Industry views

Managing the risks and rewards of collaboration*

Technology executive connections
Volume 6

*connectedthinking

The survey

The quantitative findings presented in this report are based on a survey conducted by the Economist Intelligence Unit (EIU) in mid-2008. The survey garnered 158 responses from senior executives based in five principal regions: 31% Asia; 36% Europe; 27% North America; 3% the Middle East and Africa; and 3% Latin America.

For detailed, question-by-question survey results, please visit **www.pwc.com/techconnect** to view or download the pdf file.

The interviews

In addition to the online survey, 18 executives were interviewed for this report: some on the record, some willing to name their company but not attribute their quotes, and others insisting on complete anonymity. We thank all of them for their contributions.

On the record:

- Luis Avila-Marco, Senior Vice President, Corporate Development, Juniper Networks
- Olivier Baujard, Chief Technology Officer, Alcatel-Lucent
- David Booth, President, Global Sales and Marketing, Computer Sciences Corporation (CSC)
- Mojy Chian, Vice President of Technology Development, Altera
- Malcolm Frank, Chief Strategy and Marketing Officer, Cognizant
- Kenny Fraser, Partner, PricewaterhouseCoopers
- Etienne Lepoutre, Director, PricewaterhouseCoopers
- Marina Levinson, Senior Vice President and CIO, NetApp, Inc.
- David Marston, Partner, PricewaterhouseCoopers
- Susan McKay, Director of Strategy and Alliance Development, EMC
- Arno Pätzold, Vice President, Mergers & Acquisitions, Infineon Technologies
- Don Peppers, Co-founder, Peppers & Rogers Group
- Peter Tinner, Head of Global Sales and Marketing, OC Oerlikon Corporation AG
- Greg Unsworth, Partner, PricewaterhouseCoopers
- Jack Wenstrand, Director of University Relations and External Research, Agilent Technologies

About PricewaterhouseCoopers

The firms of the PricewaterhouseCoopers' global network (www.pwc.com) provide industry-focused assurance, tax and advisory services to build public trust and enhance value for clients and their stakeholders. More than 154,000 people in 153 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice.

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About our technology industry practice

PwC works with technology companies around the world to help them fulfill the promise of their great ideas. We are the trusted advisor and auditor to the majority of the Financial Times Global 500 technology companies.

We have made a major commitment to train our people in industry-specific issues so that we can deliver services with a global perspective, local implementation, in-depth experience and a forward-thinking approach.

There is an ever-present state of change and evolution in the technology industries. We're ready to help your company face the challenges the industry throws your way. Given our significant client base and considerable resources, our technology industry professionals work from an experience base that far exceeds any other professional services provider. That's why more technology companies choose PwC than any other professional services firm. We're in touch with your industry—and ready to work with you.

For more information on how PricewaterhouseCoopers' Technology industry practice can help your company, or to get in touch with a technology industry partner in your area, please visit us at **www.pwc.com/technology** or refer to the contact list at the back of this report.

Welcome

Dear Executive,

Welcome to the sixth volume of our Technology Executive Connections, a series of survey reports designed to help executives in the technology industries better explore, understand and share ideas about today's pressing business and strategic issues.

Our unique combination of a broad global online survey of senior executives and in-depth one-on-one interviews with industry leaders around the world allows Technology Executive Connections to gauge the climate within the industry, gain insights into current views and opinions and promote leading analysis of current issues.

In times of financial and economic uncertainties, companies are looking for strategic advantages at low costs. External collaboration in our increasingly complex and interconnected world can be a silver bullet. In this volume, we examine the rewards and risks of collaboration. We showcase strategies to succeed and discuss how to avoid roadblocks.

To date our Technology Executive Connections series has explored the challenging issues of change management, convergence, talent management, intellectual property value and the demand for green operations and products. For soft or hard copies of any of these reports, please visit www.pwc.com/techconnect.

I hope this report offers insights for your company's collaboration goals, strategies and practices. PwC is ready to help you accelerate your collaborative successes. I welcome your feedback and questions. Please feel free to contact me about this series via email at tech.connect@us.pwc.com.

Sincerely,

Raman Chitkara

Raman Chitkara
Partner and Global Technology Industry Leader
PricewaterhouseCoopers

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Executive summary

Alexander Graham Bell once said: “Great discoveries and improvements invariably involve the cooperation of many minds.” For corporations operating in a global economy where competition is fierce, collaboration can significantly expand capabilities and opportunities by providing access to new talent and resources, sources of capital and marketing channels.

Collaboration also introduces new challenges. To profit from external collaboration, executives must make decisions relating to choices of partners, governance, capitalisation, intellectual property management and even the protection of brands and corporate reputation.

To assist executives in managing the risks and opportunities of collaboration, PricewaterhouseCoopers and the Economist Intelligence Unit conducted an online survey of 158 senior technology executives. These quantitative findings are supported by interviews with 18 senior industry executives. The results follow.

Synthèse

Comme l’a dit un jour Alexander Graham Bell : « les grandes découvertes et les grandes inventions sont toujours le fruit de la collaboration de nombreux esprits ». Pour les entreprises qui travaillent dans une économie mondiale où la concurrence est féroce, la collaboration peut considérablement étendre les capacités et les opportunités en offrant un accès à de nouveaux talents et ressources, sources de capitaux et circuits de commercialisation.

Cela étant, la collaboration implique également de nouveaux défis. Pour qu’une collaboration externe soit profitable, les dirigeants doivent prendre des décisions quant au choix des partenaires, à la gouvernance, à la capitalisation, à la gestion de la propriété intellectuelle et même à la protection des marques et de la réputation de leur entreprise.

Afin d’assister les dirigeants dans la gestion de ces risques et opportunités, PricewaterhouseCoopers et l’Economist Intelligence Unit ont mené une enquête en ligne auprès de 158 hauts dirigeants dans le secteur de la technologie. Les résultats quantitatifs sont étayés par des entretiens avec 18 hauts dirigeants. Les conclusions de l’enquête sont présentées ci-après

Zusammenfassung

Alexander Graham Bell hat einmal gesagt: “Für große Erfindungen und Verbesserungen ist eine Zusammenarbeit vieler kluger Köpfe absolut essenziell”. Weltweit tätige Unternehmen können durch Kooperationen ihren Zugang zu neuen Talenten und Ressourcen erleichtern, aber auch ihre Kapitalquellen und Vertriebskanäle erweitern und so ihre Leistungsfähigkeit und ihre Entwicklungsmöglichkeiten signifikant verbessern.

Kooperationen bergen aber auch zahlreiche Risiken. Um von externen Kooperationen profitieren zu können, sind maßgebliche Entscheidungen seitens der Geschäftsleitung zu treffen: Entscheidungen über die Wahl des Partners, die Form der Kontrolle, die Kapitalausstattung, das Management geistigen Eigentums und sogar über den Schutz der Marke und der Reputation des Unternehmens.

Um Technologieunternehmen im Umgang mit den Chancen und Risiken von Kooperationen zu unterstützen, hat PricewaterhouseCoopers (PwC) in Zusammenarbeit mit der Economist Intelligence Unit (EIU) eine Online-Umfrage von 158 Führungskräften der Technologiebranche durchgeführt und durch 18 vertiefenden Interviews ergänzt.

摘要

亚历山大 - 格雷厄姆 - 贝尔（Alexander Graham Bell）曾经说过：“伟大的发现和进步必然是集体智慧的结晶。”对身处竞争激烈的全球化经济之中的公司而言，通过合作能够获得新的人才、资本以及渠道，从而最大限度地提升自我能力并把握机会。

合作也带来了全新的挑战。为更好地受益于企业合作，管理层必须在合作伙伴、公司治理、资本化、知识产权管理、乃至于品牌及公司声誉维护等方面作出至关重要的选择。

为了帮助高层管理人员更好地在企业合作中管理风险并抓住机遇，普华永道和经济学人信息部一起对于158位高层技术管理人员进行了一项网上问卷调查。其量化结果亦和对18位企业高级管理人员进行的访谈结果相符。这一调查的主要发现如下 。

The five principal observations are:

1. Collaboration is becoming a core competence.

Collaboration is quickly gaining support across the globe. Today, 50% of survey respondents describe external collaboration as being very important (23%) or important (27%) to their firms. Within the next three years, 82% of respondents expect this to be the case.

There are several forces behind this trend. First and foremost is the perception that collaboration pays. Eighty-six percent of respondents agree (56%) or strongly agree (30%) with the statement: "Collaboration efforts create significant advantages for my company."

At the same time, collaborators tend to prefer partners where it is likely that both parties will more or less stay out of one another's way. For example, the most active collaborative relationships are with complementary noncompetitors (41%) and customers (41%).

2. External collaboration introduces significant—but manageable—risks.

Not surprisingly, nearly three-quarters of executives agree that external collaborations are more complex than purely internal initiatives. The most frequently cited risk management challenges arising from collaboration include intellectual property management (cited by 56% of survey participants), data security/integrity (28%) and reputational risk (25%). However, companies need to also be aware of the need to manage issues surrounding HR and talent, customer privacy, sustainability, governance and IT.

In general, the more formal the relationship, the greater the associated risk.

In the case of open-source collaboration, 51% of executives view this as an area of considerable opportunity and 46% say it is or will likely become a significant component of their business model. Regardless, 26% of companies consider open-source collaboration to be a considerable risk.

3. The most critical collaborations are with (or for) customers.

Companies choose to collaborate—and choose their partners—based on a belief that the practice will lead to improvements in products, services and the overall quality of a customer's experience. In short, the desire to meet the needs of customers is the core focus if not the primary driver of nearly all external collaboration.

Many firms are launching formal initiatives with customers themselves. This not only improves the quality of the relationship with a single customer, it can also lead to innovations across the whole of a company's product or service offerings.

Still, launching formal collaboration projects with customers is not risk-free. Companies must make decisions across the full range of issues including governance, intellectual property protection and even reputation and brand.

4. Collaboration opens up emerging markets.

When it comes to collaboration in emerging markets, over three-quarters of respondents (76%) say that relative to developed markets, the risks of collaboration in emerging markets are significantly greater. But at the same time, executives say collaboration is especially critical in emerging markets. For example, a partner that understands local business conditions, structures, people and cultures can be invaluable. Similarly, partnership becomes a means of sharing risks. Asked which forms of collaboration they feel are most effective for entering emerging markets, survey participants cited partnership (47%), alliances (43%), joint ventures (38%) and acquisitions (32%).

In addition, nearly half of executives (46%), say they collaborate with established companies in emerging markets primarily as a means of gaining market entry. Another 35% say their collaborations in emerging markets are primarily sourcing-oriented. Companies need to pay close attention to the work of their suppliers and partners to prevent damages to corporate reputation.

5. Collaboration is in its infancy.

Though the ability to collaborate externally is increasingly recognised as an essential core competence, responses indicate that companies still have a long way to go. For example, despite the fact that 41% of executives say that their collaboration efforts create significant risks for their companies, companies seem to be skimping on processes that could lead to better risk management. Less than half (47%) of executives say their companies perform thorough due diligence before entering into formal collaborative relationships. Perhaps even worse, only 35% say they are fully aware of and proactively manage the risks inherent in external collaborations and partnerships.

Overall, it appears that companies are not taking the needed steps to formalise their approach to external collaboration despite the fact that there are a number of readily identifiable attributes of successful collaborations.

Les cinq grands constats qui se dégagent de cette enquête sont les suivants:

1. La collaboration devient une compétence stratégique.

La collaboration trouve un nombre croissant d'adeptes au niveau mondial. À ce jour, 50% des personnes interrogées jugent la collaboration externe très importante (23%) ou importante (27%) pour leur entreprise, et 82% pensent qu'elle le deviendra dans les trois ans à venir.

Plusieurs facteurs expliquent cette tendance, à commencer par les bénéfices apportés. 86% des personnes interrogées sont d'accord (56%) ou totalement d'accord (30%) avec l'affirmation suivante : « les efforts de collaboration apportent des avantages significatifs à mon entreprise ».

Parallèlement, les formes de collaboration privilégiées sont celles dans lesquelles les partenaires s'en tiendront plus ou moins à leur domaine respectif. À titre d'exemple, les collaborations les plus actives sont conclues avec des non-concurrents complémentaires (41%) et des clients (41%).

2. La collaboration externe s'accompagne de risques significatifs mais gérables.

Il n'est pas surprenant que près des trois quarts des dirigeants s'accordent à dire que les collaborations externes ont un caractère plus complexe que les simples initiatives internes. Les défis de la gestion des risques liés à la collaboration les plus fréquemment cités comprennent la gestion de la propriété intellectuelle (citée par 56% des participants à l'enquête), la sécurité et l'intégrité des données (28%), ainsi que le risque de réputation (25%). Néanmoins, les entreprises doivent également veiller à traiter les problématiques des ressources humaines et des talents, de la confidentialité client, du développement durable, de la gouvernance et de l'informatique.

De manière générale, plus les relations sont formelles, plus le risque est élevé.

Quant aux formes de collaboration ouverte, 51% des dirigeants y voient une opportunité considérable et 46% déclarent qu'elles pourraient devenir un élément significatif de leur modèle économique, même si 26% des entreprises pensent qu'une collaboration ouverte représente un risque conséquent.

3. Les collaborations avec (ou pour) les clients sont les plus cruciales.

Les entreprises choisissent de collaborer, et choisissent leurs partenaires, pour améliorer les produits, les services et la qualité globale de l'expérience d'un client. Bref, répondre aux besoins des clients est l'objectif central si ce n'est le principal moteur de la quasi-totalité des collaborations externes.

De nombreuses entreprises mettent en place des initiatives formelles avec les clients eux-mêmes. La qualité de la relation avec le client en est améliorée, mais ce type d'initiative favorise aussi des innovations dans l'ensemble de l'offre de produits ou de services de l'entreprise.

La mise en place de projets de collaboration formelle avec les clients n'en demeure pas moins risquée. Les entreprises doivent prendre des décisions dans tous les domaines, y compris en matière de gouvernance, de protection de la propriété intellectuelle et même de réputation et de marque.

4. La collaboration est un levier d’accès aux marchés émergents.

S’agissant des marchés émergents, plus des trois quarts des personnes interrogées (76%) indiquent que les risques de collaboration y sont sensiblement plus élevés que sur les marchés développés. Parallèlement, les dirigeants révèlent néanmoins que la collaboration y est particulièrement cruciale. À titre d’exemple, un partenaire qui connaît les conditions d’activité, les structures, les individus et les mœurs au niveau local peut s’avérer précieux. De la même manière, le partenariat devient un moyen de partager les risques. Lorsqu’il est demandé aux participants à l’enquête de citer la forme de collaboration la plus efficace pour pénétrer les marchés émergents, ils citent les partenariats (47%), les alliances (43%), les joint-ventures (38%) et les acquisitions (32%).

En outre, près de la moitié des dirigeants (46%) déclarent collaborer avec des sociétés réputées des marchés émergents avant tout pour bénéficier d’un point d’entrée sur le marché, tandis que 35% affirment que leurs collaborations sur les marchés émergents visent essentiellement leurs approvisionnements. Les entreprises doivent être particulièrement attentives aux travaux de leurs fournisseurs et partenaires pour ne pas compromettre leur réputation.

5. La collaboration n’en est qu’à ses prémices.

Bien que la capacité de collaboration externe s’affirme de plus en plus comme une compétence stratégique, les réponses montrent qu’il reste encore beaucoup à faire. Ainsi, bien que 41% des dirigeants déclarent que leurs efforts de collaboration font peser des risques conséquents sur leurs entreprises, ces dernières semblent lésiner sur les procédures qui pourraient permettre une meilleure gestion des risques. Moins de la moitié (47%) des dirigeants indiquent que leur entreprise effectue des vérifications approfondies avant de s’engager dans une collaboration formelle. Et, ce qui est peut-être plus grave encore, seulement 35% disent connaître pleinement et gérer en amont les risques inhérents aux collaborations externes et aux partenariats.

Globalement, il semble que les entreprises ne prennent pas les mesures requises pour formaliser leur démarche de collaboration externe, bien que diverses caractéristiques des collaborations réussies soient déjà connues.

Die vier wichtigsten Beobachtungen in diesem Zusammenhang waren:

1. Kooperationen werden zum entscheidenden Erfolgsfaktor

Kooperationen werden weltweit immer beliebter. Schon heute sagen 50 Prozent der befragten Führungskräfte, dass externe Kooperationen für ihr Unternehmen von entscheidender (23 Prozent) oder großer Bedeutung (27 Prozent) sind. 82 Prozent der Manager erwarten, dass Kooperationen in drei Jahren maßgeblich sein werden.

Zahlreiche Faktoren unterstützen diesen Trend: Primär erwarten Unternehmen, dass sich eine Kooperation bezahlt macht. Dieser Meinung sind 86 Prozent der befragten Führungskräfte. 30 Prozent halten die Aussage: "Kooperationen schaffen einen signifikanten Vorteil für mein Unternehmen" für absolut richtig, 56 Prozent halten die Aussage für richtig.

Grundsätzlich bevorzugen Führungskräfte bei der Wahl ihres Kooperationspartners Unternehmen, die nicht im unmittelbaren Wettbewerb mit ihrer Gesellschaft stehen. Am aktivsten arbeiten sie daher mit komplementären Unternehmen (41 Prozent) und Kunden (ebenso 41 Prozent) zusammen.

2. Externe Kooperationen bergen signifikante - aber steuerbare - Risiken

Wenig überraschend sind nahezu drei Viertel der befragten Führungskräfte der Meinung, dass externe Kooperationen komplexer sind als rein interne Aktivitäten. Grundsätzlich, so die Meinung der Führungskräfte, steigt das Risiko mit dem Grad der Formalität der Kooperation.

Die größte Herausforderung sehen die Manager beim Risikomanagement des geistigen Eigentums (56 Prozent der Befragten), bei der Datensicherheit und der Datenintegrität (28 Prozent) und bei Reputationsrisiken (25 Prozent). Zudem müssen Unternehmen auch Mitarbeiter- und Talentfragen, Datenschutz, Nachhaltigkeit, Governance und IT berücksichtigen.

51 Prozent der befragten Führungskräfte halten sogenannten Open-Source-Kooperationen für sehr interessant, 46 Prozent geben an, dass solche Kooperationen bereits einen signifikanten Bestandteil ihres Geschäftsmodells ausmachen oder zumindest in naher Zukunft einnehmen werden. Nichtsdestotrotz sehen 26 Prozent der befragen Unternehmen in Open-Source-Kooperationen ein bedeutendes Risiko.

3. Die wichtigsten Kooperationsformen sind jene für oder mit dem Kunden

Unternehmen entscheiden sich, mit anderen Unternehmen zu kooperieren in der Überzeugung, dadurch ihre Produkte, Dienste oder ihre Qualität verbessern zu können. Der Wunsch, die Bedürfnisse der Kunden zu befriedigen, steht damit im Vordergrund oder ist sogar treibender Faktor aller externen Kooperationen.

Viele Unternehmen gehen auch mit ihren Kunden formale Kooperationen ein. Dadurch verbessern sie nicht nur die Qualität der Kundenbeziehung. Vielmehr können solche Kooperationen zu Innovationen in der gesamten Produkt- und Dienstepalette führen.

Ungeachtet der Vorteile bergen formale Kooperationsprojekte mit Kunden zahlreiche Risiken. Daher müssen Unternehmen im Vorfeld Entscheidungen hinsichtlich der Governance, ihres geistigen Eigentums, ihrer Reputation und ihrer Marke treffen.

4. Kooperationen ebnen den Weg in Entwicklungsländer

Kooperationen in Entwicklungsländern bergen signifikante Risiken. In diesem Aspekt herrscht bei der Mehrheit der Führungskräfte Einigkeit: Mehr als drei Viertel (76 Prozent) der Befragten sagen, dass das Risiko in Entwicklungsländern signifikant größer ist als in Industriestaaten. Gleichzeitig sind solche Kooperationen aber ein entscheidender Erfolgsfaktor. So ist etwa ein Geschäftspartner, der die lokalen Geschäftsbedingungen versteht und mit den Strukturen und der Mentalität der Menschen vertraut ist, oftmals unersetzlich. Zudem kann durch eine Kooperation das Risiko reduziert werden.

Nahezu die Hälfte der Führungskräfte (46 Prozent) ist überzeugt, dass Kooperationen mit etablierten Unternehmen in Entwicklungsländern primär dem Ziel dienen, den lokalen Markt zu erschließen, weitere 35 Prozent sind der Meinung, dass diese Sourcing-orientiert sind. Bei der Frage, welche Form der Kooperation in Entwicklungsländern am effektivsten ist, nennen 47 Prozent der Führungskräfte Partnerschaften, 43 Prozent strategische Allianzen, 38 Prozent Joint Ventures und 32 Prozent Akquisitionen. Um dem Ruf des Unternehmens nicht zu schaden, müssen Unternehmen grundsätzlich besonders auf die Arbeit ihrer Zulieferer und Partner achten.

5. Kooperationen stecken noch in den Kinderschuhen.

Ungeachtet der Tatsache, dass die Notwendigkeit zu externen Kooperationen zunehmend als Kernkompetenz anerkannt wird, haben Unternehmen noch einen langen Weg vor sich.

Obwohl 41 Prozent der Führungskräfte wissen, dass Kooperationen ein signifikantes Risiko für ihr Unternehmen darstellen, werden Prozesse, die das Risikomanagement verbessern, oftmals nicht mit der notwendigen Sorgfalt eingeleitet. Weniger als die Hälfte der Umfrageteilnehmer (47 Prozent) sagen, dass ihr Unternehmen die potenziellen Partner gründlich prüfen, bevor sie eine formale Kooperation mit ihnen eingehen. Und nur 35 Prozent der befragten Führungskräfte geben an, dass sie die Risiken ihrer Kooperationen kennen und diese proaktiv managen.

Grundsätzlich wird klar, dass Unternehmen nicht die notwendigen formalen Schritte einleiten, um externe Kooperationen einzugehen und das, obwohl es zahlreiche Kriterien gibt, die für ein erfolgreiches Kooperationsmanagement zu beachten sind.

五项主要调查结果是:

1. 企业合作正逐渐成为企业核心竞争力

企业合作正在全球范围内迅速成为一种趋势。50%的受访者认为今天外部合作对于他们的公司已非常重要（23%）或者重要（27%）。82%的受访者认为在未来三年内这一趋势将会持续。

推动这种趋势的有许多因素。首先，也是最重要的因素是企业预计将通过企业合作获得效益。86%的被访者认同（56%）或者非常认同（30%）“企业合作会为本公司带来巨大的优势”这一看法。

同时，合作双方更倾向于在互不影响的情况下进行企业合作。如调查结果显示，最理想的合作伙伴为互补性的非竞争者（41%）以及客户（41%）。

2. 外部合作将带来重大的但可控的风险

不出所料，将近75%的高级管理人员认为相对于单纯的内部合作，外部合作更加复杂。最常被提到的对于企业合作引起的风险管理方面的问题，包括知识产权管理（56%），数据安全性及完整性（28%）以及公司声誉方面的风险(25%)。除此之外，公司尚需注意人力资源及人才管理，客户资料保密，可持续发展，企业治理以及信息技术等方面的问题。

总体而言，合作关系越正式，其伴随的风险也越大。

51%的高级管理人员认为开放式的企业合作可带来重大机遇，46%的管理者认为这已经成为或很可能成为其经营模式的重要组成部分。尽管如此，有26%的公司认为开放式企业合作存在相当的风险。

3. 最至关重要的合作是与客户（或为客户）进行的合作

公司进行企业合作及选择合作伙伴都是基于同一个共识，即企业合作会带来产品，服务以及客户整体满意度的提高和进步。简单说来，希望通过企业合作更大程度上满足客户的需求几乎是所有企业进行外部合作的最主要的目标。

许多公司正尝试与客户建立正式的合作伙伴关系。这不仅推动了与单一客户间的关系，更促进了公司在其产品及服务领域的全面创新及改革。

当然，与客户进行正式的企业合作亦存在风险。管理层需要在公司治理，知识产权保护，甚至品牌及声誉等诸多方面做出谨慎决策。

4. 企业合作开辟新兴市场

当谈及新兴市场的企业合作问题时，超过四分之三（76%）的被访者认为，相对于发达市场，新兴市场的企业合作风险要大得多。但同时，高级经理们认为企业合作在新兴市场亦显得尤为重要。比如一位熟谙当地商业环境、法律架构、人文环境等的合作伙伴将是非常宝贵的资源。同样，合作关系也可以成为分担风险的一种方式。当被问到在进入新兴市场时，哪种合作方式最有效时，被访者列举了合伙制（47%），企业联盟（43%），合资（38%）以及收购（32%）。

除此之外，近半数的经理人（46%）认为他们主要通过与新兴市场中已有规模的公司进行合作的方式进入市场。另外35%的经理人认为，他们主要以寻求供应商的方式进入新兴市场。无论哪种方式，公司都需要慎选供应商及合作伙伴以防止其对公司声誉的损害及影响。

5. 企业合作正处于起步阶段

虽然进行对外合作的能力正逐渐被认为是必需的企业核心竞争力，调查结果显示类似合作仍处于起步阶段。如调查结果显示，虽然41%的高级经理人意识到企业合作为公司带来了很大程度的风险，但他们却对那些能更好管理风险的内部程序重视不足。只有不到一半（47%）的经理人表示，在建立正式的合作关系前他们对合作企业会进行全面的尽职调查工作。也许更加糟糕的是只有35%的受访者表示他们充分意识到了外部企业合作的固有风险，并且会积极主动地进行风险管理及控制。

总体而言，尽管的确有一些为人熟知的成功案例存在，诸多公司似乎尚未采取必须的措施去规范外部企业合作

Observation one: Collaboration is becoming a core competence.

Internal collaboration between business units or members of the same organisation should be a given for all companies. But when it comes to external collaboration—the ability to work formally or informally with external partners, alliances, customers, suppliers and the like—many companies are still defining their strategy.

As products, markets and the needs of customers become more sophisticated, the importance and prevalence of collaboration across corporate boundaries is on the rise. In fact, many executives already consider such collaboration fundamental to success. "No one company can do everything and do it well," says Arno Pätzold, Vice President, Mergers and Acquisitions with Germany's Infineon Technologies AG, a US$11.3 billion semiconductor maker. "Technology is changing too fast, so collaboration with groups outside of your own company is becoming more and more important."

Complexity breeds collaboration

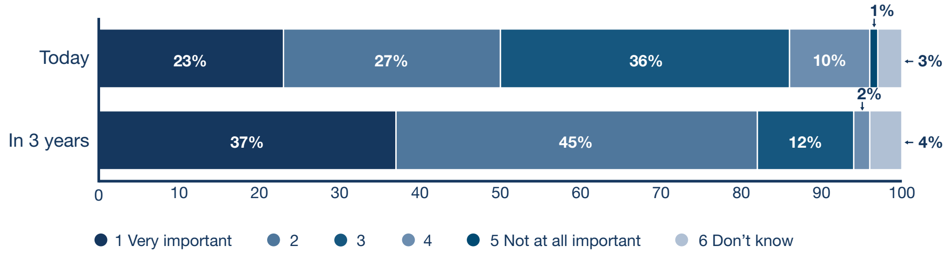
Kenny Fraser is a PricewaterhouseCoopers partner and a performance improvement subject matter expert. According to Fraser, a technology company's ability to collaborate is "becoming an ever-greater determinant of success. Those that can excel at external collaboration," he adds, "stand to perform at above-average levels in the coming decades."

This view resonates with a growing number of executives: According to Computer Sciences Corporation's (CSC) David Booth, president, global sales and marketing, "technology products and IT solutions are becoming extraordinarily complex." Consequently, "today it's a world where you have absolutely no choice but to collaborate. Extensively. Intimately. Openly. Capably."

Overall, Booth sees external collaboration as a business model whose time has come. There is "too much change and too much opportunity all happening so fast" that it is simply too difficult for a single company to remain leading-edge in all areas. Consequently, "your willingness and ability to collaborate with external partners, suppliers, alliances and customers increasingly defines how successful you can be."

Already accepted among many companies as a key to success, collaboration is quickly gaining support across the globe. Today, 50% of survey respondents describe external collaboration as being very important (23%) or important (27%) to their firms. Within the next three years, 82% of respondents expect this to be the case.

How important is collaboration with nonrelated partners to your company's success today? How important do you think it will it be in three years' time? Rate on a scale of 1 to 5, where 1=Very important and 5=Not at all important.



How do you compare?

For live benchmarking for your revenue peer group, go to www.pwc.com/techconnect.

Please note that not all answers add to 100% because of rounding or because respondents were able to provide multiple answers. For full question-by-question survey results, please visit www.pwc.com/techconnect to view or download the pdf file.

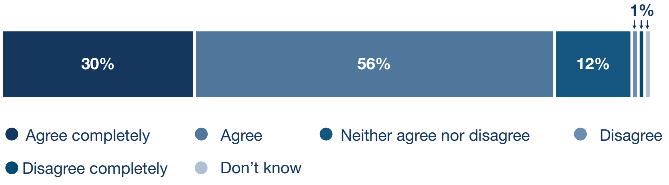
Similarly, the number of formal collaborations is on the upswing. For example, 62% of executives say that their companies are pursuing more collaborative partnerships with third parties than in the past.

My company is pursuing more collaborative partnerships with third parties than in the past.

Collaborative benefits

There are several forces behind these trends. First and foremost is the perception that collaboration pays. Eighty-six percent (86%) of respondents agree (56%) or strongly agree (30%) with the statement: “Collaboration efforts create significant advantages for my company.”

Our collaboration efforts create significant competitive advantages for our company.



The survey results also show where companies believe collaboration delivers the greatest value. Executives were shown a list of potential benefits from collaboration and asked to choose the top three. According to survey respondents, collaboration:

- **Accelerates time to market.** More than half of executives (51%) say collaboration enables their organisations to bring products and services to market faster.

  A good example of this phenomenon is the partnership between integrated circuit (IC) designer Altera and its manufacturing partner, Taiwan Semiconductor Manufacturing Company (TSMC). Altera is what's known to the industry as a 'fabless' chip maker: It designs ICs, but hires a foundry for their manufacture. Chip design is already a demanding process, but working with an outside company to figure out how to efficiently mass produce them—and to extraordinarily high standards—makes the process even more challenging.

  The collaborative design-and-build process takes place in an 18-month to two-year development cycle that is enormously complex, says Mojy Chian, Altera's vice president of technology development. For each new generation of chips, Altera must establish several different collaborative teams with TSMC, each focusing on a different aspect of the process development. It's latest generation of chips required the two companies to establish 12 such teams.

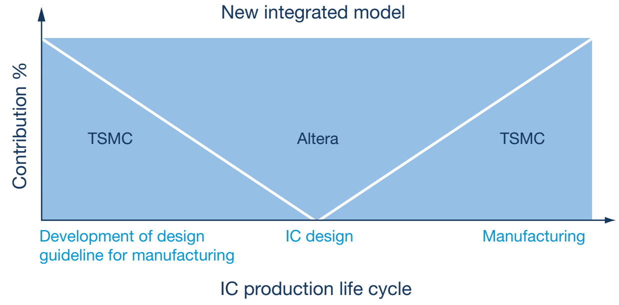
  Early and intensive collaboration is essential, says Chian. It can be many months into a chip's design cycle before specifications and design become firm or stabilise. But if Altera were to wait until the chip design stabilises before entering into discussions with a manufacturer, "we would lose many months," says Chian, which in a time-critical business like chip design "is an eternity." Without question, says Chian, this collaboration accelerates time to market.

  As for placing a value on the collaboration, Chian insists this would be very difficult. But in the semiconductor market, missing market windows by even a few months could result in lost revenues on the order of many millions of dollars. Which is why, says Chian, "our collaboration with TSMC is so important."

Exhibit

Partners through all phases

Altera and TSMC are now fully integrated, enabling extraordinarily close collaboration on all phases of integrated circuit (IC) development and production.



Source: *Altera*

- **Allows each party to focus on core competencies.** At 49%, this is the second most frequently cited advantage of collaboration and is a key theme echoed in nearly every interview conducted for this report.

  As Malcolm Frank, chief strategy and marketing officer at Cognizant, puts simply: "Partnerships let each company focus on what they do best." This doesn't mean that Cognizant—or indeed any other company in this report—could not develop the capabilities found through external partnerships. But by working together and playing off each others' strengths, both parties see greater overall results.

  Susan McKay, director of strategy and alliance development at US $14 billion Massachusetts-based information solutions provider EMC, agrees. With each partner focusing on doing what it does best, "the partnership overall becomes more valuable and effective than the sum of its parts."

- **Enables access to a broader range of technologies, resources or capabilities.** Forty-two percent (42%) of executives cite this area as a top advantage of formal collaboration. "There's just no way a single company on its own will ever have all the resources it will ever need or everything a customer would ever want," says Frank. Consequently, "customers come to us to obtain the services they require." In turn, Cognizant relies on not only its own skills but also a range of partners to meet those needs.

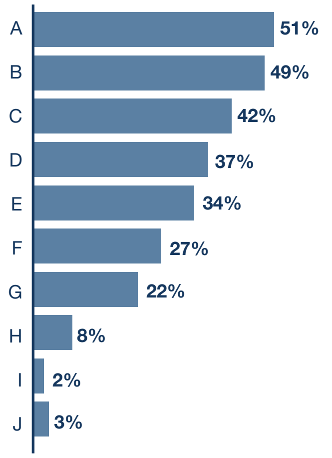
  At CSC, "the reason we partner is to gain access to the full range of products and services that will meet the needs of customers," says Booth. One area where CSC is working actively is in identifying two, three or more partners' products or services that can be bundled into a single turnkey solution. Achieving that may take time and energy on the front-end, but this form of collaboration results in new, building-block-like products that are simple, reliable, repeatable—and can be leveraged across industries or taken deeply into an industry vertical.

  "The customer doesn't care whose product it is, who gets the revenue or anything else that has to happen behind the scenes," says Booth. All the customer wants is a solution "that works the way it's supposed to." Good partners, he adds, "know how to collaborate and they understand that everything they're doing should be for the benefit of the customer."

Of course, there can be many additional advantages to partnership. For example, more than one-third of executives (37%) say that partnerships provide access to a broader portion of the marketplace. Marina Levinson, SVP and CIO of NetApp, Inc. (formerly Network Appliance), a provider of storage management hardware, software and services for open networks, explains: "We get 61% of our sales through channel partners. They're closest to the market, so it's a win-win." Furthermore, collaboration can reduce the capital investment needed to acquire capabilities/assets (34%), encourage innovation (27%) or even distribute risks (8%).

Another advantage is the degree to which a partnership can cement a company's value in a supply chain. Altera's exclusive manufacturing relationship with TSMC "means we're one of TSMC's most important customers," says Chian. As a result, he says, "our chip production will always get priority." This gives Altera's customers greater confidence—and that makes them more loyal. "They know that whatever date and quantity and quality we promise, we will be able to deliver," Chian says.

What does your company perceive as the greatest potential advantages of formal collaboration? Select up to three.



A. Speeds time to market
B. Allows each party to focus on core competencies
C. Enables access to a broader range of technologies, resources or capabilities
D. Creates larger market footprint
E. Reduces capital investment to acquire capabilities/assets
F. Encourages innovation
G. Supports R&D
H. Promotes shared risks
I. Other
J. Don't know/Not applicable

The means of collaboration

External collaborations can take many forms, ranging from passive and informal to active and structured. Customer collaboration, for example, can be informal and relatively passive: A company merely observes the actions of customers in order to form conclusions about preferences and behaviours. On the other hand, explains PwC's Fraser, collaboration with customers can be highly formal and structured, as in the co-development of a highly engineered component or the migration and maintenance of an outsourced or offshored business function.

Similarly, collaboration with other companies can exist along a continuum of ever-increasing intensity. Collaboration can exist between a supplier and customer with no formal statement: The customer shares information with the supplier in order to obtain a better product at a lower cost, and there is no contract or explicit remuneration. Alternatively, companies may progress to more formalised collaboration. For example, a customer might enter into a formal supply agreement, contractually reserving 'X' amount of capacity or product. Or companies might enter into something as informal as a letter of understanding or, alternatively, progress to a fully documented, legally binding partnership.

The survey provides an indication of how actively companies collaborate across a range of potential external entities. For example, survey participants were asked to select their top two most preferred means of collaboration. The full list of top-two choices includes:

- Partnerships (50%)
- Alliances (46%)
- Joint ventures (20%)
- Preferred supplier networks (18%)
- Industry groups (15%)
- User groups (13%)
- Open-source communities (6%)

Participants were also asked to select their top two most active collaborative relationships. Generally speaking, collaborators tend to prefer partners where it is likely that both parties will more or less stay out of one another's way.

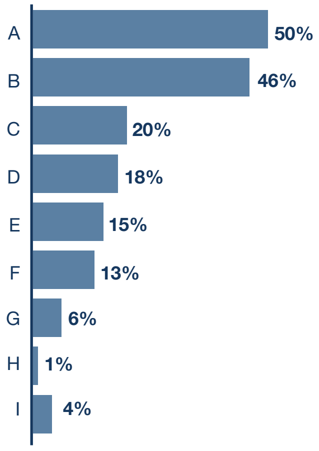
For example, the most active collaborative relationships are with complementary noncompetitors (41%) and customers (41%). Similarly, 20% of collaborations are with suppliers.

Of course, companies also often partner with companies in similar fields or with similar capabilities. For example, as Levinson of NetApp explains, "there are many cases where we could do the field work ourselves, but it makes more sense to do this through a partnership. The channel partners will find more work and more sales than we could on our own."

The rise of co-opetition

It is worth noting that 16% of survey respondents say they actively collaborate with competitors. Put another way, this statistic shows that for 16% of companies, their competitors are among the top two external entities with whom they most actively collaborate.

What are your company's preferred methods for formal collaboration? Select up to two.



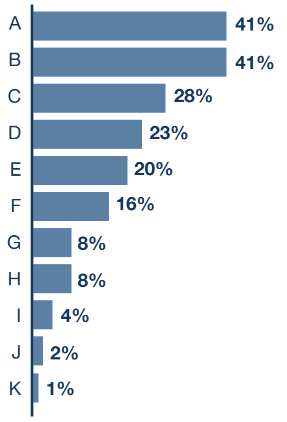
A. Partnerships
B. Alliances
C. Joint ventures
D. Preferred supplier networks
E. Industry groups
F. User groups
G. Open-source communities
H. Other
I. Don't know/Not applicable

McKay of EMC has an intriguing take on the phenomenon: “When we’re trying to reduce conflict associated with a collaboration effort between two firms, I find we are most successful when we work from the client’s perspective. If you map out the optimal solutions to a client’s business problem, and you compare that with the capabilities of parties involved, it becomes very natural how we can collaborate because we’ve gotten to the right level of detail.”

But surprisingly, “people are always shocked,” says McKay, “when I enourage overlapping capabilities.” Conventional thinking, says McKay, is that the best partnerships are formed by companies with mutually exclusive skills. But McKay finds that where’s there’s no overlap, “there’s also no common language. The other side doesn’t really understand or value what you bring to the table.” So in any partnership, says McKay, “a little overlap, a little competition, actually adds to the value of the partnership.”

It is important to point out that collaboration is not merely an exercise for smaller companies in search of broader market access or expanded capabilities. As Fraser explains, “the largest companies, the powerful ones, often have this idea that they can do anything.” In the end, says Fraser, that’s a losing orientation. “If they were more open to partnership and collaboration, and more adept, they could probably be even more successful than they are already.”

With which of the following external groups does your company most actively collaborate, either formally or informally? Select up to two.



A. Complementary noncompetitors
B. Customers
C. IT vendors
D. Professional service firms
E. Suppliers
F. Competitors
G. Governments
H. Universities
I. Regulators
J. Other prospects (formal or informal)
K. Don’t know/Not applicable

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Being open to collaboration*

A business network is a group of participants who come together in an open community of equals to conduct transactions—the transmission of products, services, information or money—with one another to produce capabilities and outcomes that advance a set of shared business goals.

The opportunities for collaborative networks are broad, yet evidence from PricewaterhouseCoopers' 11th Annual Global CEO Survey suggests that most companies are not using collaborative networks systematically; rather, collaborative networks are deployed opportunistically to solve discrete problems. Nevertheless, given that more than half the CEOs (57%) in the survey think that collaborative networks will be a defining organisational principle for business, it seems likely that a more strategic approach will eventually emerge and that tomorrow's successful networks will be the result of enhanced business thinking and foresight.

Companies in the technology industries are currently undergoing rapid convergence, driven by the impact of digital technologies and increasingly pervasive broadband access to the Internet. This convergence is fueling the need for collaboration, as companies seek to bring together the digital capabilities and integrated services needed for success. Add in today's economic uncertainties and stalled growth and you have another strong motivation for successful collaboration.

But do technology companies have the structure they need to effectively build and participate in the collaborative networks they need to succeed?

The open business model advantage

The momentum of change driving the technology explosion is placing a fierce strain on existing business models. Many of the changes are happening so quickly that management has not been able to integrate these changes across organisations. Often, divisions are not working toward a common goal, making internal collaboration difficult, if not impossible.

PricewaterhouseCoopers believes that a new and open business model is the key to successful collaborations, both internal and external. An open business model means companies exist in a virtually borderless fashion, allowing agile movement into and out of every new technological advance and opportunity.

We believe that virtual walls and barriers must be eliminated both inside and outside a corporation. A different way of doing business is needed, one that both enhances and extracts value from the fusion of value drivers occurring both across and beyond the enterprise.

The four attributes of an open business model are:

- Employing the disciplines of the capital markets
- Personalising the customer relationship
- Maximising the potential of content
- Creating a culture of innovation

The open model we advocate will likely feel neither comfortable nor safe. However, these risks are manageable and worth-while. We believe that these open business model attributes enable sustainable shareholder value.

For more information on open business models, please read PricewaterhouseCoopers' *Breaking down walls: How an open business model is now the convergence imperative.* To download the full report and for more information on how PwC can help your company build a new, open business model that is positioned to collaborate to succeed, visit us at **www.pwc.com/techconnect.**

Questions for further reflection

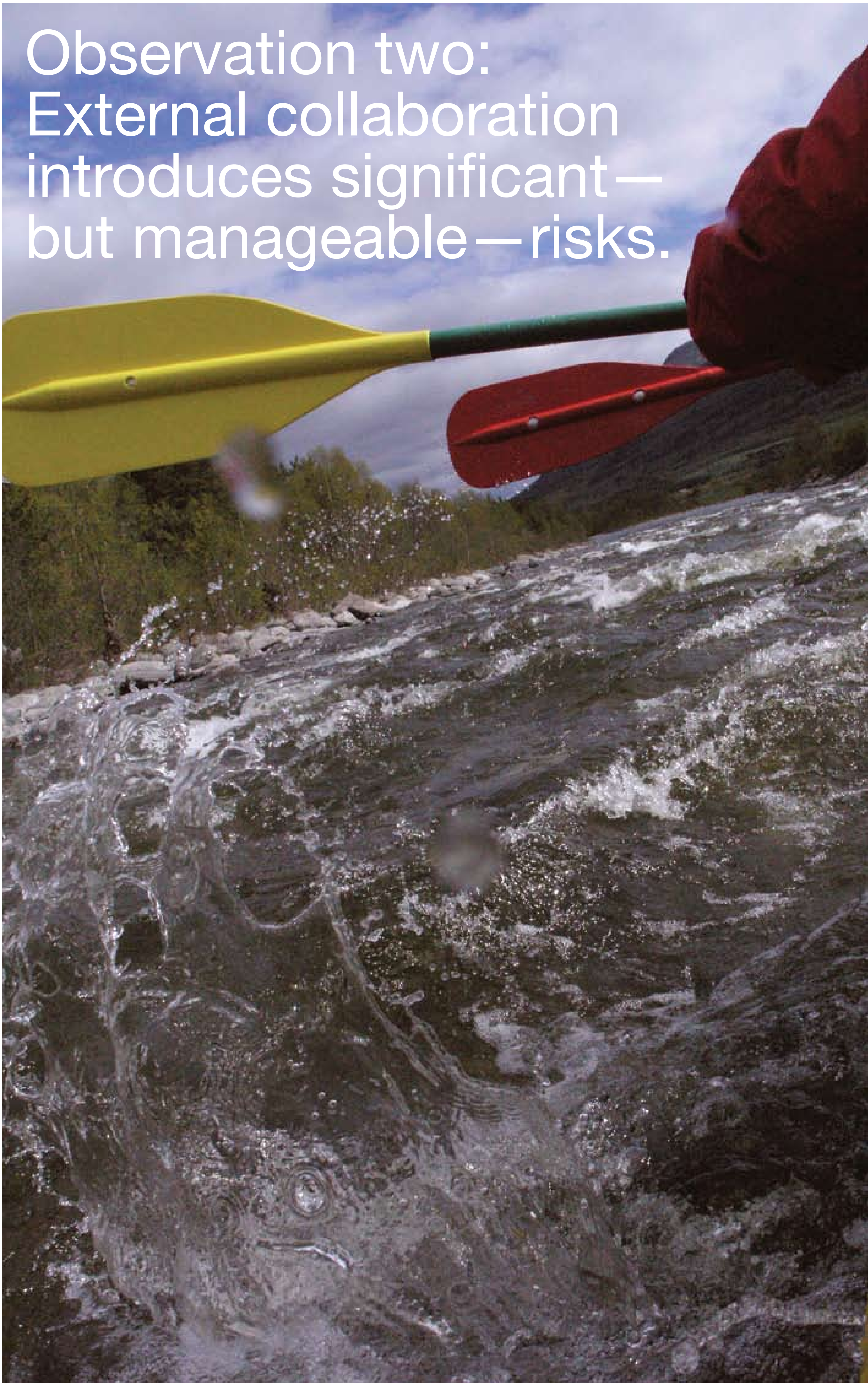
How open is your company to collaboration with external organisations? Is your business culture open or secretive?

Have you explored your company's potential for value creation within a more open business model? Where might new sources of value be created?

How would you describe the nature of your relationships with customers? With suppliers? Where might both parties obtain benefits from closer collaboration?

Do you have a clear vision relating to the role of collaboration/partnership versus acquisition? Are various models of collaboration considered within broader corporate development?

Observation two: External collaboration introduces significant—but manageable—risks.



Collaboration with external companies, customers and other groups introduces added risks relating to intellectual property, data security/integrity and even reputational risks. Not surprisingly, nearly three-quarters of executives agree: External collaborations are more complex than purely internal initiatives.

The risks of collaboration

To be sure, there are a significant number of risks when collaborating with any external organisation. The survey asked technology executives to name their top three most critical risks. These include:

- **Intellectual property.** For 56% of survey respondents, this is far and away the most frequently cited risk. Not surprisingly, it was also the issue most often raised by those interviewed for this study. However, approaches to address this issue can often be surprising. For example, as McKay of EMC explains, "we're actually going the route of sharing more IP, not less." CSC's Booth adds: "Sometimes the more IP you share, the more benefits you get in return."
- **Data security/integrity.** Just over a quarter of respondents (28%) say they worry about the security of their own data as it is shared with partners. Moreover, they have concerns about the integrity of the data they, in turn, receive. For example, as Cognizant's Frank explains, "you don't want to lose control of your own information. It is an issue that needs to be discussed with your partners." For its part, NetApp invests significant time and energy in managing data flows. The company provides access to a Web portal to its major channel partners, says Levinson. The portal enables partners to manage transactions and other data flows on a secure network. "By helping our partners be more efficient," she says, "they're better able to provide service to our mutual customers. So everyone benefits." Of course, data security is paramount. "We assure our partners their information won't be shared with anyone else. They see their pricing, their orders and no one else's."
- **Reputational risk.** Exactly one-quarter of respondents see significant reputational risk inherent in collaborations and partnerships. Unquestionably, if a partner violates ethics, delivers poor quality or in any way tarnishes its own reputation, there can be guilt by association. Companies must perform due diligence before entering into routine and/or extensive collaboration with any other firm. But ultimately, as Booth explains, "you usually can't predict something like that."

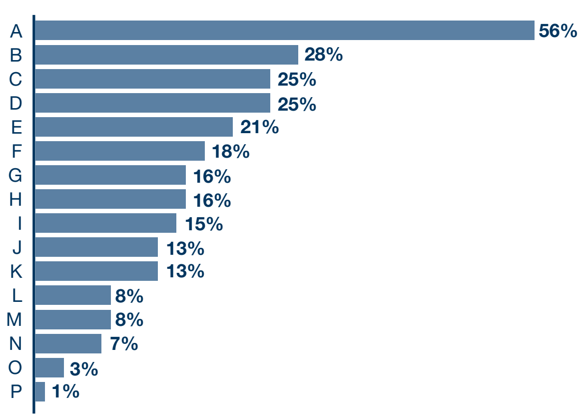
Where companies have a bit more control is in determining how well the respective organisations will work together. A quarter of respondents view this as a key risk of partnership. But according to Chian of Altera, "you don't enter into a partnership without having a good understanding of the other party. You should have a history." Adds Booth: "One way to get to know how the organisations are going to fit together is to start slowly, step by step." If there are too many conflicts, "that will be evident fairly early on."

Companies must also be aware of the need to manage issues surrounding HR and talent, customer privacy, sustainability, governance and IT. Again, it's not possible to completely eliminate such risks, but as Booth explains, "being aware of the issues means you can figure out where you might need to pay more attention."

The degree of risk

Of course, risks increase depending on the partner. For example, 86% describe the risks of collaboration with a competitor as significant (24%) or very significant (62%). "Naturally," says McKay, "when there's a competitor in the room, there are some things you don't share." Although such collaborations are becoming increasingly unavoidable—co-opetition is on the rise—this perception of the risks helps explain why only 16% of companies are involved in such relationships.

Which do you think are the most critical risks to manage within formal collaborations? Select up to three.



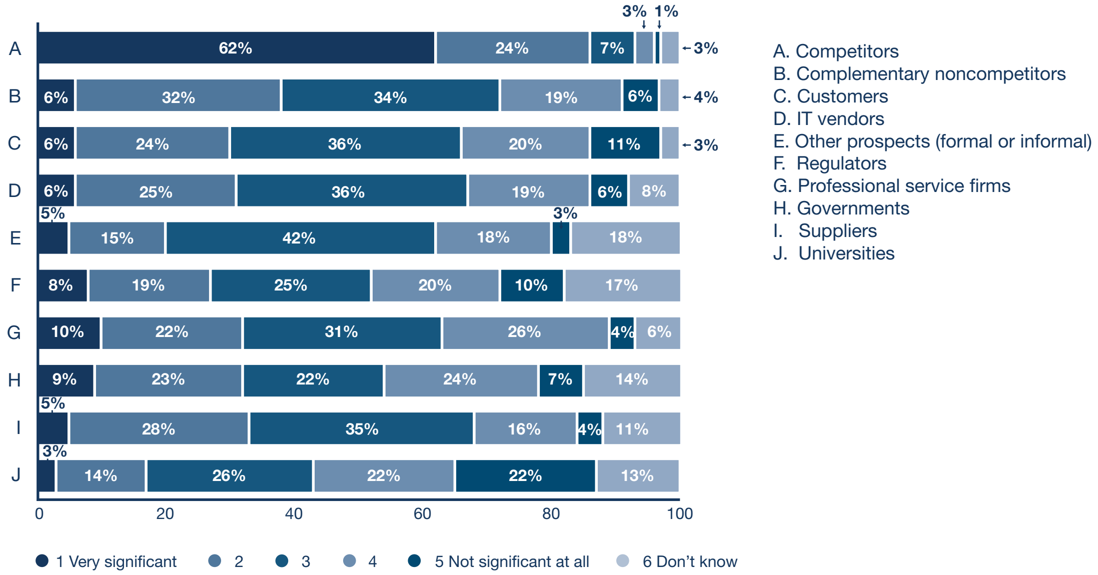
A. Intellectual property
B. Data security and integrity
C. Cultural fit
D. Reputational risk
E. Human resources and talent
F. Customer privacy
G. Independence issues
H. Sustainability
I. Governance
J. IT
K. Marketing effectiveness
L. Access to financing
M. Financial reporting
N. Antitrust laws and regulations
O. Other
P. Don't know

From there, the sense of risk declines significantly: When collaborating with complementary noncompetitors, only 38% describe the risks as significant (32%) or very significant (6%). Of course, no collaboration is risk free. One-third of respondents see significant (28%) or very significant (5%) risks in collaborating with suppliers. Meanwhile, 30% of respondents associate significant or very significant risks arising from collaborations with customers.

Greater formality = greater risk

Also a factor in the perception of risk is the nature of the collaboration. In general, the more formal the relationship, the greater the associated risk. For example, of the collaborative models presented, respondents ascribe the most risk to joint ventures: 70% describe the risks of a joint venture as significant (38%) or very significant (32%). By comparison, though partnerships can range from informal to highly structured, significantly

As it relates to collaboration, how much risk do you associate with each of the following groups? Rate on a scale from 1 to 5 where 1=Very significant and 5=Not at all significant.



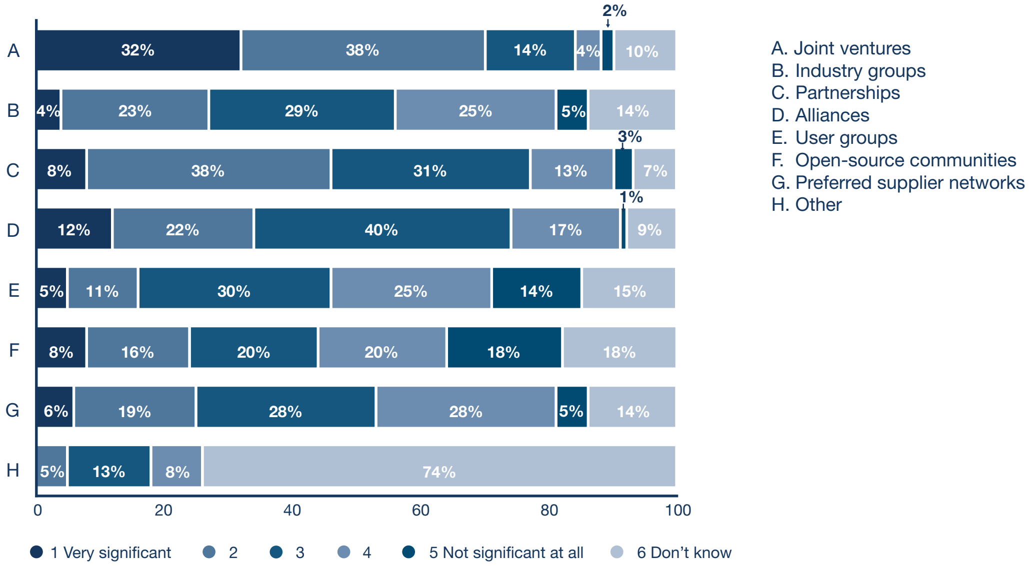
fewer survey respondents view these arrangements as risk-intensive. Specifically, only 46% view the risks here as very significant (8%) or significant (38%).

Industry alliances are also a source of potential risks, viewed by 34% of respondents as significant (22%) or very significant (12%). Similarly, 27% of respondents see either significant (23%) or very significant (4%) risks lurking among collaborations with industry groups. Finally, 24% of respondents see significant (16%) or very significant (8%) risks to formal collaboration within open source communities.

All of which makes sense, says PricewaterhouseCoopers technology-focused partner David Marston who specialises in alliances in the technology industry. Generally, "the more formal the collaboration, the more there is at stake, the greater the risk." As a formal entity, joint ventures entail a legal structure, capital, people, IT and so on. Partnerships, on the other hand, "are more flexible and, if need be, easier to dissolve," says Marston.

Partnerships at CSC, for example, range from broadly informal—from "just a handshake" says Booth—to highly structured. But no matter the case, "it's not as formal as a joint venture."

How significant are the risks associated with these formal collaborative arrangements? Rate on a scale from 1 to 5 where 1=Very significant and 5=Not at all significant.



The risk continuum

According to Infineon's Pätzold, there is a continuum running from informal collaboration with suppliers and customers to more formalised alliances, partnerships—all the way ultimately to joint ventures, mergers and finally acquisitions. But while collaboration is vital, says Pätzold, with every added layer of formality, "the numbers of risks and the size of the challenges increase."

Consequently, Infineon's corporate development tends to evolve according to a handful of principles. For example, he explains, "If there's a way to collaborate with an external party without M&A, that's generally the preferred route." The formation of a formal company, with its own personnel, systems, capital and the like "can be time consuming, complex, may consume our resources and is more difficult to unwind if that becomes necessary."

But other issues may also enter into the decision-making process. Another dimension, says Pätzold, "is how well the two organisations know each other." For example, "if you have a long history together, then there may be only a few items to be clarified." In these cases, he says, "you agree in principle to most issues—you simply have a working relationship." However, where there are more unknowns—perhaps there is only a conceptual understanding of the outcomes the collaborating organisations wish to achieve—then it is time for more formality. "With greater complexity comes less clarity," says Pätzold. "You need to begin thinking about putting the partnership terms on paper."

Another principle the company takes into consideration is the expected duration of the collaboration. "If we believe this is something that will exist well into the future, it makes sense to set up a legal framework," says Pätzold. Whether that means a formal partnership, contractual agreement, joint venture, merger or acquisition, however, "is something we determine on a case-by-case basis," he says.

Finally, it is important to recognise that relationships evolve over time. For example, says Pätzold, collaboration first might take the form of an investment in a startup enterprise, but that equity stake might grow into a larger investment and perhaps a broader, more formal statement of collaboration partnership. Ultimately, "it could escalate to an acquisition." But again, he adds, "these are guidelines, not rules. Each case needs to be considered in its own circumstances."

Full-throttle collaboration: open source

The subject of open-source collaboration bears special attention. Open-source approaches, says PricewaterhouseCoopers director Etienne Lepoutre, "give companies a way to use collaboration to create new competitive options." For example, says Lepoutre, who specialises in operations, a small or mid-sized company can use the open-source community to compete with much larger companies.

Consider a mid-sized hardware or software company looking to gain market share from a much larger company with an already established product and a broad market footprint. Smaller companies do not have the budgets or resources to compete with bigger companies head on. But by sharing and improving upon widely available source code, smaller companies can avail themselves of many legions of programmers and engineers, and take advantage of code already published in the open-source community. In essence, says Lepoutre, “it’s a new business model that can help level the playing field.”

Lepoutre is convinced that as technology advances and windows of opportunity close more quickly than before, “open-source business models will become more successful and dominant.” This is a view shared by many survey participants: More than half (51%) view open-source collaboration as an area of considerable opportunity for their companies, and 46% say open source will or is likely to become a significant component of their business model.

At the same time, over a quarter of executives (26%) still consider open-source collaboration as a considerable risk. But in this case they face another issue. “If you try to be a 100% closed shop—you risk that the open-source community could run away with your product, creating better applications than your own,” says Lepoutre. Increasingly, “they will build capabilities outside of your device or your software so that you are losing momentum and control.” Recent success stories have shown that “there are more and more companies that are able to not only target their efforts and investments on the value-added aspects of their products, but also to manage the open-source community to develop commodities. These companies win on every dimension: speed, quality and investments.”

The tipping point, says Lepoutre, “is whether or not your product is sufficiently unique so that the open-source community will not be able to surpass your competitive advantage.” As Infineon’s Pätzold explains, “companies whose products are capable of being dominant don’t need to share so much.”

By contrast, products that are not sufficiently advanced or dominant will face an increasingly difficult challenge in competing in an open-source world. So it is vital, Pätzold says, ”to get open-sourced business models” working to your advantage.

Of course, an open-source world may even involve working closely with competitors. As Pätzold explains, “you may work with a competitor on joint development of a product.” The companies would share basic information, but then develop more advanced elements on a proprietary basis.

Alternatively, continues Pätzold, “we might join up with a partner or two to build a system.”

The companies share data to a certain extent, but develop their components independently. "That's the approach we take, for example, with the chip sets for a cell phone. We deliver the chip for the baseband or the RF (radio frequency) transceiver and someone else delivers the RF front-end with the power amplifier."

The real risk: no collaboration

Partnership confers enormous advantages to all parties concerned. Certainly, each partner gives up some revenue in the process, but according to EMC's McKay, "the benefits most times far outweigh the risks and/or costs."

For example, sometimes a partner will have resources available that do not exist inside one's own firm. In those cases, collaboration means that "we can say yes to the client" more often, says McKay. While EMC might lose revenue on that client by relying more heavily on the partner's resources, that shortfall will be made up over other projects over time. For example, "we can get that client to become a reference account faster than we might otherwise, and get to the next project with that client sooner." Companies that do not take this approach, says McKay, "will never get to that moment where both teams realise that together, they have a terrific offering for clients."

Unquestionably, collaboration with external organisations entails risk. But rather than focus only on the risks of collaboration, those interviewed for this report suggest considering the risks of not collaborating. "The world is too complex today for any one company to have all of the answers," says Altera's Chian. Collaboration "is a much less risky strategy than trying to do everything on your own."

PwC connections

No risk, no reward*

Every business decision has some element of risk. Collaborating with external entities heightens risk exposure. Concerns about protecting intellectual property, keeping data secure and upholding the company's reputation are paramount and should be taken seriously.

In addition, the twin forces of globalisation and connectivity have ensured that risk is no longer confined to one company, country or continent.

But successful companies need to be able to make informed decisions and must learn to define their risk appetite and integrate this appetite into business strategy and culture so that all facets of the business consistently apply the desired risk thresholds, top down, to decision-making. If risk appetite is articulated in the strategy, driven into the culture and consistently applied to decision making, an organisation can achieve optimal performance and compliance and avoid investing in redundant or ineffective functions, processes and technology.

PwC believes that risk savvy enterprises are those that adopt a holistic approach to risk, with the following characteristics:

- Agile, coordinated response to special circumstances (e.g., crisis or new requirements)
- Taking the right risks to enhance competitive advantage—this requires a clear definition of overall risk appetite—linked to strategic goals and corporate culture
- Building a risk-aware culture for success
- Effective and efficient risk and compliance operations
- Building collaborative networks with regulators and competitors

Making smart risk decisions as you consider a collaborative venture yields numerous benefits. Some of these benefits are financial and relatively easy to quantify. Some are more intangible, although still possible to measure. They include:

Financial benefits

— Higher revenues

— Sustainable growth

— Fewer unexpected losses

— Lower costs and less earnings volatility

— Increases in market capitalisation

— Lower cost of capital

Strategic benefits

— Clearer focus on core activities

— Better allocation of capital and other resources

— Greater transparency

— More empowered and engaged employees

— Higher levels of customer satisfaction

— A better reputation and relationship with key communities

For an organisation to truly optimise business success and differentiate itself in the market, it must foster the complementary and necessary risk-taking culture.

For more insight on PwC's points of view on a holistic approach to risk and regulation, please refer to **www.pwc.com/getuptospeed**. To learn more about how PwC can help your company effectively manage the risks related to collaborations, please visit **www.pwc.com/techconnections.**

*connectedthinking

Questions for further reflection

What advantages might accrue to your company if it were more adept at external collaboration? What does your company risk by failing to improve its collaborative capabilities?

If your company were to form a partnership with a noncompetitor, which risks would you consider the most significant? What steps could be taken to manage those risks?

How would your list of risks change if the partnership was with a competitor? What would be the greatest risks? How would you go about managing those risks?

Do you think that efforts your company makes are well balanced between improving the competitive advantage of your products and developing commodities? Have you already considered partnerships or outsourcing as opportunities? Why did (or didn't) you do it?

What are the most significant risks your company might encounter by collaborating more closely with customers? With suppliers? With industry groups?

What steps could be taken to manage those risks? Is it likely the potential benefits might outweigh the risks?

What possible risks might your company face by failing to collaborate more closely with customers? With suppliers?

Observation three: The most critical collaborations are with (or for) customers.

It is crucial to set up formal frameworks for collaboration, but it is also important to understand the bottom-line goal of the collaboration. More than likely, it's all about the customer.

Customers are the reason

Why do companies collaborate with one another in the first place? Don Peppers, co-founder of Peppers & Rogers Group, a consultancy focused on customer strategy, says that "at some point, any collaboration between companies at any level is likely to be undertaken at least partly to improve the customer experience, even if the customer isn't directly involved in the collaboration effort."

That's a view shared by virtually every executive interviewed for this report. For example, as CSC's Booth explains, "all of our partnership efforts are geared to creating value for the customer."

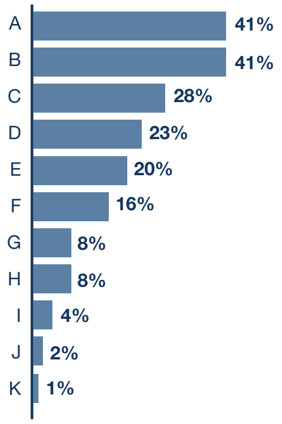
This focus becomes even clearer whenever there's a disagreement within a partnership, or the partners can't agree on the right approach. In those cases, says Booth, there's a really simple solution available. "We ask: What would be the best approach from the customers' perspective?" Framing the partnership in the light of the end user, or as Booth describes it, "keeping the customer in the room," nearly always "delivers the right answer."

The source of innovation

In fact, many firms have taken collaboration a step further and have launched formal initiatives with customers themselves. The benefits of going directly to the end user are virtually limitless, says Peppers. "You can create better products or services that are more attuned to the needs of customers, and reduce the odds that some other company will be able to satisfy their needs as completely."

Of course, one of the greatest advantages of customer collaboration is that it can lead to innovations across the whole of a company's product or service offerings. As Alcatel-Lucent CTO Olivier Baujard explains, "We foster innovation thanks to a dynamic ecosystem where collaboration is key. Alcatel-Lucent Bell Labs and our R&D develop home-grown innovative technologies. We also enhance rich, open innovation through collaboration with strategic partners from diverse technology fields and from working closely with customers."

With which of the following external groups does your company most actively collaborate, either formally or informally? Select up to two.



A. Complementary noncompetitors
B. Customers
C. IT vendors
D. Professional service firms
E. Suppliers
F. Competitors
G. Governments
H. Universities
I. Regulators
J. Other prospects (formal or informal)
K. Don't know/Not applicable

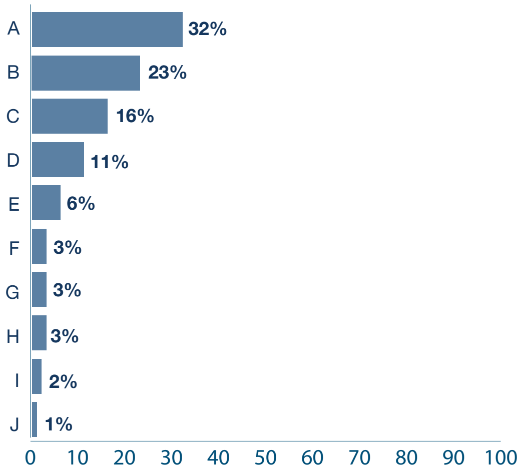
For example, the company works closely with one of its best customers, the University of Pittsburgh Medical Centre, on the key challenges of connected health strategy. Products and services developed in the joint venture, says Baujard, include advanced telemedicine solutions, patient care management and broader data centre communications. In the end, “the customer obtains innovations and customised services to boost their own business,” says Baujard, “and we obtain insights relating to the future of healthcare that can lead to even more innovation.”

Indeed, as PwC’s Fraser explains, “increasingly, technology companies are getting their best ideas from customers.” Much of this may derive from formal collaboration, but other insights can be gleaned from such tools as data mining to transform what they know about customers into improved products and services.

Profound changes are on the horizon. Certainly, the role of pure research or in-house R&D will never disappear. But according to the Economist Intelligence Unit report, *The Digital Company 2013*[1], executives predict

Where do your firm’s most innovative ideas come from today?

(% of respondents)

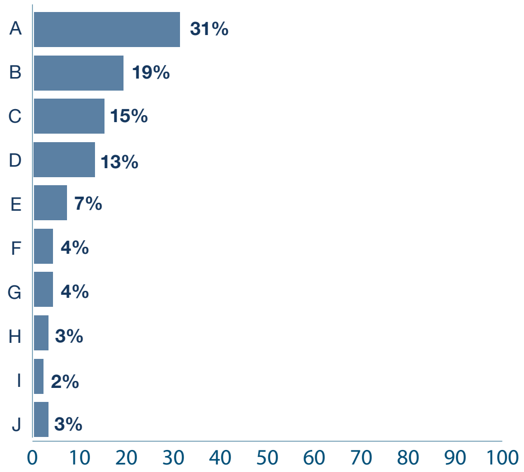


A. R&D (in-house)
B. Employees (non-R&D)
C. Customers
D. Partners (in alliance or joint ventures)
E. Competitors
F. R&D (outsourced)
G. Industry groups
H. Don’t know/Not applicable
I. Suppliers
J. Others

Source: Economist Intelligence Unit report, *The Digital Company 2013,* March 2008

In 2013, where do you think its most innovative ideas will come from?

(% of respondents)



A. Customers
B. R&D (in-house)
C. Employees (non-R&D)
D. Partners (in alliance or joint ventures)
E. R&D (outsourced)
F. Industry groups
G. Competitors
H. Suppliers
I. Others
J. Don’t know/Not applicable

Source: Economist Intelligence Unit report, *The Digital Company 2013,* March 2008

[1]The Digital Company 2013: How technology will empower the customer; The Economist Intelligence Unit, June 2008; with major sponsorship by AT&T, Nokia, PricewaterhouseCoopers and SAP.

that within the next five years, customers will replace in-house R&D as the primary source of product innovation. Specifically, the report says, "companies today still tend to rely on their in-house R&D departments to generate the lion's share of innovative ideas." However, "the survey results strongly suggest that customers will be the most important source of innovation" within five years. This is "a view which is held with similar degrees of conviction across all regions, industries and company sizes."

The new IP risks

Launching formal collaboration projects with customers is not risk-free. In particular, as Baujard of Alcatel-Lucent explains, there are intellectual property issues to consider. "Whenever there is customer intimacy of any kind, the IP is always a serious topic," he says. Before entering into any form of close collaboration with a customer, "we agree in advance with the customer on who will own what is created through and by the collaboration."

Close collaboration with customers "is extremely valuable for both parties," says Baujard. Nonetheless, management of shared IP with a customer "can lead to highly sensitive situations." Consequently, he explains, Alcatel-Lucent prefers spending the needed time up front to clarify the arrangement. Creating clear roles and objectives beforehand, says Baujard, helps prevent misunderstandings down the line "and creates the basis for a mutually beneficial collaboration."

Not all companies adhere to the same philosophy. Switzerland's R&D-focused OC Oerlikon Corporation AG makes products ranging from solar films and coatings to state-of-the-art mechanical drives. According to Peter Tinner, head of global sales and marketing, the company relies on "very close collaboration with our customers."

There are two types of customers, Tinner says. First, there are "those who buy things—products that are ready to go." Then there is a second set of customers who are driven by time-to-market and innovation, "customers who want to be on the forefront of technology," says Tinner. These are the types of customers with whom Oerlikon likes to form close, yet informal (noncontractual), partnerships.

With such companies, "we enter into a partnership where we are very open with our data," says Tinner. "We'll share all of our information, with the idea that together we can make the product better." Or, he adds, perhaps the collaboration will allow the company to "make something new and get it to market much faster" than either company could by working on their own.

Oerlikon has numerous relationships of this nature—all of them established with limited or even no formal documentation. In the company's experience, openness is essential. As Tinner explains, "the willingness to share information becomes an enormous advantage." In particular, says Tinner, "If you have to make a new, complex agreement each time, or if you have too many confidential agreements—you can use this innovation here but not there, with that customer but not this customer—it makes things too difficult."

Case study: Collaborating with universities

Opportunities for external collaboration are by no means limited to customers or suppliers, says Jack Wenstrand, director of university relations and external research for Agilent Technologies Inc, the US $5.4 billion manufacturer of scientific instruments and analysis equipment. Wenstrand is in charge of a unique programme that promotes collaboration between Agilent's global professional R&D staff and university professors and students around the world.

At the heart of the initiative is a desire to tap the university's expertise to solve problems and generate new ideas. Agilent's staff voluntarily submits collaborative research proposals to company executives, who select which projects will proceed. From there, the firm works collaboratively with the university to conduct the research. Agilent staffers (usually employees who championed the original proposal for research) are assigned to research projects and devote up to 10% of their time to a project.

Most of the research collaborations include a gift which helps to support a student and the research. By forgoing a research contract and making a gift, Agilent gives up all rights to any university-created intellectual property that arises. But students and professors gain access to real-world technologies and methodologies that can greatly enhance the educational experience. Meanwhile, Agilent employees learn by contributing and enhancing their own basic research and collaboration skills. The programme is also an extremely valuable tool to recruit top minds from leading universities. In addition, says Wenstrand, "this gives us an opportunity to explore the leading edge of our basic research agenda on a very cost-effective basis." The programme is also "a great way to familiarise" students and professors with Agilent's research tools, building a loyal customer following.

And the programme delivers tangible benefits. Wenstrand recalls a case where the external collaboration solved a significant challenge for Agilent's customers. One of the company's products required four different algorithms in order to satisfy the needs of various customers. Through a research collaboration, Agilent was able to provide technical and financial support to a student who developed a single algorithm with an open-source implementation. The work improved and simplified an important aspect of the product.

Listening to consumer conversation*

A recent global survey conducted by the Economist Intelligence Unit, *Digital Company 2013: How technology will empower the customer,* found that over the next five years, customers—not in-house R&D—will be the leading source of new product and service ideas and that Web-based customer communities will also be significant contributors in providing product support.

In order for companies to benefit from these trends they must learn to listen to consumer conversation. Consumers are using online media and forums, phone calls, emails, chats and text messages to discuss what, when and how they buy. Successful companies will tap into that conversation, analyse it and act on it.

Analysing consumer conversation is a process of progress discovery—i.e., harvesting consumer insight and then combining it with other internal and third-party intelligence in order to identify opportunities. Progressive discovery can be applied to a specific, immediate challenge, such as finding out what consumers think of a product, or to scanning the company's strategic horizon for disruptions and opportunities. The process of progressive discovery involves the following steps:

Strategise – Determine which challenge or goal could be effectively informed and addressed by leveraging real-time customer insight. Then, identify which types of data sources have the best chance of containing conversations about the topic of interest.

Aggregate – Aggregate information and data from myriad sources with the goal of gathering information that is directly responsive to your company's big questions. Use sampling techniques to gather a statistically meaningful portion data and/or consider using new technologies that can capture and interpret unfiltered, real-time consumer conversations across multiple media in a data repository.

Analyse – Run software to analyse the "voicescape", the landscape of consumer voices—volume of words, common phrases and tags, frequency and clustering. Use this voicescape analysis to identify promising concepts, phrases and words about the company, competitors and consumer needs. Then conduct deeper analysis, such as on sentiment, tonality, spread and volume over time.

Communicate – Translate the voicescape and deeper findings into indicators that meet business goals. Verify indicators against other sources of consumer data within the organisation as well as against trends in the marketplace.

Operate – Test the interpretation in the marketplace by using it to adjust operations.

Aided by increasingly sophisticated technology, progressive discovery can dramatically increase the speed and depth of business intelligence. It can reveal granular, unfiltered consumer attitudes in real time, provide early warnings of crises and market shifts and create new insight out of other transactional and behavioural data. Questions such as "Why are my customers leaving?" or "What are my competitors doing better?" can be answered quickly and accurately by listening to and processing consumer conversation.

To read or download PricewaterhouseCoopers' *How consumer conversation will transform business*, visit **www.pwc.com/techconnect.**

Questions for further reflection

Do your business model and customer base lend themselves to closer collaboration? Where could your company forge closer ties with customers?

What are the risks of close collaboration with your largest customers? What steps could you take to manage those risks?

To what degree are your R&D efforts informed by your customer-facing activities? Are the two adequately integrated?

Not all collaboration is overt: Do you use tools such as data mining to decipher what your customers are telling you? What customer data do you already have or could you easily collect that might yield insights?

Observation four: Collaboration opens up emerging markets.

Any time an organisation collaborates outside of its own borders, it creates additional business risks. But when it comes to developing countries, over three quarters of respondents (76%) say that relative to developed markets, the risks of collaboration in emerging markets are significantly greater. Similarly, 63% say that cultural issues between partners collaborating in emerging markets require significantly greater attention than in developed markets. So if the risks are indeed greater, why are companies so apt to pursue partnerships or joint ventures in emerging markets?

Mitigation through collaboration

PricewaterhouseCoopers' Marston says that the risks of collaboration in emerging markets are offset by the operating advantages of having a partner who understands the local business and economic issues. In fact, "emerging markets are where you would probably want to rely on a partner [or an alliance] even more than you might in developed markets."

Pätzold of Infineon Technologies AG says collaboration is a preferred approach to conducting business in emerging markets. "When you have limited knowledge in a given area, you look for partners who have that knowledge." He adds that executives are understandably wary of the risks in emerging markets: "It's a fear of the unknown." Plus, there are real cases where emerging market companies have not lived up to the standards of the developed world—which creates real risk for the latter.

Nonetheless, Pätzold is confident that by working with local partners, the challenges become more manageable. "The risks are real," says Pätzold. "But by taking on a local partner or by forming a joint venture with a local company, you reduce the overall risk" of doing business in an emerging market.

Specialised risks

Collaboration through partnership, joint venture or similar arrangement creates both risks and benefits in emerging markets. The more capable companies are in identifying and managing these risks, the more successful they will be. Here, the survey sheds light on the trouble spots. Asked which risks require significantly greater efforts to manage in emerging markets relative to developed markets, the top four selections include:

Intellectual property. Respondents view the potential for leakage of intellectual property as the greatest risk of collaboration in emerging markets. Certainly, there are many documented cases of IP theft in such nations. For example, one senior executive from a major technology company says that for a while in one of the BRIC countries, "any process technology we might introduce would show up in another factory within weeks."

IP theft or leakage is real, but the risk is manageable. As PricewaterhouseCoopers' partner Greg Unsworth explains, "what's needed is due diligence." This starts with a good look at your potential collaborative partner. Whether that's a contract manufacturer, distributor or whatever, "you need to evaluate their track record and outlook on IP protection," he says.

But even more important, companies need to be very cautious in introducing valuable IP to any external emerging market collaboration. "You have to make a very educated assessment of how much risk you're prepared to take," says Unsworth. "What are you willing to risk losing in order to gain the advantages of operating in an emerging market?"

Cultural fit. Another risk perceived to be higher in emerging markets is the cultural fit between two collaborating organisations. As PwC's Marston explains, "you can have a bad cultural fit between two companies from the same country." So it's not surprising, "that it's even harder finding a good fit where there are language, cultural" and other barriers.

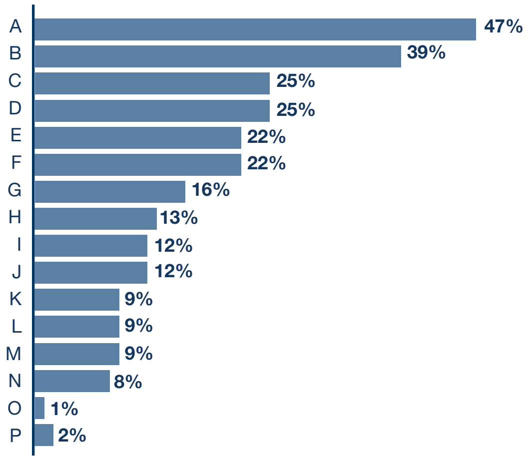
Human resources and talent. Respondents also see considerable HR and talent management risk in external collaborations in emerging markets. However, as Unsworth explains, gaining insight into local practices is at the same time "one of the reasons local partners are so valuable. They can help you manage these issues."

Reputational risks. A very real risk of emerging market collaboration is the risk of guilt by association. Undeniably, standards in areas such as pollution controls or labour policies are more relaxed in emerging markets. Nonetheless, companies from developed markets—particularly those with brand names to protect—cannot risk being associated with major polluters, toxic waste dumpers or employers of child labour.

In reality, says Unsworth, "this is probably the greatest risk of collaboration with companies from emerging markets." Again, he explains, the solution is due diligence.

Moreover, the more substantial the collaboration, the higher the level of due diligence required. In cases where companies are sharing R&D, capacity or other resources, "this reaches a level comparable to what you would execute for an acquisition," says Marston. "Who are they? What is their background? What are their sources of financing? Are they viable over the long term? You need to know with whom you're partnering."

Which of the following risks require significantly greater efforts to manage in emerging markets rather than developed markets? Select up to three.



A. Intellectual property
B. Cultural fit
C. Human resources and talent
D. Reputational risk
E. Governance
F. Data security and integrity
G. Marketing effectiveness
H. Sustainability
I. Access to financing
J. Antitrust laws and regulations
K. IT
L. Independence issues
M. Customer privacy
N. Financial reporting
O. Other
P. Don't know

The form of collaboration

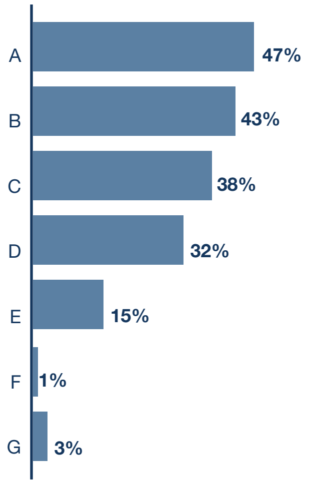
Asked which forms of collaboration they feel are most effective for entering emerging markets, survey participants cited partnership (47%), alliances (43%), joint ventures (38%) and acquisitions (32%).

In addition, nearly half of executives (46%) say they collaborate with established companies in emerging markets primarily as a means of gaining market entry. Another 35% say their collaborations in emerging markets are primarily sourcing-oriented.

Finally, in terms of creating supply chains in emerging markets, again the most often cited means is partnership (36%) followed by alliances (33%), preferred supplier networks (31%), joint ventures (27%) and acquisitions (27%).

However, part of the challenge of emerging markets is managing relative inflexibility. Often, says Marston, the structure of collaboration in these countries is dictated by local rules. For example, the governments of nations such as China, Thailand and others require market entry through formal joint ventures—a means of protecting certain sectors. In these cases, says Marston, "the form of collaboration is dictated or at least limited."

Which forms of collaboration do you think are best for entering emerging markets? Select up to two.



A. Partnerships
B. Alliances
C. Joint ventures
D. Acquisitions
E. Preferred supplier networks
F. Other
G. Don't know/Not applicable

Managing emerging market collaboration through a successful joint venture*

Nineteen percent of CEOs stated that access to new markets through geographic expansion is where they see major opportunities to grow their business in the next 12 months, according to the recent PwC 11th Annual Global CEO Survey. The choice of entry strategy into an emerging market is of vital importance, and while there are many options, joint ventures remain a popular strategy for many. In fact, according to the survey, joint ventures and mergers and acquisitions are of equal interest to CEOs as a source of business growth.

In some markets, joint ventures have been the only strategy available to companies, due to restrictions on ownership by foreign investors. However, joint ventures offer numerous advantages above and beyond these legislative and regulatory constraints. They can allow companies to reach new customers through an established distribution network as well as providing local know-how, contacts and relationships. This adds up to an opportunity for companies to accelerate growth and access skills that they need and cannot provide locally.

The three Ws – being aware of risks

Before deciding whether a joint venture is the correct approach, companies need to consider the “three Ws”: “Why?”; “What?”; and “Who?”.

Why is a joint venture more appropriate than any other form of corporate structure?

Answering the “why” question can sometimes be straightforward, but for many projects the drivers behind the selection of a joint venture structure may be less clear-cut. Successful collaborating companies will be very clear about exactly what those objectives and drivers are.

What precise assets and capabilities is each side bringing to the table?

For example, a UK company investing in a developing market would typically bring capital, technology and brand, while the partner from the developing market would bring contacts, local market knowledge and distribution routes. This can raise a thorny issue when it comes to valuing the shares of a joint venture on exit, as one is often a tangible input and the other an intangible input. Successful companies will address how to value assets from the start.

Who really is our prospective joint venture partner?

Whereas it may be relatively easy to get information on a business partner in a developed market, it can be much more difficult to do so in many parts of the developing world. Successful companies will undertake extensive due diligence on their prospective partners by making enquiries as broadly as possible in their chosen market.

From a strategic perspective, joint ventures offer companies a source of flexible and swift market access. But, those advantages do not come without risk. It can be difficult to ensure that the objectives of partners remain aligned, and their may be cultural differences that can be a barrier to efficient decision-making. Many of the risks can be mitigated, however, by ensuring that both partners are explicit about intentions and strategy from the outset. Clear mechanisms and reporting lines should be agreed, as well as processes to manage conflict or a divergence in objectives.

For more insight on PwC’s recommendation to apply the three “Ws” to ensure successful emerging markets joint ventures, please refer to *Crossborder – Managing joint ventures in emerging markets.* To view the full report or find additional information on doing business in emerging markets, visit **www.pwc.com/emergingmarkets.**

Questions for further reflection

What are your company's business objectives in emerging markets? Do they differ from your objectives in developed markets? Have these differences been evaluated and translated into appropriate collaboration strategies?

In what specific ways do your approaches to collaboration differ in emerging markets relative to developed markets? Are there any significant differences? Why or why not?

Does your company have any formal policies for sharing IP? How might these change in an emerging market context?

How is your company positioned for conducting due diligence in an emerging market? Do you have the skills and capabilities necessary to adequately evaluate potential collaborative relationships?

Observation five: Collaboration is in its infancy.

Though the ability to collaborate externally is increasingly recognised as an essential core competence, survey responses indicate that companies still have a long way to go.

For example, despite the fact that 41% of executives say that their collaboration efforts create significant risks, companies seem to be skimping on processes that could lead to better risk management. Less than half (47%) of executives say their companies perform thorough due diligence before entering into formal collaborative relationships. Perhaps even worse, only 35% say they are fully aware of and proactively manage the risks inherent in external collaborations and partnerships. Similarly few (also 35%) describe their companies as having a clearly defined collaboration strategy that adequately addresses the risks of collaboration.

Extracting greater value

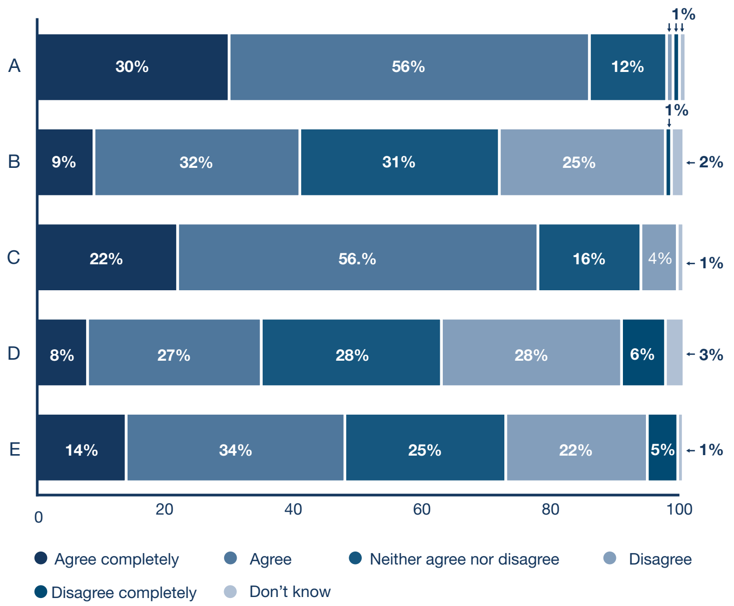
Are companies benefiting from collaboration? About half (48%) agree with the statement: "The ability to manage and to profit from collaboration is a core competency for my company." However, only 14% strongly agree with this statement. Moreover, over three quarters (78%) believe that if they could improve their capabilities, their companies could extract significantly greater value from formal collaboration.

Overall, it appears, companies are not taking the needed steps to formalise their approach to external collaboration. For example, less

My company is pursuing more collaborative partnerships with third parties than in the past.

How do you compare?
For live benchmarking for your revenue peer group, go to www.pwc.com/techconnect.

Do you agree or disagree with the following statements? Rate on a scale of 1 to 5, where 1 = Agree completely and 5 = Disagree completely.



A. Our collaboration efforts create significant competitive advantages for our company.

B. Our collaboration efforts create significant risks for our company.

C. If we improved our capabilities our company could extract significantly greater value from formal collaboration.

D. Our company has a clearly defined collaboration strategy that adequately addresses the risks of collaboration.

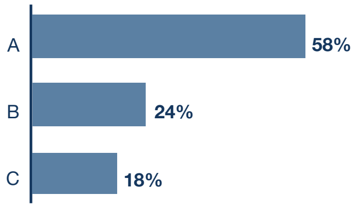
E. The ability to manage and profit from collaboration is a core competency for our company.

than a quarter of companies (24%) use specific metrics to prove that their collaborations yield positive overall results. By comparison, 58% use only informal measures—and 18% do not determine the ROI of their collaborative efforts in any way.

The failure to gauge returns can have devastating consequences for future collaborations. As CSC's Booth explains, "Collaboration is sustainable only if both parties see the value in that collaboration." Moreover, there needs to be a clearly communicated balance in terms of contributions and benefits. "If one party believes it is doing all the work but not receiving [commensurate] benefit, that's going to create friction in the relationship."

As such, companies should clearly calculate the risks, costs and benefits for both parties in the relationship. Imbalances in the mix shouldn't necessarily be viewed as a negative for the partnership but rather as a topic for discussion—an opportunity to renegotiate. Being aware of this balance of trade is essential, says EMC's McKay. "When the balance is swinging in EMC's favour, our partners let us know it. That's always a negotiating point."

Which statement best describes how your company determines the ROI of formal collaborations? Our company...



A. Uses only informal measures to assess how successful our formal collaborations have been.

B. Uses specific metrics to prove that our collaborative efforts have yielded positive overall results.

C. Does not determine the ROI of our collaborative efforts in any way.

How do you compare?
For live benchmarking for your revenue peer group, go to www.pwc.com/techconnect.

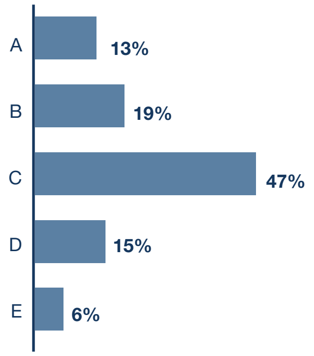
Introducing structure

The survey makes it clear that executives feel their companies can do a better job at collaborating. Perhaps one of the most effective means of accomplishing this is by introducing a more systematic approach. For example, the most common practice today, in evidence at 47% of companies, is to approach the risks of collaboration on an *ad hoc* basis. Within three years, only 16% of respondents expect this to be the case. In contrast, only 13% of executives say their companies today exhibit formal, strategic frameworks, policies and procedures for managing the risks and opportunities of collaboration. Looking out three years, that figure nearly triples, to 37%.

While a structured approach can pay dividends, *ad hoc* approaches can sap the value of collaboration. These are lessons that McKay of EMC says her company has learned—in some cases the hard way. So today, her company subscribes to a formal set of policies and concepts she refers to collectively as "partnership 101". In her company's view, the following elements are essential to the success of any collaboration:

- **Commitment.** Without a clear commitment of resources and management attention from both sides, "the partnership will fail," says McKay.
- **Equal benefit.** "Balance of trade" is essential, says McKay. "Both parties have to be getting something out of the relationship and the distribution of those rewards needs to be relatively even."

Which of the following statements best describes your company today?



A. We have a formal strategic framework, policies and procedures for managing risks within formal collaborations.

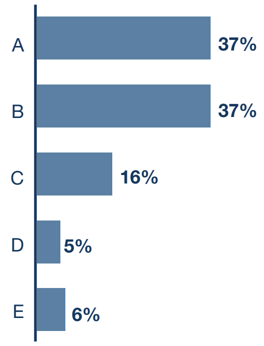
B. We have broad guidelines for managing risks within formal collaborations.

C. We manage the risks of collaboration on an *ad hoc* basis.

D. We do not manage the risks of collaboration.

E. Don't know.

Which do you think will best describe your company in three years?



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E. Don't know.

- **Clear governance.** Who makes decisions for the partnership, and at what point? Is there a system for escalating disagreements? Companies don't need to hire lawyers to create a partnership's governance structure, "but there should be clear leadership, ownership, decision-making and dispute resolution."
- **Dedicated individuals.** In addition to governance, responsibilities should be clearly defined and well communicated to all parties. "You should not have to guess who to approach on important issues," says McKay.
- **Defined areas of competition.** It is also important to let partners and potential partners know the precise parameters and boundaries of the collaboration. In EMC's case, the company defined a "no fly zone." "We've announced to our partners that EMC will not compete with them in certain markets. This is well received by our partners when we follow through on this commitment," says McKay.
- **Agreed-upon processes.** The partnership should also feature consistent processes for assigning tasks, handling financial matters and managing day-to-day operations. Everyone—from the executive offices to the field team—needs to understand how to get things done correctly through the partnership, says McKay.
- **The willingness to "lose early."** Not every partnership is going to be successful. But the most dismal failures can be avoided by moving the conversation straight to the most challenging issues. "Get the tough issues out on the table right away," says McKay. "If those can't be resolved, then you've saved a lot of time and resources that can be refocused on the alliances and partnerships that are more likely to thrive and grow."

According to Juniper Networks' Luis Avila-Marco, Senior Vice President, Corporate Development, successful collaboration comes from a comprehensive approach that addresses all of the basics. These include, says Avila-Marco, "clearly defined and aligned goals, transparency in action and intent, active support by upper management, clear and timely communication among the teams and proactive identification of potential hard issues." These and related actions, says Avila-Marco, are what add up to "long-term success."

Who makes the calls?

A clear understanding of roles can lead to not only more effective collaboration, but also to better governance. Here, the survey shows that for most companies, formal collaboration involves a complex interplay of initiation, influence and final decision-making.

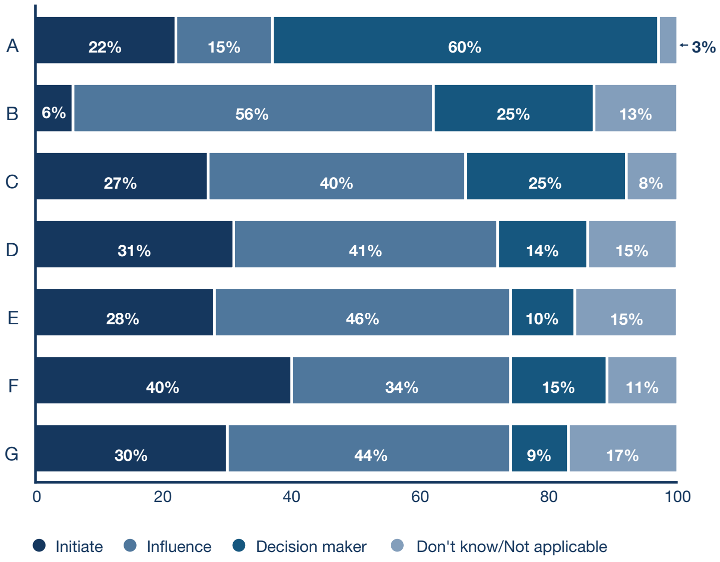
- **Initiation.** Topping the list of those most likely to initiate a formal external collaboration are business unit leaders (cited by 40% of respondents). Next in line are Chief Marketing Officers (CMOs) (31%), functional leaders (30%) and Chief Technology Officers (CTOs) (27%).
- **Influence.** Most influential in shaping collaboration are CFOs (56%) followed by senior corporate development officers (46%), functional leaders (44%) and CMOs (41%).
- **Decision-making.** The CEO is a key decision-maker at 60% of companies. But the CFO (25%), CTO (25%), business unit leaders (15%) or even the CMO (14%) can also play a decision-making role.

The chart below indicates common decision-making paths:

Who initiates	Who influences	Who decides
Business unit leader	CFO	CEO
CMO	Senior corporate development officer	CFO
CTO	Functional leader	CTO

Of course, there will always be unforeseen circumstances that rise up to challenge any collaboration. But by understanding roles, relationships, strategies and governance, executives attempting to improve their company's collaborative processes will be better equipped.

What are the most likely roles for the following executives in terms of decisions relating to the risks within formal collaborations? Are they more likely to initiate, influence or make final decisions?



A. Chief executive officer
B. Chief financial officer
C. Chief technology officer
D. Chief marketing officer
E. A senior corporate development executive
F. Business unit leaders
G. Functional leaders

PwC connections

Capturing the value of collaborative business networks*

Numerous case studies show that business networks can deliver greater agility, consumer engagement, innovation and cost savings. But they do not provide a roadmap for capturing real value from collaboration. A systematic approach might start with a framework that examines three aspects of collaborative networks: the business objectives, stakeholders and risks.

Networks can address a wide range of business objectives. They can enhance innovation (e.g., through sharing R&D efforts or inviting consumers to participate in new product development initiatives); provide access to new markets (through partnering with local firms for distribution or participating in exchange marketplaces) and improve the supply chain (through global sourcing or outsourcing).

The current and potential stakeholders may include customers, communities, suppliers, logistics providers, regulators and even competitors—and each will have something unique to bring to the network. Traditional vendor-customer relationships sometimes evolve into business networks, through the sharing of risks and rewards. But completely new forms of networking with new stakeholders can also emerge.

However, collaborative business networks involve risks—and the level of risk varies according to the extent to which intellectual property is involved, the degree of control over the outputs and sheer complexity, among other factors. For example, some brands have been damaged by quality control problems in third-party production facilities or call centres. When a network becomes more complex, the brand-holder cedes some control over the final product or service, and its reputation is more exposed.

To marry these three elements—business objectives, stakeholders and risks—into a framework for collaborative networking, organisations need to be very clear about the various types of networks (both internal and external) that are possible. The following questions can help tease out the differences:

- Can the risks and rewards be shared among the existing value-chain partners—either product or service providers or customers?
- Would market-based networks provide better sourcing and distribution?
- Do networks offer opportunities to create new markets?
- What is the best way to use a peer network of firms, customers or the general public to enhance innovation, marketing or distribution?
- Can the rewards of collaborating with suppliers which are also competitors be balanced favourably against the risks?

The responses will vary, since different objectives require different kinds of collaborative network. Furthermore, collaboration is not appropriate for every objective in every company, industry and country. However, it is increasingly becoming an essential strategic tool for succeeding in the connected world.

To learn more about what CEOs are thinking visit **www.pwc.com/techconnect** to view the complete *PricewaterhouseCoopers' 11th Annual CEO Survey: Compete & Collaborate.*

Questions for further reflection

Does your company pursue external collaboration on a formal or *ad hoc* basis?

Do your company's strategic planning processes consider the potential contributions of open source collaboration, partnership or similar strategies? What about your company's corporate development processes?

Where do your company's most capable resources for external collaboration reside? Is there any one group in your company that excels at collaboration? Could their successes be replicated elsewhere?

Is your company running the risk that its collaborative capabilities may be less developed than those of its competitors?

Conclusion:
Collaborate to succeed

Given the growing complexity and even interdependency of technology products today, it is becoming increasingly difficult for any single company to be able to deliver all things to all customers. This underscores the need for formal kinds of collaboration with third parties.

Collaboration can take many forms. For example, companies can elect an open approach—with agreements no more complex than what can be written on the back of an envelope. Alternatively, partnerships, alliances or other agreements can be painstakingly formal and detailed, seeking to anticipate and deal with any and all potential future outcomes. Both approaches—along with anything in between—can be effective given appropriate circumstances or business strategies.

But closer collaboration in all its forms can also introduce a new and broader set of business risks ranging from strategic to tactical. For example, what will be done to protect intellectual property—and who will own or commercialise any IP that comes out of the collaboration? Who owns the relationship with the end customer? Who makes the final decisions in any collaboration? These are questions that must be answered before entering into any formal collaboration.

No matter the form of collaboration or its goals—to maximise benefits or to minimise risk (or both)—companies should overlay a range of processes and controls. Whether formal or informal, whether with a supplier, customer, competitor or peer organisation, clear governance is essential as are clearly defined roles and responsibilities. In order to profit from collaboration, companies must apply management discipline. As the survey reveals, many companies may have a good deal of ground yet to cover in these regards.

So which is the riskier strategy: electing to collaborate closely with a competitor or attempting to enter a new market alone? In an era of complex products and technological interdependency, the answers to such questions are no longer so obvious.

This highlights the need for companies to develop expertise in collaboration. For example, assessing the strategic value of a partnership—even with a competitor—requires relevant experience and insight. So it is, in an increasingly demanding global marketplace, those who elevate collaboration to a core competence who will achieve higher levels of success.

Acknowledgments

This report was developed by PricewaterhouseCoopers' Global Technology Industry Group, with contributions from a number of PwC subject matter experts across the globe. We gratefully acknowledge the following team members who contributed their thoughts, knowledge and experience:

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Of further interest

Additional thought leadership on the subject of collaboration from PricewaterhouseCoopers includes:

Breaking down walls: How an open business model is now the convergence imperative
A detailed report outlining why businesses must eliminate internal silos in order to maximise value.

Crossborder — Managing joint ventures in emerging markets
A review of the advantages and disadvantages of joint venturing with a local company when operating in emerging markets.

How consumer conversation will transform business
Discusses specific strategies on how companies can achieve improvements in business processes, technology and organisation culture through the use of consumer data.

Smarter risk decisions: Reinventing risk
A look at how the most successful organisations define their risk appetite and integrate this appetite into their business strategy and culture to achieve optimal performance and compliance.

The 11th annual CEO survey: Compete & collaborate
PwC's annual survey of cross-industry global CEOs.

The digital company 2013
Two in-depth reports on how technology will affect day-to-day business in the next five years based on a global online survey and personal interviews.

Additional Technology Executive Connections reports:

Going green: Sustainable growth strategies
How technology companies are responding to the growing demand for green products, services and operations.

Exploiting intellectual property in a complex world
A look at the shift in attitude from IP as legal issue/concern to IP as strategic asset that must be managed and maximised.

Successful strategies for talent management
How technology companies are responding to the increasing scarcity of the right talent.

Shaping digital convergence through mergers & acquisitions
What M&A activity is telling us about the market's approach to convergence.

Embracing change in the technology industries
How successful technology companies manage and respond to never-ending change in the market.

To download or order a hard copy any of the above reports please visit *www.pwc.com/techconnect.*

PwC can help

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

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TEC6-1108

Published in the U.S.A. for member firms of PricewaterhouseCoopers.