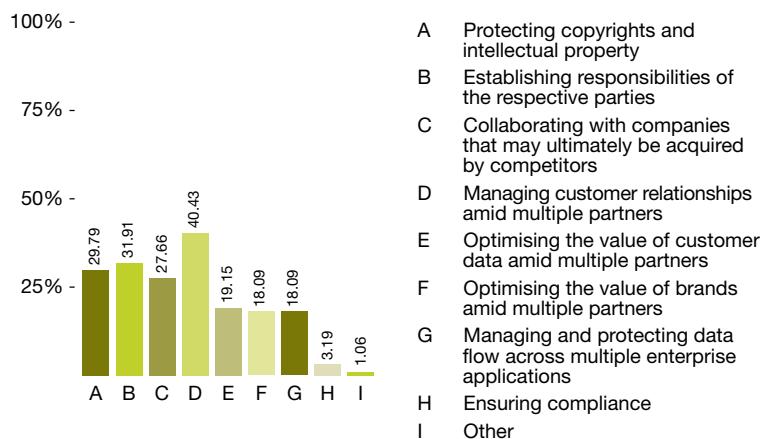
8

Within the scope of digital convergence, what do you believe will be the most likely sources of revenue growth for your company over the next three years? Select up to three responses.



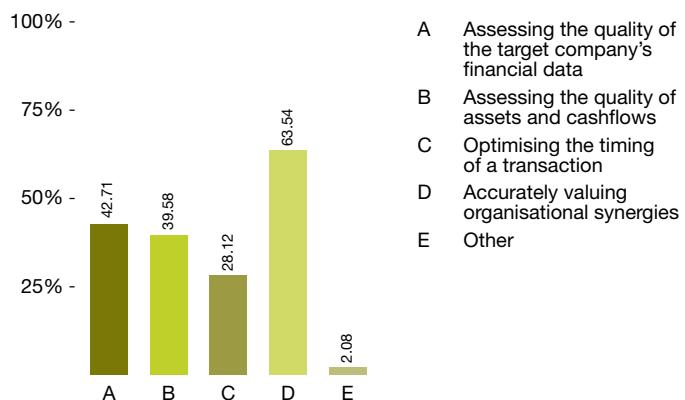
9

Regarding partnerships and alliances, what do you view as the greatest convergence-related challenges? Select up to two responses.



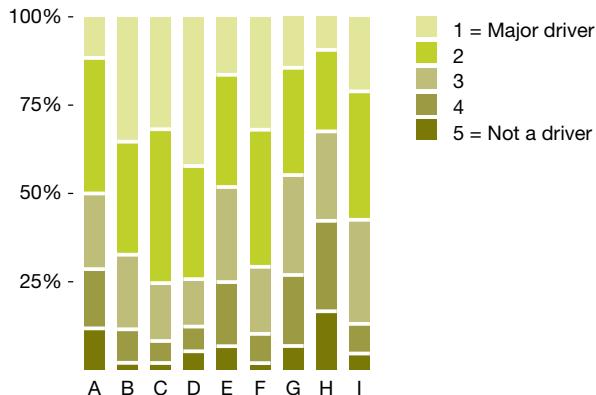
10

In terms of financial issues, what do you view as the greatest challenges for your company prior to convergence-related mergers & acquisitions? Select up to two responses.



11

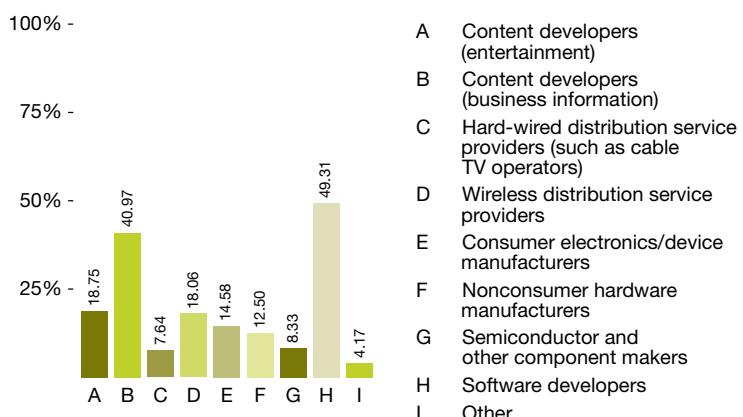
If your company were to pursue a significant merger, alliance, partnership or acquisition, what would drive the decision?



	1	2	3	4	5
A. Access to new content	11.81%	38.19%	21.53%	16.67%	11.81%
B. Access to technology	35.37%	31.97%	21.09%	10.20%	1.36%
C. Ability to create/deliver enhanced products	31.97%	43.54%	16.33%	6.80%	1.36%
D. Access to new customers/markets	42.18%	31.97%	13.61%	7.48%	4.76%
E. Ability to bypass intermediate members of a value chain/more direct access to customers	16.55%	31.72%	26.90%	18.62%	6.21%
F. Ability to gain market share/critical mass	31.97%	38.78%	19.05%	8.84%	1.36%
G. To defend against competitor actions	14.48%	30.34%	28.28%	20.69%	6.21%
H. Access to a brand name	9.66%	22.76%	25.52%	25.52%	16.55%
I. Access to specialised skills/people	21.23%	36.30%	29.45%	8.90%	4.11%

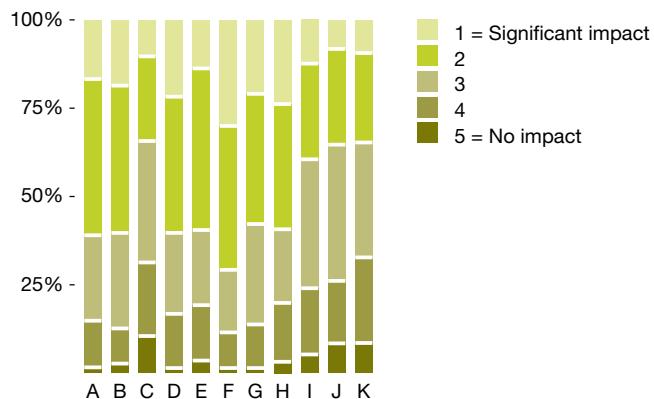
12

If your company were to pursue a significant acquisition, which of the following segments are the most likely candidates? Select up to two responses.



13

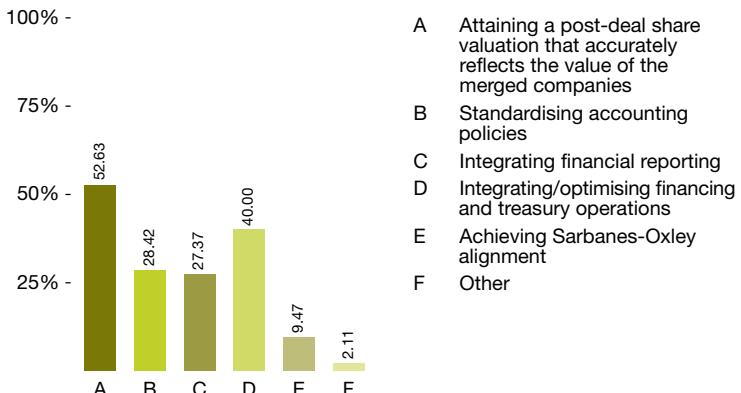
In which areas of your business will anticipated convergence-driven transactions affect the following elements of your corporate strategy?



	1	2	3	4	5
A. Overall business model and structure	16.84%	44.21%	24.21%	13.68%	1.05%
B. Customer relationships and strategy	18.75%	41.67%	27.08%	10.42%	2.08%
C. Supply chain	10.42%	23.96%	34.38%	20.83%	10.42%
D. Research and development (R&D)	21.88%	38.54%	22.92%	15.62%	1.04%
E. Technological footprint (e.g., capital-intensive, non-R&D technology investments in networks, satellites, manufacturing, data pipelines)	13.83%	45.74%	21.28%	15.96%	3.19%
F. Product/service development and portfolio	30.21%	40.62%	17.71%	10.42%	1.04%
G. Product/service demand	21.05%	36.84%	28.42%	12.63%	1.05%
H. Sources of revenue	23.96%	35.42%	20.83%	16.67%	3.12%
I. Capital structure	12.50%	27.08%	36.46%	18.75%	5.21%
J. Advertising and promotion	8.33%	27.08%	38.54%	17.71%	8.33%
K. Human resources	9.47%	25.26%	32.63%	24.21%	8.42%

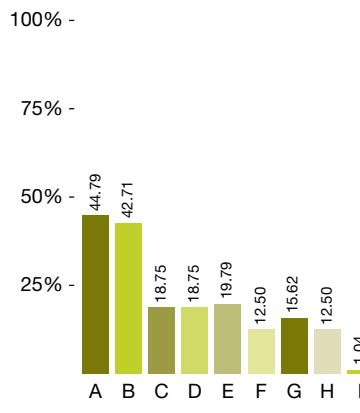
14

In terms of financial issues, what do you view as the greatest challenges for your company after convergence-related mergers & acquisitions? Select up to two responses.



15

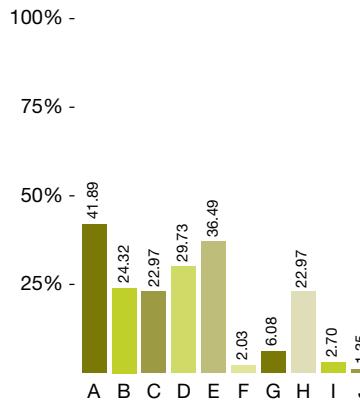
In terms of culture, customers or other remaining significant issues, what do you view as the greatest challenges for your company relating to convergence-related mergers & acquisitions? Select up to two responses.



- A Integrating cultures
- B Retaining key personnel
- C Optimising customer retention
- D Integrating marketing to capitalise on cross-selling
- E Integrating business development and marketing to develop and sell new products
- F Managing potential customer cannibalisation
- G Managing customer relationships (who 'owns' which customers or segments)
- H Developing an optimal allocation of costs and revenues to maximise organisational performance
- I Other

16

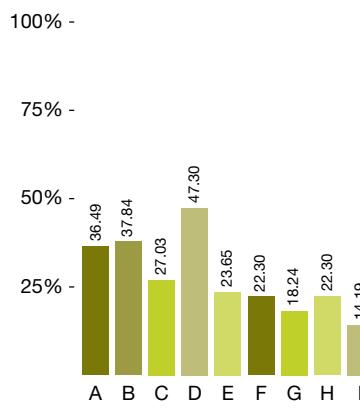
Which types of companies face the most compelling opportunities from digital convergence over the next five years? Select up to two responses.



- A Content developers (entertainment)
- B Content developers (business information)
- C Fixed operators/service providers (such as cable TV operators)
- D Wireless operators/service providers
- E Consumer electronics/device manufacturers
- F Nonconsumer hardware manufacturers
- G Semiconductor and other component makers
- H Software developers
- I Impossible to determine
- J Other

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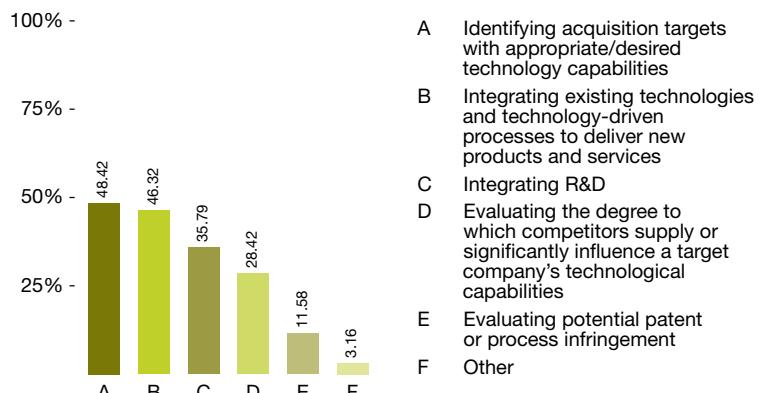
Which of the following are the greatest impediments to the realisation of convergence-driven strategies at your company? Select up to three responses.



- A Long or uncertain payback
- B Lack of interoperability owing to competing technology standards
- C Regulatory uncertainty
- D Slow adoption rates for new products/services among consumers and other end-users
- E Potentially converged industries' reluctance to alter existing external revenue models (sales)
- F The lack of end-to-end solutions
- G Inflexibility of our own company's existing internal revenue models (allocations)
- H Hesitancy to share technology within external partnerships or alliances
- I Insufficient financial resources

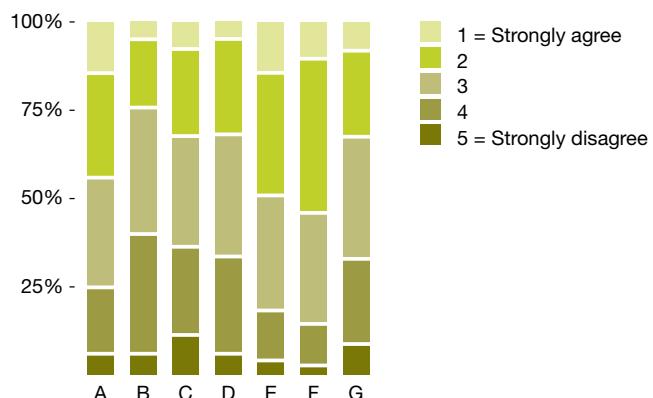
18

In terms of technology issues, what do you view as the greatest challenges for your company relating to convergence-related M&A? Select up to two responses.



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To what extent do you agree with the following statements relating to digital convergence impact on your company?



	1	2	3	4	5
A. Convergence in our industry is inhibited by a lack of widely applicable standards.	14.48%	29.66%	31.03%	19.31%	5.52%
B. Antitrust regulators are severely inhibiting opportunities to exploit convergence.	4.83%	19.31%	35.86%	34.48%	5.52%
C. We are reluctant to collaborate with external partners or alliances owing to the risks of devaluing of our own technology.	7.59%	24.83%	31.03%	24.83%	11.72%
D. Convergence is forcing us to accept significant degrees of co-operation with our competitors.	4.83%	26.9%	34.48%	28.28%	5.52%
E. We are strengthening safeguards of intellectual property in situations of co-operation with our competitors	14.48%	34.48%	32.41%	14.48%	4.14%
F. Our agreements with partners adequately account for and protect intellectual property and related assets.	10.34%	43.45%	31.72%	11.72%	2.76%
G. Convergence is creating situations in which our internal divisions/subsidiaries must compete with one another.	8.28%	24.14%	34.48%	24.14%	8.97%

Profile of the survey respondents

Which of the following best describes your title?

CEO/president/managing director	18.37%
Manager	17.01%
SVP/VP/director	11.56%
Head of business unit	9.52%
CIO/technology director	8.84%
Head of department	8.84%
Other	8.84%
Board member	6.12%
Other C-level executive	6.12%
CFO/treasurer/comptroller	4.76%

What are your main functional roles? Choose no more than three.

Strategy and business development	44.90%
General management	31.97%
IT	30.61%
Marketing and sales	25.85%
Finance	14.97%
Information and research	12.93%
Customer service	12.24%
Operations and production	10.20%
R&D	6.80%
Risk	4.76%
Supply-chain management	4.08%
Human resources	2.72%
Legal	2.04%
Other	2.04%
Procurement	0%

What type of company do you work for?

Software developer	46.32%
Content developer (business information)	16.91%
Consumer electronics/device manufacturer	13.97%
Nonconsumer hardware manufacturer	10.29%
Hard-wired distribution service provider (e.g., cable TV operator)	3.68%
Semiconductor and other components maker	3.68%
Content developer (entertainment)	2.94%
Wireless distribution service provider	2.21%
Other	0%

What are your organisation's global annual revenues in US dollars?

Over \$10bn	17.61%
\$5bn to \$10bn	7.04%
\$1bn to \$5bn	11.97%
\$500m to \$1bn	8.45%
\$250m to \$500m	14.79%
Under \$250m	40.14%

In which region are you personally based?

Asia-Pacific	32.41%
Western Europe	28.28%
North America	24.83%
Eastern Europe	7.59%
Middle East & Africa	5.52%
Latin America	1.38%

Acknowledgments

PricewaterhouseCoopers prides itself on the concept of Connected Thinking. For this study we drew support and expertise from PricewaterhouseCoopers staff with varied experience and knowledge from around our firm. A core group of PricewaterhouseCoopers staff worked diligently to help produce this publication. These team members include:

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About the PricewaterhouseCoopers convergence initiative

Most companies involved in technology, content and distribution are not achieving returns on capital above their cost of capital—and are struggling to create shareholder value. An open business model is the only way to manage convergence and realise a return on investments. New management principles are required. All walls or barriers, internal and external, must be broken down to succeed in the business of convergence.

PricewaterhouseCoopers has a dedicated team of practitioners supporting our global convergence initiative. We have focused our efforts on understanding and forming a point of view on convergence-related topics.

For more information on how PricewaterhouseCoopers can help your company embrace convergence and succeed, please visit us at www.pwc.com/techconnect, call our technology industry hotline at +1 617 530 5292 or contact any of our technology leaders listed on the inside back cover of this report.

As companies in the industry converge, the issues they face become more complex—PricewaterhouseCoopers' ability to add value is a constant.

About PricewaterhouseCoopers

The member firms of the PricewaterhouseCoopers network provide industry focused assurance, tax and advisory services to build public trust and enhance value for its clients and their stakeholders. More than 130,000 people in 148 countries across our network work collaboratively using connected thinking to develop fresh perspectives and practical advice.

The depth of our industry expertise, like our international perspective, is an attribute that our clients value highly. We invest significant resources in building and sharing such expertise. As a result, the people of PricewaterhouseCoopers have the scope, depth and expertise to advise technology, telecom and entertainment/media companies on the issues facing their business in a converging world. We work with these companies to help them achieve success and fulfil the promise of great ideas.

PwC can help

PricewaterhouseCoopers delivers value with a global perspective through local implementation. Please contact the technology industry leader nearest you to discuss the challenges facing your company and how we can help you.

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