Customer Decision Drivers for Netsourcing: Are you ready to rent your business applications over a network?

Netsourcing is the practice of renting or “paying as you use” access to centrally-managed business applications, made available to multiple users from a shared data center over the Internet or other networks via browser-enabled devices. Netsourcing allows customers to receive business applications as a service. Rather than purchase software directly from an independent software vendor (ISV), customers may use netsourcing to access ISV applications such as personal productivity tools from Microsoft Office, e-mail/collaboration tools like Microsoft Exchange, Lotus Notes, Netscape Messenger, and sophisticated enterprise resource planning packages from Baan, Great Plains Software, Oracle, PeopleSoft, and SAP. Customers typically pay for the service with an installation fee and a monthly subscription fee based on number of users, number of transactions, or percentage of the value of the transactions.

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The concept of delivering ISV business applications as a service – or “apps on tap” – was initially called application service provision (ASP). But that term has proved too narrow. Customers are also using netsourcing to hand over entire business processes to service providers, such as human resource management or accounting. In this scenario, access to ISV software to support these business processes is just one component of the total packaged service. In addition, customers are also using netsourcing to remotely host and manage customer-grown applications, reducing the expense and need for internal information technology (IT) resources. More broadly, then, netsourcing can be viewed as an alternative delivery channel for business applications and services.

The netsourcing value proposition to customers is compelling: no upfront investment costs in infrastructure or costly software licenses, faster delivery of applications (measured in days and weeks rather than months and years), scalable solutions that grow or contract with the customer’s business, flexible solutions with minimal switching costs, and minimal expensive in-house support staff – to name but a few. Given these benefits, who wouldn’t want to netsource?

On the downside, there are significant netsourcing risks which must be mitigated. The netsourcing of business applications is still seen as an immature option primarily offered by unstable dotcom start-ups. Business managers worry about the reliability and security of the Internet, feel that their business requirements are too idiosyncratic for canned, “one-to-many” solutions, and do not trust outsiders to supply mission-critical systems. Many Global 2000 companies initially rejected netsourcing on these grounds.

Despite these cautions, our research has found that nearly all organizations – large and small in both the public and private sector – will netsource at least some of their business applications over the next five years. Initially, netsourcing has primarily appealed to small and mid-sized enterprises (SMEs). The one-to-many business model offers SMEs low costs, little infrastructure investment, and rapid implementation. SMEs are willing to incur the downsides of the one-to-many model, such as lack of customization, to achieve these benefits. Moving to the Global 2000 – these customers will likely select non-critical, discrete business activities, such as document or image management, for their first netsourcing adoption. By “testing of the waters” in the netsourcing space, Global 2000 players can gain the experience they need to further exploit this option. Global 2000 companies also have the clout to demand more services, customization, and integration from service suppliers than

SMEs. Thus, the netsourcing model will likely morph away from the one-to-many model for these players. For the Global 2000, however, netsourcing will probably always be viewed as merely one of the many sourcing options in their application portfolio.

> **Customers need to consider the total value proposition of netsourcing vis-à-vis other sourcing options**

So where does one begin? We have conducted a year-long study of netsourcing early adopters and netsourcing suppliers. The study included an international survey[1] of 400 European and North American netsourcing customers as well as ten in-depth case studies. The results of this research will be published as "Netsourcing Business Applications: Leveraging the Third Wave of Outsourcing" by Prentice Hall, New York, in 2002. Montgomery Research Europe provides an opportunity for European executives to have early access to some of our findings. In this report, we identify the five key drivers that executives can use to evaluate netsourcing: business, technology, economic, market, and relational drivers. Taken together, these drivers serve many purposes:

- First, the drivers describe the business logic of the netsourcing business model for customers.
- Second, the drivers highlight customers primary decision and selection criteria when considering a netsourcing solution.
- Third, the drivers outline the key areas of customer expectations.
- Fourth, for service providers, the drivers define the basis upon which they need to differentiate their service solutions from direct and indirect competitors.
- Fifth, the drivers outline the basis against which a netsourcing provider's performance can be assessed, not least by the provider itself.

Using the drivers as a guide, we provide a checklist of evaluative pointers to guide netsourcing decisions concerning both internal and external providers. We also provide guidelines for providers themselves on how they need to respond to the customer requirements identified.

Business Drivers

For the customer, business drivers define the potential strategic, organizational and operational advantages and disadvantages from selecting netsourcing as an IT/e-business sourcing option. For the provider, the business drivers focus on making a service offering available that addresses true business needs in a way that gives the provider a competitive advantage.

Customers need to consider the total value proposition of netsourcing vis-à-vis other sourcing options. The notion of economies of scale a netsourcing provider can achieve informs the business logic for netsourcing. Implied here is that providers can achieve an increased efficiency in operations and offer access to a larger skill and knowledge base. However, unlike IT outsourcing, where a customer transfers not only people and assets, but also its management to a service provider, the netsourcing model is in essence about renting a business solution. Therefore, the netsourcing solution frees up useful resources and improves organizational flexibility. Adopting a netsourcing solution, in turn, gives client organizations the advantage of focusing on core operations and what they do best, while leaving the application management and maintenance concerns to a provider.

Innovation and access to applications that are normally prohibitively expensive, especially for smaller organizations, are noted as additional business reasons for seeking a netsourcing provider. Netsourcing providers supposedly represent the leading edge of application management, since they focus primarily on solving customers' business demands through the applications and services provided. Therefore, they will have a better understanding of applications than most customers since it defines their core business. As such, innovations in terms of operations and technological improvements can be touted. What the customer is looking for ranges from delivery of a commodity activity through to the provision of a total business solution. The customer, in turn, needs to take care that critical differentiator assets and activities of his or her own business are not outsourced. A buy-in policy can be adopted, though, where key capabilities are lacking and hence need to be built. Commodities, however, are clear targets for netsourcing.

In this search, the netsourcing provider needs to be assessed on cost. Here the focus should be on whether a provider can achieve the requirement at a superior or at least competitive price compared to in-house and other external providers. If this is the case, the customer needs to look for a detailed explanation, in particular in terms of exploring the process for achieving the economies of scale, the existence of any superior IT management practices, and the benefits from learning curve effects in the provider's practices and offerings. The customer also needs to diagnose whether the netsourcing provider does offer superior capability in terms of any or all of: expertise, service, speed and complementary resources.

The customer also needs to assess the probability and impact of drawbacks in the case of each specific service provider. One major actual drawback with netsourcing centers on the potential loss of customer control and resulting dependency on the supplier. Forty-four percent of existing customers experienced this outcome. Once a firm signs up with a netsourcing provider, there will be a lock-in for the length of the contract. However, lock-in is not merely to the terms of the contract. It implies, for example, a commitment of intention and resources, and an acceptance of the opportunity costs of not doing other things, and not servicing IT in other ways. Most companies will not opt to terminate a contract early, due to the costs and the disruption it is likely to cause to operations – remembering applications will touch most, if not all organizational processes. Thereafter, hidden costs and lack of delivery on original expectations are the key risk issues to check against, and for which to develop mitigation practices. Interestingly, we found that potential customers fear lock-in and loss of control much more than is warranted in the light of actual customers' experiences.

Our international survey revealed some fundamental insights into customer experiences on business drivers. The eight top business benefits being experienced strongly (scoring between 3-4 out of 5) are listed below.

The figures show the percentage of existing customers recording the benefit:

- Enable focus on core activities (95%)
- Significant cost savings (70%)
- Increased roll-out speed for applications (66%)
- Enhanced business flexibility due to scalability of applications (74%)
- Competitive advantage from access to skills, applications, services not otherwise available (74%)
- Make IT costs more predictable (77%)
- Enhance business innovation (55%)
- Improve IT and service quality (44%).

Clearly, most existing customers are getting some real business benefits from their netsourcing providers. What is particularly interesting is that these benefits exceed the type of benefits emerging from surveys carried out in the more general IT outsourcing markets in Europe, USA and Australia. This undoubtedly reflects that the netsourcing market tends to service smaller, less IT-capable enterprises. It certainly argues that netsourcing providers are doing a much better job than their media profile suggests. Interestingly, would-be customers also expect to get these benefits, but have lower expectations about the size of the benefits on offer – again suggesting that netsourcing providers need to think a lot more about improving their customer education programs.

Business Drivers: Questions

The business drivers detail the core business reasons for seeking a netsourcing solution. For a customer it is a matter of evaluating and weighing these advantages and the possible value added to its business, against potential drawbacks of netsourcing. For the netsourcing provider it entails combining capabilities and resources in such a way that both the netsourcing provider and its customers will compare advantageously these services against competitors' offerings.

Technology Drivers

The technical drivers describe the technical characteristics of a netsourcing solution. For customers, a netsourcing provider's performance on these features determines its technical capabilities, and whether it can truly deliver services and business benefits. The challenge for a netsourcing provider is to deliver high technology standards necessary to gain superior marks from the customer on relative perceived quality and relative customer satisfaction.

A wide range of technical issues taxes customers. Typically, customers look toward netsourcing providers to offer an underlying IT infrastructure and a broad range of applications, beyond what is available to the customer without netsourcing. Customers look to netsourcing providers for a reliable, readily available and secure service that can either replace, amend, or expand their current application service portfolio. Reliability implies that a service remains constant and consistent, and compares favourably against other technical options. Similar assumptions apply to the security and confidentiality of application services, especially in respect of data that netsourcing providers might be storing for customers on their server farms. Responsiveness is another important criterion by which technical services need to be judged, along with quality of technical skills and capabilities. Availability of applications and services matters most at crucial times to the business, eg peak periods. The netsourcing provider needs to recognise that 99.9% availability means little to a customer if the 0.1% unavailability causes serious business disruption.

Scalability of services often plays a crucial role for fast growing businesses, but also for firms where service volume increase is likely to occur; for example, during end-of-year accounting periods. Customers seek the possibility to easily increase the number of terminals and processing volumes. In part, a netsourcing provider's flexibility in responding to these scalability requirements of solutions facilitates a greater operational flexibility for a customer.

Another important issue for clients is application customization. Here the focus needs to be on the degree of customization available, which determines to what extent standard applications can be altered, 'modularized' or 'componentized' to meet a client's unique business needs. This will influence the extent to which company-specific information can and cannot be handled and processed.

Customers are also likely to look towards a netsourcing provider for leading-edge technologies that could improve their company's technical performance, make innovations available, provide more solution possibilities and offer new options to customers. These state-of-the-art technologies can enhance a customer's internal business processes, operations and innovativeness.

Customers are very concerned that netsourcing providers are able to supply web-oriented applications; that they are able to supply integration of netsourcing offerings, and of these offerings with the customer's own systems; that the applications provided are continuously up-to-date; and that the netsourcing provider supplies sufficient help-desk and technical support.

Finally, it is clear that different customers attribute different levels of importance to individual technical features, often dependent on what customers are looking for in terms of technical solutions. Thus a netsourcing provider's portfolio of solutions will be of great interest.

How important are these issues to customers? The following nine issues were rated as very important by the percentage of potential customers indicated:

1. Availability (85%)
2. Quality of services (85%)
3. Security (83%)
4. Reliability (80%)
5. Responsiveness (79%)
6. Skills and technical capabilities (75%)
7. SLA and contract management (75%)
8. Scalability of service (66%)
9. Application customization (58%).

Noticeably, potential customers are focused on service issues, with underlying IT infrastructure, IT ownership and strategic IT advisory services being ascribed much less importance, and of much less interest to them.

On actual netsourcing performance levels, we found some causes for concern that netsourcing providers need to address, especially given the high expectations revealed by potential customers. There are dangers of an expectation-outcome mismatch developing on technical and service issues, as we found existed already in the more general experiences of IT outsourcing. On average, out of a maximum score of, 1 = poor, 5 = excellent, netsourcing providers are scoring as follows:

- Availability – 3.4
- Quality of services - 3.66
- Security – 3.69
- Reliability – 3.5
- Responsiveness – 3.43
- Skills and technical capabilities – 3.54

- SLA and contract management – 3.6
- Scalability of service – 3.51
- Application customization – 3.51.

These averages hide the fact that 25% of suppliers are performing excellently on security; 20% on responsiveness; 17% on skills and capabilities; 17% on quality; and 17% on new technologies and innovations.

In contrast, the top five technical problems, experienced by the percentage of customers indicated, were:

1. Slow application response time (41%)
2. Application unavailable (25%)
3. Inability to integrate netsourcing with existing applications (16%)
4. Unanticipated technical costs (16%)
5. Lack of qualified netsourcing provider staff (16%).

If these results look quite good, then the more general picture is less flattering. Most netsourcing technical and service performance falls between 2 and 4 out of 5. There are no real obvious disasters (though 13% of customers rate their netsourcing service as 'poor'), but all too few excellent performances. What remains is plenty of room for improvement, not least to match the high expectations of potential customers.

Technology Drivers: Questions

The technology drivers define the key technical features of a netsourcing solution. Different customers will attribute different levels of importance to technical capabilities, and will naturally tend to apply their own criteria as a means to weight netsourcing providers' solutions to address their particular requirements. For some customers the technology drivers will define, in turn, the primary netsourcing selection and evaluation criteria. In contrast for netsourcing providers, these drivers outline the critical range in which their technical, managerial and service capabilities and offerings need to fall.

Economic Drivers

For the customer, netsourcing promises considerable economic benefits. Essential to the netsourcing business model are the favorable pricing models, cost benefits and savings it is likely to provide for customers. The comparison is commonly performed on total cost of ownership as compared against sourcing applications directly from a netsourcing provider. Indeed netsourcing providers often reinforce this by arguing that customers should perform a 'total cost of ownership' comparison against sourcing applications directly from a netsourcing provider.

Customers looking at the netsourcing model will most likely see it as a means to, at a minimum, stabilize costs, improve cost control by changing the variable costs to fixed, and achieve additional cost savings. Additionally, netsourcing offers the opportunity of spreading payments and financial risk. Customers are commonly confronted by relatively high up-front investment costs in the applications and underlying server technology, which the netsourcing model can alleviate. The additional cost benefits come from the netsourcing providers' economies of scale for implementing applications across the business, which can be much lower depending on the degree of customization that is required. Netsourcing providers may also claim superior management practices and experience curve effects allowing them to achieve significant cost savings for the customer.

Cost control can be further improved by the payment arrangements underpinning the netsourcing model. It offers the customer sufficient flexibility to make it work with their internal accounting procedures. At the end of the day, this could imply payment arrangements that would see usage costs for applications calculated on a transaction basis, per-user-per-desk, or a weekly and/or monthly total basis. In any case, the determination of the costs will be fixed and clear to the customer, giving greater customer control over expenditures.

The actual experiences of customers on the economics of using a netsourcing provider paints a clear picture. It can be seen above that 77% are finding that netsourcing is making costs more predictable, and that 70% are receiving significant cost savings on the total cost of ownership. More than 70% of customers are paying netsourcing fees of up to only $10,000 a month. This reflects the relatively small size of netsourcing deals to date, and the fact that those who responded to our survey were procuring mainly standard commodity-type applications. At the same time, some 16% of customers were paying fees in excess of $50,000 a month. On set-up fees, some 45% of customers were paying less than $5,000, and all were paying less than potential customers themselves were anticipating. In practice some 85% of existing customers were achieving yearly savings of $3-180,000. Generally, potential customers are overly pessimistic about cost savings. Finally, the top six pricing models in use, in order of frequency, are:

1. Based on number of users (31% of customers)
2. Flat rental fee (25%)
3. Based on data volumes (22%)
4. Based on number of applications (19%)
5. Based on number of desktops (16%)
6. Based on degree of customization (12%).

In contrast, the most popular pricing models amongst potential customers were:

1. Based on number of users (52%)
2. Based on number of applications (34%)
3. Flat rental fees (33%)
4. Based on degree of customization (28%).

Some of the respondents cited a preference for more than one pricing model. In practice, potential customers were less certain and less knowledgeable about the most appropriate pricing model, and so tended to cite more pricing models. Again here netsourcing providers have to clarify to their clients the appropriateness and disadvantages of different pricing models.

Economic Drivers: Questions

Since economic drivers are both a core part of a customer's decision to select netsourcing and essential to making the service provision to customers profitable for netsourcing providers, they require very careful attention. The questions thus need to concentrate on issues such as economies of scale, cost savings, profitability, and pricing arrangements to discover both the supply and demand side advantages.

The IT Services Market

The IT services market drivers explore the market context. For netsourcing customers the market conditions influence the perceived value of the netsourcing solution versus the alternatives. For netsourcing providers the IT services market describes the backdrop against which they need to stand out and assert their offering as being differentiated and leading-edge. The netsourcing providers who look to compete primarily on price alone will be playing a losing game. Efforts instead should be focused on differentiating their product/service offerings, and seeking opportunities and managing threats.

The scarcity of IT resources and capabilities has put a serious constraint on companies' in-house deployment of IT skills across the developed economies. In the majority of cases, but especially in small and medium sized enterprises, this drives companies with IT capabilities shortages to source vital skills from external suppliers. The wide acceptance of the Internet, the usage-based pricing models, lower Total Cost of Ownership (TCO) and a lower initial capital outlay makes netsourcing a particularly interesting option for many companies. For small and medium sizes enterprises (SMEs), companies pursuing maximum growth strategies, and Internet-based start-ups, the netsourcing model makes accessible applications they could normally not afford. For instance, the netsourcing model makes formerly prohibitively expensive ERP applications now affordable for many SMEs. For larger companies, the netsourcing model may reduce the efforts involved in maintaining and managing applications, but also makes essential applications accessible at competitive and attractive prices

Before evaluating specific netsourcing providers, customers first have to identify the capabilities they expect from their netsourcing provider. Only then can a customer evaluate specific netsourcing providers service offerings. Brands, reputation, track records, size and the netsourcing provider's main suppliers are all things to be taken into account. Also, the immaturity of the netsourcing market and the novelty of the netsourcing solution bring about uncertainty that makes the adoption of the netsourcing model risky. For example, uncertainty about the netsourcing model's longevity, business and financial stability are key features to be considered when comparing different netsourcing providers.

In practice the gravest concerns amongst existing customers are, in order of importance:

1. Netsourcing provider longevity and existence
2. Reliability
3. Service and business stability
4. Security
5. Integrating netsourcing and host applications.

These tend to be rated as medium-risk issues (2/3 out of 5) by existing customers, while potential customers tended to be much more worried by these and a whole range of other issues.

Over 60% of both potential and existing customers now expect, and look to the netsourcing market to be offering, not just applications, but hosting, help-desk and integration skills sets and services. Between 20-60% of potential and existing customers expect to be able to buy from the netsourcing market the following:

- Technology maintenance and service
- Security verification services
- Co-location services
- Application customization
- IT consulting
- Internet service access provision
- IT outsourcing services
- Data warehousing
- Legacy systems outsourcing and management
- WAP based services.

To control the relation with its supplier, the customer needs to continually monitor and evaluate the netsourcing provider's performance

Clearly, there is a widening requirement for the types of service that customers are prepared to contract for from the netsourcing market, raising important questions on whether netsourcing providers can rise to match the full range of these demands.

However, there is some disparity between existing and potential customer requirements. Thus, there is some discrepancy where potential customers rate netsourcing skills in the customization of applications as much more essential than do existing customers. Conversely, existing customers regularly rate legacy systems outsourcing and management, hosting services, WAP-based services, and strategic management consulting as more important than do potential customers.

IT Services Market: Questions

The demand-side considerations concerning the IT services market drivers are to link internal needs to the right netsourcing suppliers. This involves listing internal needs, evaluating different netsourcing providers and selecting a suitable netsourcing provider. The supply side questions concerning the IT services market are about positioning, given expected market developments, and how to generate trust in the netsourcing solutions generally, and in an individual netsourcing offering.

Relational Drivers

The relational drivers refer, firstly, to the relationship between a netsourcing supplier and its customer and secondly, to the relationships between a netsourcing provider and its business partners. The latter can be either a straightforward buyer-supplier relationship or a preferred/strategic partner relationship.

The drivers regarding the relation between the netsourcing supplier and the netsourcing customer can be classified in terms of stakeholder, ie client, and provider interests. On the demand side, client considerations aim at controlling the relationship and ensuring that services are performed according to the SLAs. On the other hand, netsourcing supply-side considerations focus on achieving service performance, customer business goals and satisfaction, and satisfactory profit and revenue.

To control the relation with its supplier, the customer needs to continually monitor and evaluate the netsourcing provider's performance. The technical performance can be monitored relatively easily using periodic performance reviews of service levels, which most netsourcing providers will make readily available to their clients. Penalties for not meeting Service Level Agreement (SLA) standards can be an effective enforcement instrument when used properly. Based on our findings, the best SLAs will focus on user training programs provided by the netsourcing provider, adequate exit and continuity of service clauses, contingency, security and future flexibility guarantees, and the degree of knowledge sharing and cooperation that surrounds SLA performance.

A client should also monitor and evaluate whether the provider's delivered services actually meet their needs. For this, clients will definitely have to develop in-house evaluation procedures. If the netsourcing provider's service does not meet the client's business needs, it could very well indicate that the contract needs to be renegotiated, or that the client needs to re-source its applications from a different netsourcing provider.

Control over the relationship with the netsourcing provider will vary according to the strategic importance of the sourced applications for the customer's business. For instance, the e-commerce platforms that some dotcoms have sourced from netsourcing providers are at the heart of their business and enable their core operations. Obviously, the sourced applications and the resulting relationship with a netsourcing provider will be of considerable strategic importance to the dotcom. On the other hand, if the applications sourced can be classified as commodities, the customer-supplier relationship may be of lesser strategic importance.

Given the sourcing of mission-critical applications, relations are likely to be more long-term in nature. Therefore, the netsourcing supplier selection process will be vital. Not only operational, technical and economic selection criteria but also the longer-term strategic intent of the netsourcing provider will have to be taken into account. In all cases, however, the customer needed to retain core IT capabilities in the areas of contract facilitation, contract monitoring, informed buying and vendor development. One important aspect frequently neglected by customers is a failure to provide adequate point-of-contact and relationship-building processes until mounting problems force the issue.

Trust and confidence remains crucial to relationship building. Both potential and existing customers cite five top sources about how trust and confidence are generated:

1. Industry recognition of the netsourcing provider, eg, Vistorm has won a number of European level awards
2. Alliances and partnerships with recognized, often large, telecom providers, hardware manufacturers, and software vendors.
3. Verification services, eg, Verisign, TRUSTe.
4. Security audits by well-known audit firms.
5. Branding and marketing by the netsourcing provider.

In contrast, the top nine items customers indicated they included in their contracts for good client-netsourcing provider relations were:

1. Application availability metrics and guarantees
2. Security of data guarantees
3. Confidentiality of customer data clauses
4. Guaranteed levels of customer service
5. Guaranteed level of application response time
6. Penalty clauses for non-performance
7. *Force majeur* clauses
8. Warranty clauses
9. Liability and indemnity clauses.

Customers felt strongly that these clauses gave guarantees and a level of trust and expectation from which the relationship could further develop. Put another way, good detailed contracts were the foundations of good relationships.

Relational Drivers: Questions

The demand-side considerations of the relational drivers are about controlling the customer-supplier relationship, while the supply-side considerations are, firstly, about managing customer satisfaction, and secondly, about using inter-firm relationships for competitive advantage.

Summary: A Decision and Selection Checklist

The issues discussed in this report are captured in Table 1. This decision checklist illustrates both the provider's (supply-side) and the customer's (demand-side) considerations for entering into a netsourcing deal. To date most understanding of the netsourcing business model is based on supplier practice and offerings. In turn, our understanding of customers' selection and decision criteria and resulting expectations are at an early stage.

The checklist framework is structured along four main issues. These are:

a. The drivers underpinning the reason to opt for a netsourcing service/solution;
b. The supply side (ie netsourcing provider company) considerations;
c. The demand side (ie client/customer company) considerations; and
d. The central questions that both of these raise for deciding, evaluating and selecting your netsourcing providers. These will assist customers to develop and formulate their expectations.

Following this structure, we developed an overview table that integrates all the previously discussed aspects that customers may want to reflect on when developing their netsourcing strategy, when evaluating the netsourcing business model and/or selecting a netsourcing provider. More importantly, these together illustrate our view on the core issues undergirding the drivers of the netsourcing solution.

Reference

1 The entire survey report entitled ASP Marketspace Report: Mastering Customers Expectations, including detailed data charts, can be ordered for US$175 from: The Department Assistant, Department of Information and Decision Sciences, F1-18, Rotterdam School of Management, Erasmus University Rotterdam, Postbus 1738, 3000 DR Rotterdam, The Netherlands, Tel: +31 (0)10 408 2032, Fax: +31 (0)10 408 9010, E-mail: cschoof@fbk.eur.nl.

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Table 1. Customer Driver Checklist for Netsourcing.

Drivers	Supply side considerations	Central question(s)	Demand side considerations
Business	Customer value proposition Delivery speed Competition/cooperation Customer-centricity Switching policies	To what degree do the potential business advantages and ddrawbacks really characterise the netsourcing model? How do netsourcing customers perceive these potential advantages and drawbacks? How do netsourcing providers manage and cater for these potential advantages and drawbacks?	Advantages Core focus Effectiveness Efficiency Speed/time to market Innovativeness Differentiation Access to skills/knowledge Drawbacks Loss of control Dependence Lock in
Technology	Skills/technical capabilities IT infrastructure Suppliers • Reliability/track record • Industry leaders Range of services/products Responsiveness Quality of products & services Customisation techniques Customer support Systems integration capability Web-oriented, up-to-date applications	What are the main technical problems that customers who use the netsourcing solution encounter? What criteria do netsourcing customers use to measure their provider's technical performance? What is their relative importance? How can providers manage their performance on these criteria?	Scalability Customisation options Availability Reliability Security Innovativeness Quality products/services/people Infrastructure 'Best of breed' applications Technical help desk/support Integration skills/processes
Economic	Pricing models made available One-to-many relations Economies of scale Experience curve	What are the likely costs for customers? What pricing models/arrangements do customers expect and prefer? How do providers achieve and maintain their economies of scale? What is the average timeframe for achieving return on investments? What pricing models can providers offer?	Total cost of ownership Implementation costs Pricing models • Flat rental fees (subscription) • Fee based on: no. of users no. of desktops no. of applications volume of data degree of customisation complexity size of the firm
IT-services market	Segmentation and positioning Financial structure and sustainability Security audits Branding and marketing Industry recognition Use of Trusted Third Parties Alliances and partnerships Industry standards Regulations • Privacy • Security	What are the main concerns among (potential) customers looking at the netsourcing market and the netsourcing concept? What could be done to generate trust in the netsourcing concept? What do (potential) customers expect from their provider? What selection criteria do they use selecting a netsourcing provider? How does the provider achieve long-term financial viability?	Market perception: Maturity Trust Concerns: Longevity Reliability Security Scalability Customization Lock in Expectations: Products and services Skills Selection criteria: Brands and track records Price Quality Range of products and services References and recommendations
Relational	Service level agreements • Guarantees • Penalties • Clauses Performance reviews Customer satisfaction reviews Degree of cooperation/integration/ knowledge-sharing Relationship staffing and processes Help with Implementation/set up	How can and do netsourcing customers control their relationship with their provider supplier to ensure they get what they pay for? How can providers manage their customers' satisfaction? How can and do providers use inter-firm ties as a source for competitive advantage?	Service level agreements: • Guarantees • Penalties • Clauses • Security • Contingency planning • Future flexibility Performance reviews/detailed monitoring Degree of partnering/knowledge sharing Core partnering capabilities in-house User training programs Exit strategy/clauses/continuity guarantees

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Professor Leslie P Willcocks Ma (Cantab) MA, PDLS, PHD has an international reputation for his work on e-business, information management, IT evaluation and information systems outsourcing. He is Andersen Professor of Information Management and E-business at Warwick Business School, UK. He is also Associate Fellow at Templeton College, Oxford, Visiting Professor in Information Systems at Erasmus University, Rotterdam, Professorial Associate at the University of Melbourne, and Distinguished Visitor at the Australian Graduate School of Management. He holds a doctorate in information systems from the University of Cambridge, and has been for the last twelve years Editor-in-Chief of the Journal of Information Technology.

He worked for twelve years in accounting and management consultancy, for Touche Ross and several smaller firms, before heading a Research Centre at City University Business School, London. He moved to Oxford University in 1992 where he was for nine years Fellow and University Reader at Templeton College. He is co-author of 19 books, including Global IT Outsourcing: In Search of Business Advantage (Wiley, 2001), Moving to E-Business (Random House, 2000), Building the E-Business Infrastructure (Business Intelligence, 2001), Managing IT as a Strategic Resource (McGraw Hill, 1997), Strategic Sourcing of Information Systems (Wiley, 1998) and A Business Guide to IT Outsourcing (Business Intelligence, 1994). He has published over 130 papers in journals such as Harvard Business Review, Sloan Management Review, MIS Quarterly, Journal of Management Studies, Communications Of The ACM, and Journal of Strategic Information Systems.

In February 2001 he won the PriceWaterhouseCoopers/Michael Corbett Associates World Outsourcing Achievement Award for his contribution to this field. He is also a Board Director of Los Angeles-based hi-tech services provider MainPass Technologies. He is a regular keynote speaker at international practitioner and academic conferences, has extensive consulting experience, and is regularly retained as adviser by major corporations and government institutions. Recent clients have included Transco, Thames Water, IBM, Standard Chartered Bank, Lend Lease Corporation, ANZ Bank, NatWest Bank, Royal Sun Alliance, Commonwealth Bank, Hewlett Packard, Australian Wheat Board, Norwich Union, Ericsson, WH Smith, Eli Lilley, RailTrack, and several government institutions in the UK and Australia. In 1998 he served as expert witness on information management issues to the US Congressional Committee on Restructuring the Internal Revenue Service, and provided evidence to the UK Government's report on public sector IT projects published in March 2000. In May 2001 he was expert witness to the Senate Inquiry into the Australian government's IT outsourcing initiative. His forthcoming books include Delivering the Business Value from IT (Heinemann, 2001) and The Relationship Advantage: Information Technologies, Sourcing and Management (Oxford University Press, 2001).