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Opportunities in Business
Process Outsourcing, U.S.

U.S. Outsourcing Program

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Opportunities in Business Process Outsourcing, U.S.

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Abstract

The concept of the virtual corporation has been established in the U.S. for a considerable time. Indeed, organizations are increasingly encouraged to outsource functions and processes that cannot be performed to a world-class standard in-house.

However, organizations have tended to be slow to implement business process outsourcing. Such concepts only tend to become widely implemented once a number of early adopters have achieved demonstrable success.

This stage has now been reached in the U.S. business process outsourcing market and a number of major opportunities are beginning to emerge.

The purpose of this report is to assist vendors in identifying and quantifying the emerging opportunities for business process outsourcing in the U.S. In particular, this report provides:

- Planned usage of business operations outsourcing by industry sector and business function
- An analysis of users' likelihood to outsource business processes across a number of industry sectors
- Analysis of current business process outsourcing activity including examples of current contracts

This report contains 74 pages and 62 exhibits.

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U.S. Outsourcing Program

Opportunities in Business Process Outsourcing, U.S.

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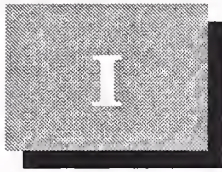
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Introduction

A

Scope and Objectives

Organizations in the U.S. are increasingly willing to outsource IT functions, either partially or completely. This outsourcing trend is driven by a need for change in terms of the types of IT service, the nature of applications delivered to the business, and in the skills required to implement these changes, accentuated by considerable cost pressure on IT departments.

However, IT functions are not the only areas of business that are subject to outsourcing pressures. In theory, organizations should consider outsourcing any business process that cannot be performed to a world-class standard in-house.

In practice, some organizations are prepared to outsource a wide range of business functions, while others prefer to retain operational capability in-house. However, overall, a growing number of organizations—including a number that have already outsourced IT functions—are now considering outsourcing business functions.

The objectives of this report are to identify:

- The market potential for business process outsourcing
- The current and emerging opportunities in business process outsourcing
- The opportunities emerging from individual industry sectors
- Senior managers' attitudes toward business process outsourcing and the concept of the virtual corporation
- Organizations' outsourcing intentions and the level within the organization at which business process outsourcing will take place

Outsourcing is defined by INPUT as follows:

Outsourcing is a long-term relationship (greater than one year) between a client and vendor in which the client delegates all, or a major portion, of an operation or function to the vendor. The operation or function may be solely information systems outsourcing-based, or may include information systems outsourcing as a prominent component of the operation (at least 30% of the budget).

The critical components defining an outsourcing service are:

- Delegating an identifiable area of the operation to a vendor
- Single-vendor responsibility for performing the delegated function
- Intended, long-term relationship between the client and the vendor, where:
 - The contract term is for at least one year
 - The client's intent is not to perform the function with internal resources
- The contract may include non-information systems outsourcing activities, but information systems outsourcing must be an integral part of the contract.

Business process outsourcing (also referred to as business operations outsourcing or functional outsourcing) is a relationship in which one vendor is responsible for performing an entire business/operations function, including the information systems outsourcing that supports it. The information systems outsourcing content of such a contract must be at least 30% of the total annual expenditure in order for INPUT to include it in this category. Examples of business processes that are outsourced include telephone company billing and employee benefits processing.

B

Methodology

The data in this study was derived from 41 telephone interviews with IT and functional managers across the following industries:

- Discrete manufacturing
- Finance
- Insurance
- Process manufacturing
- Retail
- Services
- Utilities

The data was supplemented with data from 101 telephone interviews conduct in Europe with board-level personnel and outsourcing vendors.

The breakdown of user telephone interviews by company size is shown in Exhibit I-4.

Exhibit I-1

Interview Profile by Size of Company

Revenues	Percent of Respondents
< US\$1B	49%
≥US\$1B	51%

Source: INPUT

All interviews were carried out with organizations with annual revenues in excess of \$4 million.

The breakdown of user telephone interviews by industry sector is shown in Exhibit I-5.

Exhibit I-2

Interview Profile by Industry Sector

Industry Sector	Percent of Respondents
Finance/Insurance	14
Discrete Manufacturing	17
Process Manufacturing	30
Retail	14
Services, Other	15
Utilities	10
Total (All Industries)	100%

Source: INPUT

C

Report Structure

Chapter II is the Executive Overview, which is a summary of the key findings of the report. Included is a 1996-2001 forecast of the business process outsourcing market.

Chapter III analyzes managers' attitudes toward business process outsourcing. In particular, it identifies:

- The level of acceptance of the concept of the virtual corporation and business process outsourcing
- The key drivers of business process outsourcing
- Perceived and planned use of business process outsourcing by business function

Chapter IV analyzes business process outsourcing opportunities by industry sector, including, for each sector, identification of:

- Key driving forces

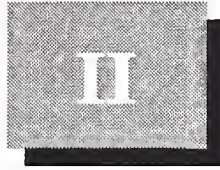
- The perceived level of cost and investment pressure on a range of business functions
- The relative importance of a range of business functions in delivering competitive advantage within the sector
- The likelihood of organizations in the sector outsourcing each of a range of business functions

D

Related Reports

- *Opportunities in Applications Management Outsourcing, 1997*
- *Opportunities for Outsourcing Supply Chain Management, 1996*
- *Opportunities in Business Operations Outsourcing—Europe, 1996*
- *Impact of the Internet on Outsourcing and Processing Services*
- *Using the Internet for Business Operations*
- *Pricing and Marketing of Outsourcing Services*
- *Negotiating Outsourcing Contract Terms and Conditions*
- *Outsourcing Services Competitive Analysis*
- *Internet Sales and Marketing Directions*
- *U.S. Applications Solutions Market, 1995-2000*
- *Impact of Business Reengineering on Outsourcing—Europe, 1994*

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Executive Overview

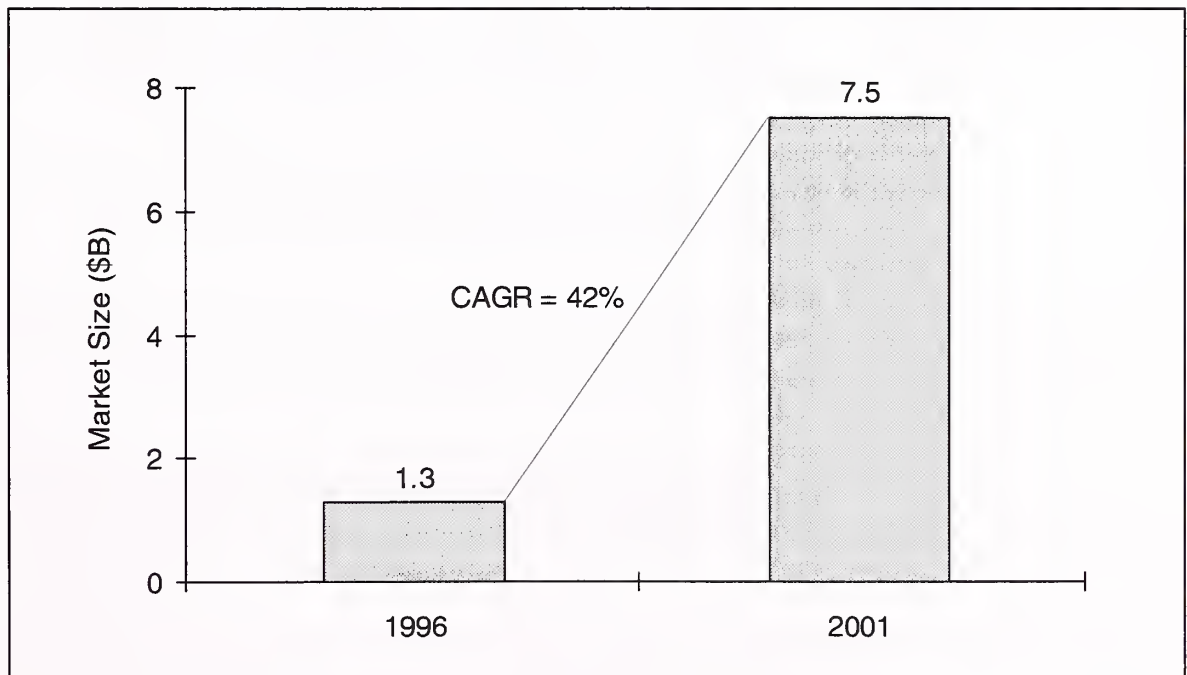
A

U.S. Business Process Outsourcing Market 1996-2001

Business process outsourcing, also called business operations outsourcing, is the fastest growing segment of the outsourcing market. The U.S. market will increase from \$1.3 billion in 1996 to \$7.5 billion in 2001, as shown in Exhibit II-1.

Exhibit II-1

U.S. Business Process Outsourcing Market Forecast, 1996 - 2001



Source: INPUT

The two principal drivers of this outstanding growth are:

- It is often not cost effective for in-house staff to manage certain business processes.
- The investment requirement to implement and manage these processes is high.

Opportunities in business process outsourcing are based on a number of business functions, including:

- Customer services, comprising customer service desks and customer order fulfillment services
- Accounting services, including billing and day-to-day accounts preparation
- Human resources administration, principally payroll and pensions administration
- Supply chain management, comprising purchasing and logistics
- Procurement services

Overall, the research conducted for this report reveals that:

- Almost two-thirds of organizations expect to extend their use of business operations outsourcing within three years.
- In the short term, organizations will focus on outsourcing payroll, accounting, and human resources administration.
- Vendors can succeed in business operations outsourcing either by emphasizing reengineering capability or by building administrative capability around existing processing services.

Typically, vendors targeting large organizations will offer them highly customized outsourcing, while offering mid-sized companies a highly packaged service.

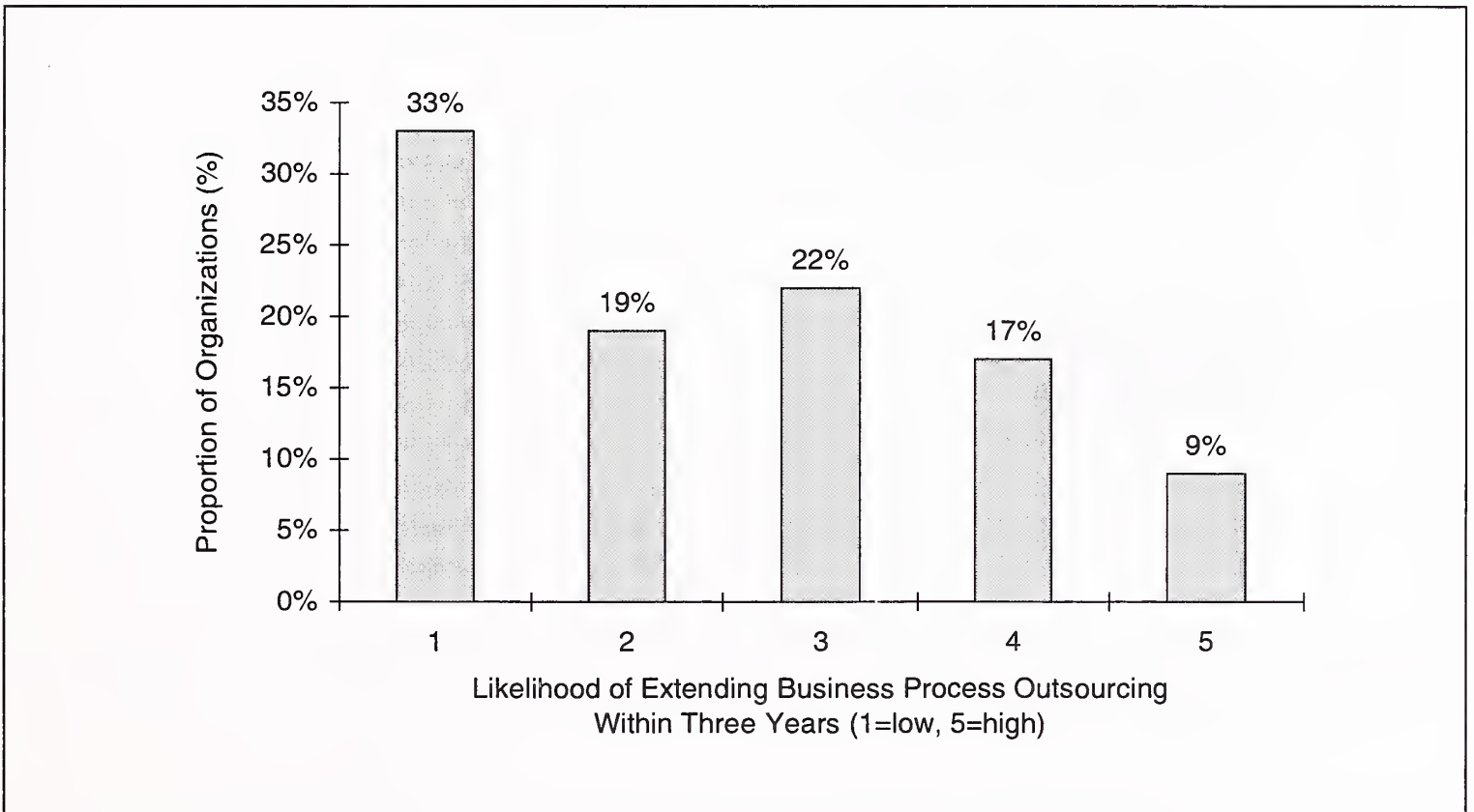
B

Major Organizations' Expectations Regarding Use of Business Process Outsourcing

Exhibit II-2 is a profile of responses to the question: "To what extent is your organization likely to extend its use of business process outsourcing over the next three years?"

Exhibit II-2

Likelihood of Organizations Extending Business Process Outsourcing



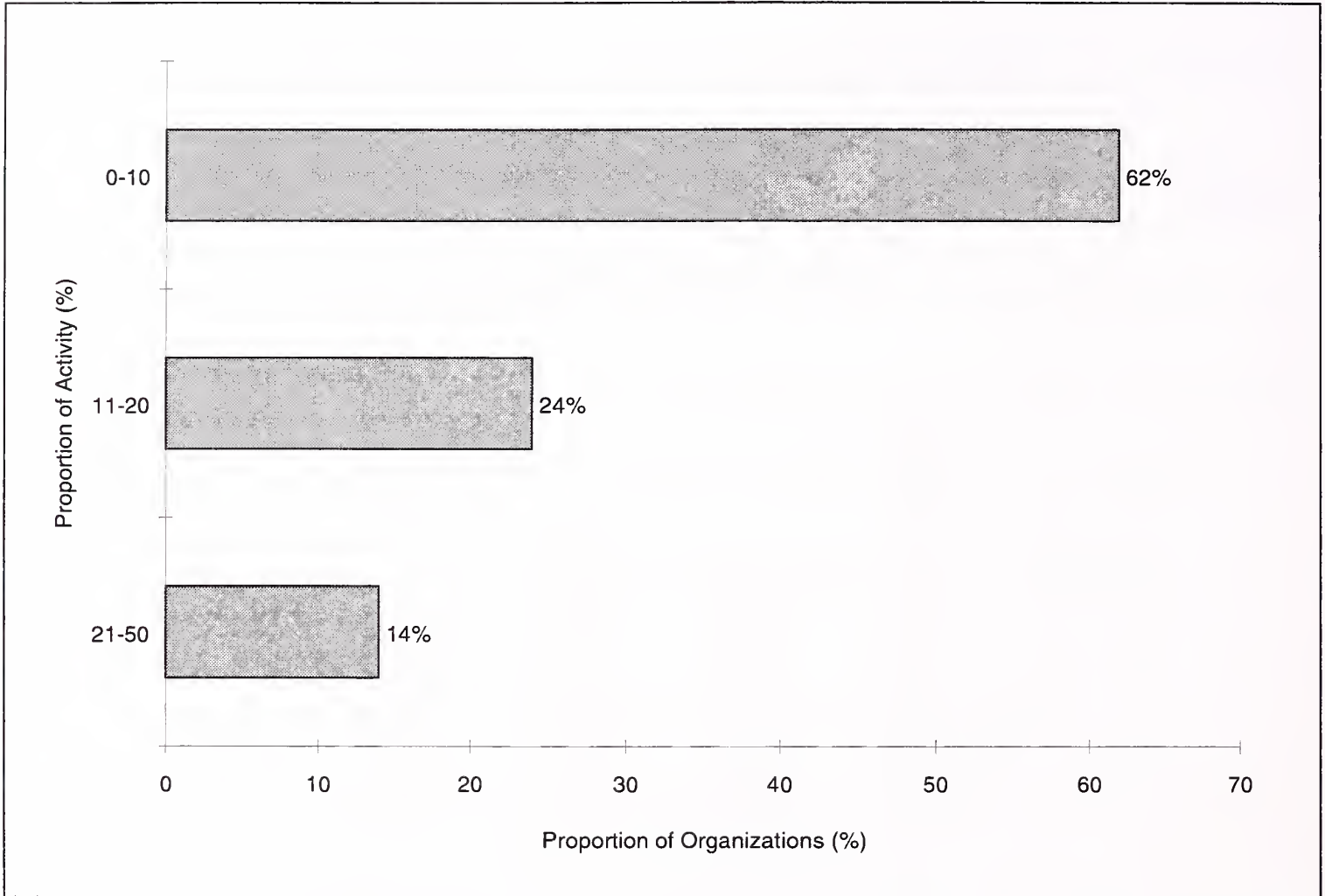
Source: INPUT

Though there is still resistance to the concept of business process outsourcing, more than one-fourth of managers surveyed strongly intend to adopt this approach within three years.

Exhibit II-3 lists the proportion of current in-house business activity that organizations expect to outsource by the year 2001.

Exhibit II-3

Proportion of Current In-house Activity to be Outsourced by Year 2001



Source: INPUT

Approximately 14% of organizations exhibit a strong commitment to outsourcing a major portion of current in-house business processes.

C

Organizations Will Outsource Payroll Administration and Accounting First

Organizations' likelihood to outsource business functions varies considerably among functions. The relative propensity of organizations to outsource each of the functions identified earlier is indicated in Exhibit II-4.

Exhibit II-4

Relative Propensity to Outsource by Business Function

Relative Propensity	Business Function
High	IT Services Payroll Administration Accounting Services
Medium	Human Resources Administration Procurement Customer Fulfillment Billing/revenue Collection
Low	Customer Service Desks Supply Chain Management

Source: INPUT

This survey investigated a number of factors likely to influence organizations' willingness to outsource business functions. Major characteristics of business processes likely to be outsourced include high labor intensity and high technology content.

The role of competitive differentiation in the outsourcing decision is complex. At one extreme, organizations show a high propensity to outsource functions such as payroll and accounting services that add little to their competitive differentiation.

However, organizations also display a high propensity to outsource IT services, the function perceived by managers overall to have the highest ability to create competitive differentiation.

The explanation for this apparent contradiction may lie in the fact that IT services also received the highest rating of any business function for cost pressure and future investment requirement. It appears that these factors typically tend to outweigh any need to deliver competitive differentiation.

Organizations also indicate a propensity to outsource human resources and procurement.

After IT services, the functions perceived to be under greatest cost pressure are accounting, procurement, and human resources. The functions perceived to require the highest levels of investment, apart from IT services, are procurement and customer service. These processes received high ratings for competitive differentiation, as well.

Overall, business process outsourcing opportunities vary by industry sector. Exhibit II-5 lists emerging business process outsourcing opportunities, excluding IT services, by industry sector.

Exhibit II-5

Emerging Opportunities by Industry Sector

Industry Sector	Opportunities
Finance/Insurance	Payroll, Procurement
Discrete Manufacturing	Payroll, Accounting
Process Manufacturing	Customer Service, Customer Order and Fulfillment
Retail	Billing, Customer Service, Customer Order and Fulfillment, Procurement, Accounting
Services	Payroll, Billing, Accounting
Utilities	Payroll

Source: INPUT

D

Reengineering Is a Critical Vendor Skill

Exhibit II-6 lists some of the leading vendors currently active in the U.S. business operations outsourcing market.

Exhibit II-6

Leading Vendors: Business Process Outsourcing

Business Function	Vendor
Accounting Services	Andersen Consulting Price Waterhouse
Payroll Services	ADP Paychex Ceridian IBM Global Services
Supply Chain Management	Andersen Consulting EDS
Customer Services	EDS Affiliated Computer Services
Check Verification, Credit/Debit Card Processing	Fiserv NDC ALLTEL Information Services
Billing and Customer Care	AT&T Solutions CSC CBIS EDS
Procurement	EDS

Source: INPUT

There are several ways in which vendors can target the business operations outsourcing market. One way is to build greater administrative capability into existing processing services such as payroll services, human resources administration, and check verification and credit/debit card processing. This approach, used by vendors such as ADP and Fiserv, is particularly effective in targeting small to mid-sized companies. However, the approach can also be adapted for targeting major corporations by increasing the flexibility and scope of the offering.

Another approach is via demonstration of reengineering capability to major corporations. This is the approach adopted by Andersen Consulting, which builds on its perceived reengineering capability. In the U.K., for example, Andersen Consulting formed a joint venture with Thames Water, with the client providing the joint venture company with day-to-day operational

knowledge and manpower and Andersen Consulting deploying its reengineering skills. The goal is to turn the joint venture company into a vendor with world-class capability that can attract external business from similar organizations.

The major benefits of this approach to the original client are:

- Access to world-class operational capabilities for its own internal use
- A share in profits from a subsidiary providing third-party services externally

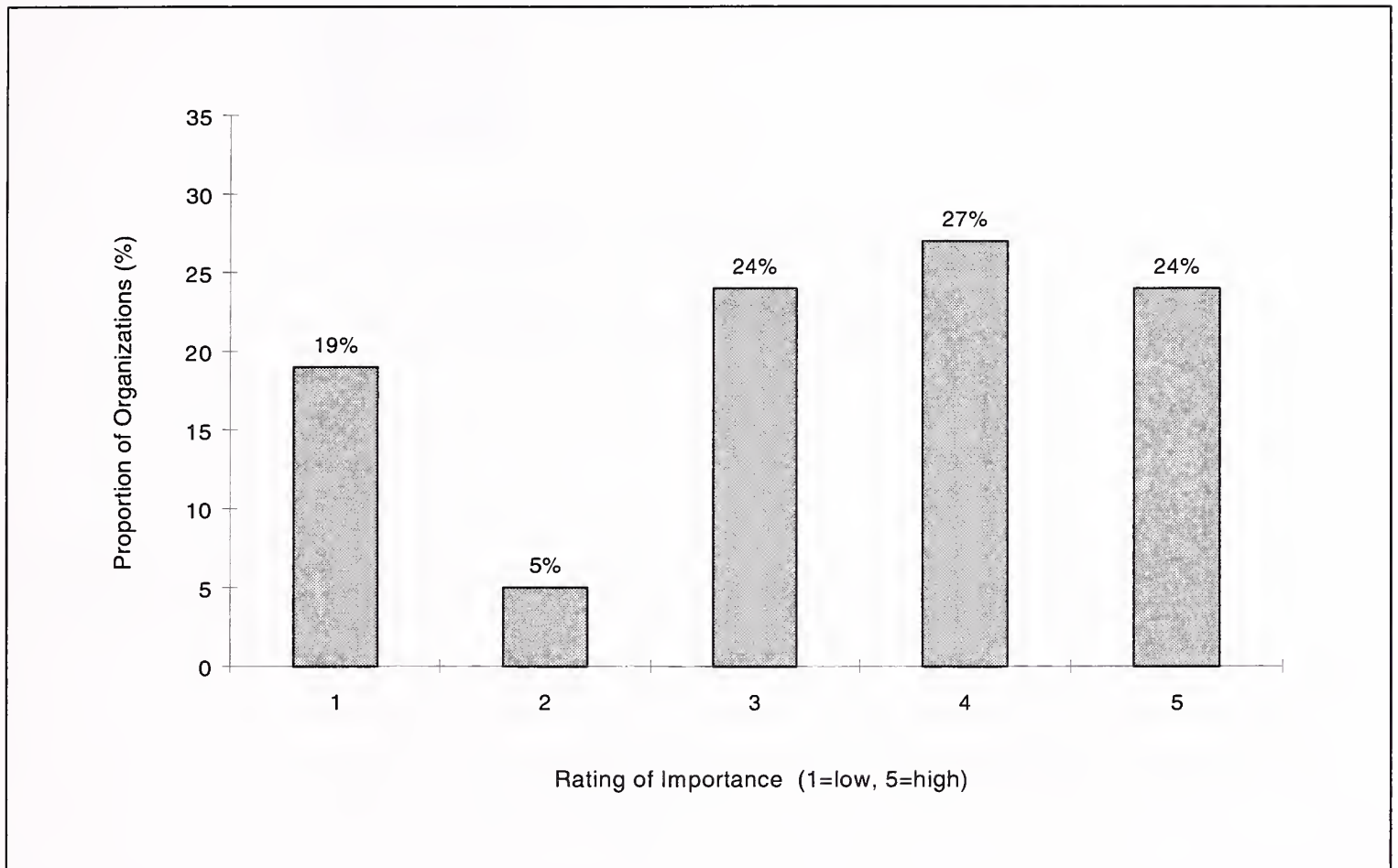
Other large outsourcers have taken a similar approach.

Another approach, based on reengineering, is to offer to consolidate the business functions of a number of business units or subsidiaries that each have their own service departments. This is the approach that Andersen Consulting has taken with Sears Plc; Andersen Consulting is combining the various IT departments and accounting units into a central services function.

There is scope for other vendors to adopt this practice. Exhibit II-7 shows the extent to which managers believe that there is scope within their organizations to rationalize business practices across business units or subsidiaries.

Exhibit II-7

Scope for Rationalization of Business Practices



Source: INPUT

Over half of respondents believe that there is scope within their organizations to achieve this; only a minority of respondents believe there is limited scope for such an approach. Globalization and consolidation within industries such as finance, insurance and transportation will continue to create demand for rationalization of business practices, and opportunities for business process outsourcing.

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Attitudes Toward Business Process Outsourcing

A

Most U.S. Companies Accept the Virtual Corporation Concept

The concept of the virtual corporation has been widely promoted by the press in recent years and is now beginning to be adopted in terms of increasing business process outsourcing. Fewer major organizations are continuing to perform business activities in-house that make only minor contributions to their competitive position.

Barriers to the adoption of business process outsourcing include:

- The difficulty and expense of benchmarking business processes with comparable organizations
- The potential turmoil caused by transferring staff between organizations

As a result, companies have been slow to adopt a true core business focus. Typically, organizations are only likely to consider outsourcing business processes when one or a combination of the following conditions apply:

- The overall organization faces financial difficulties and actively seeks areas in which short-term savings can be made
- A major investment decision relating to that business process has to be made: for example, company startups or management buyouts

- Major skill shortages emerge
- The organization faces external coercion, for example deregulation in the telecommunications sector

Nevertheless, the concept of the virtual corporation is now viewed as a useful business model by a majority of managers. See Exhibit III-1.

Exhibit III-1

Acceptance of the Virtual Corporation Concept

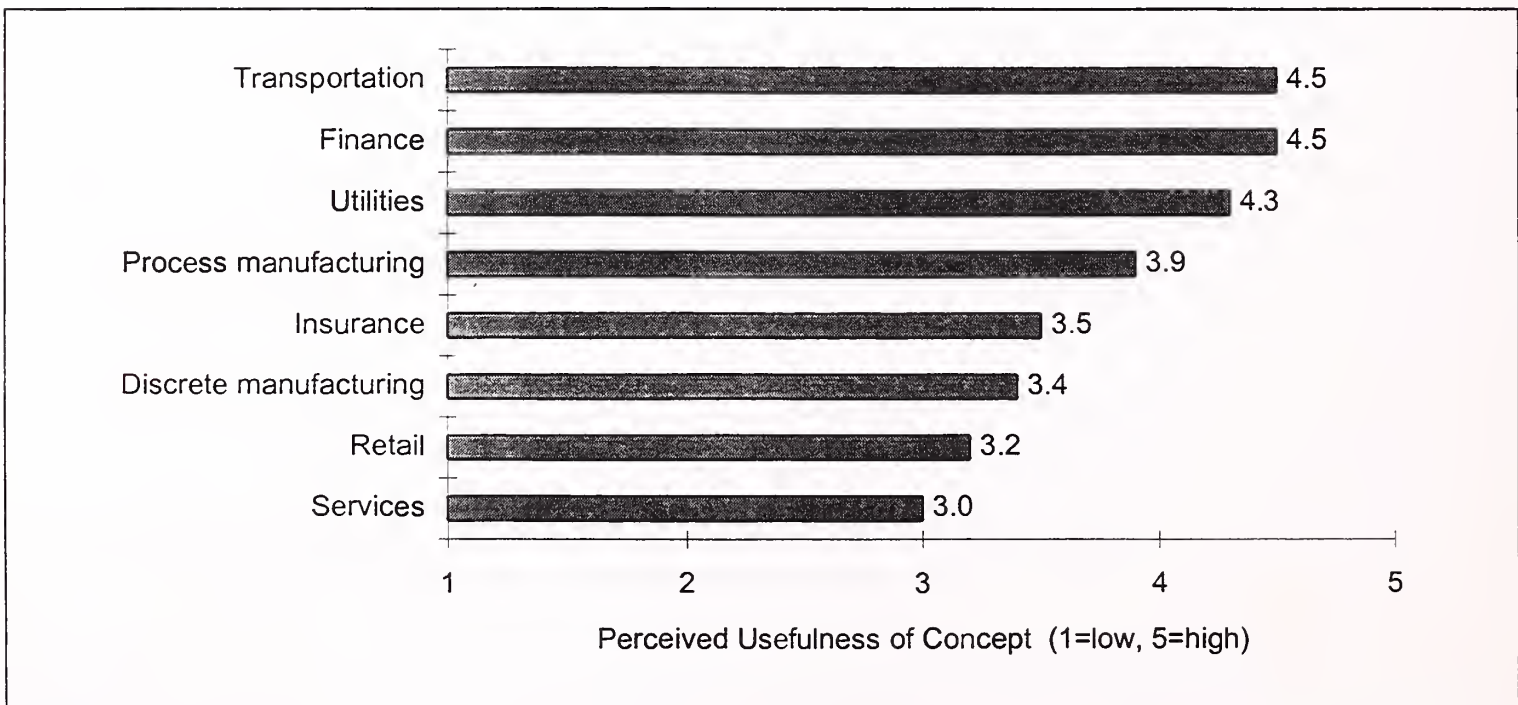
Degree of Usefulness	% of Respondents
Very Useful	56
Not Very Useful	18
Neutral	26

Source: INPUT

Acceptance of the virtual corporation concept varies considerably by industry. Exhibit III-2 lists by industry sector the extent to which managers perceive the concept of the virtual corporation to be a useful business model.

Exhibit III-2

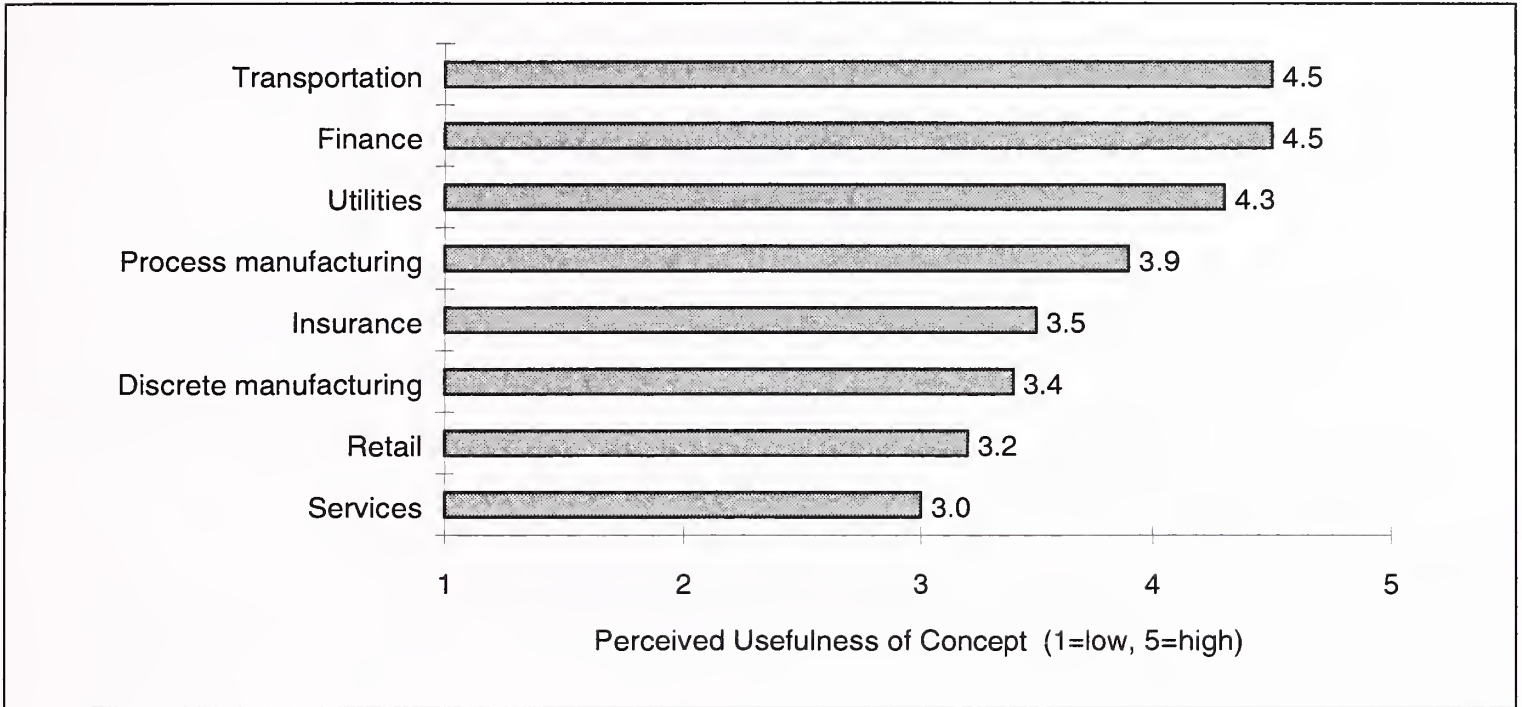
Acceptance of the Virtual Corporation Concept: Perception by Industry



Source: INPUT

Exhibit III-2

Acceptance of the Virtual Corporation Concept: Perception by Industry



Source: INPUT

The highest level of acceptance of the concept is in the finance, transportation, and utilities sectors, where managers rated the concept as highly useful. This would indicate major business process opportunities in these sectors.

B

Business Process Outsourcing Driven by Low In-house Cost Effectiveness

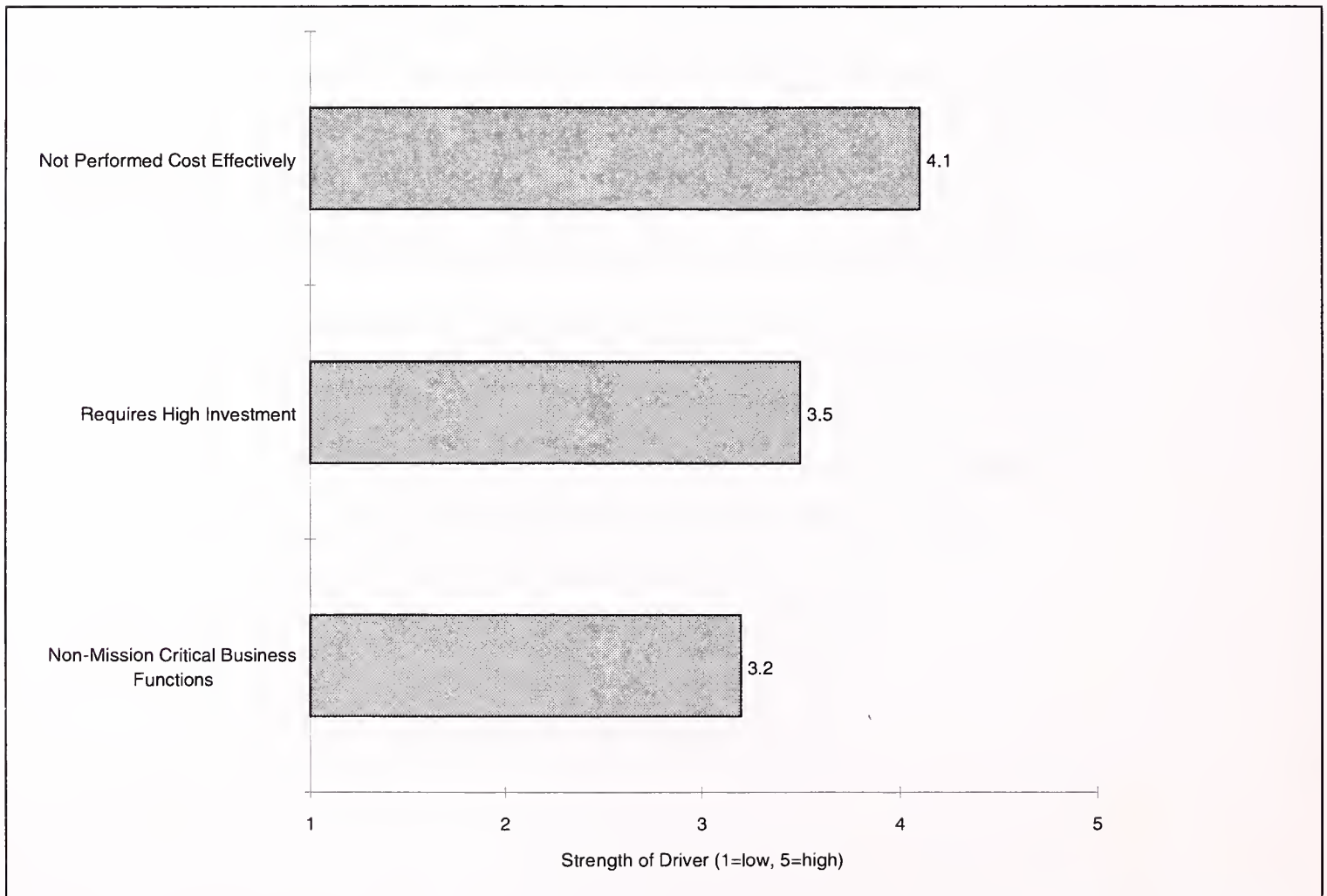
Prior to the study, three potentially key drivers of business operations outsourcing were identified:

- Low in-house process cost effectiveness
- A requirement for high capital investment
- Low impact on business success (non-mission critical function)

The extent to which managers perceive that individual business processes should be outsourced because they meet each of these criteria is shown in Exhibit III-3.

Exhibit III-3

Drivers of Business Process Outsourcing



Source: INPUT

Overall, the major driver of those shown in Exhibit III-3 is low in-house cost effectiveness. Approximately 50% of managers interviewed strongly believe that business functions not cost effectively performed in-house should be outsourced.

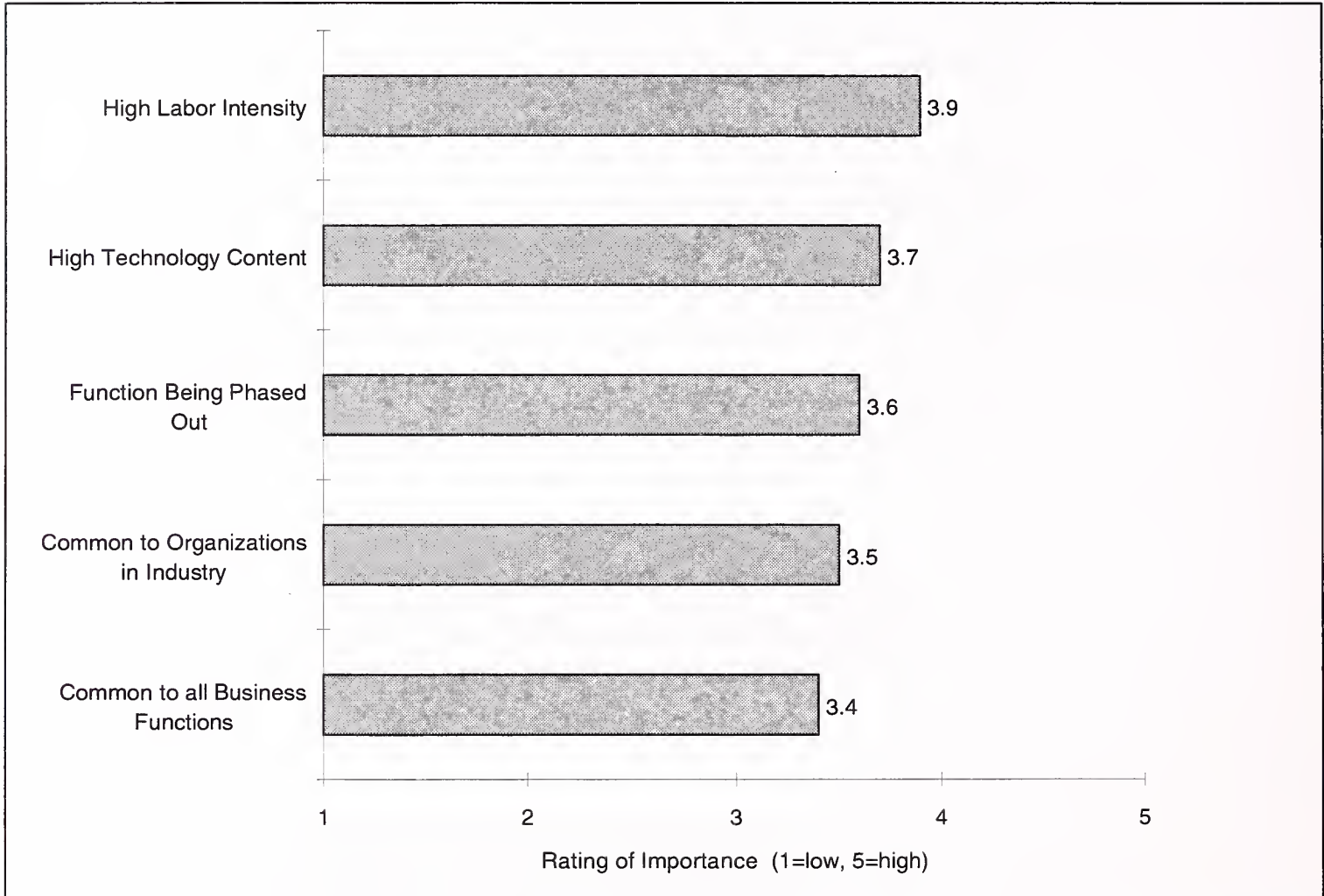
However, the fact that a business function is not a core activity is not typically perceived to be a sufficient reason to outsource it. Less than a quarter of managers thought that functions should be outsourced simply because they were not important determinants of business success.

High capital investment requirements are a second important driver of business process outsourcing. However, here, too, a requirement for high investment is insufficient on its own to lead to process outsourcing.

Exhibit III-4 lists the process characteristics awarded the highest ratings when managers were asked what characteristics made a business operation a candidate for outsourcing. Similarly, Exhibit III-5 lists the process characteristics given the lowest ratings.

Exhibit III-4

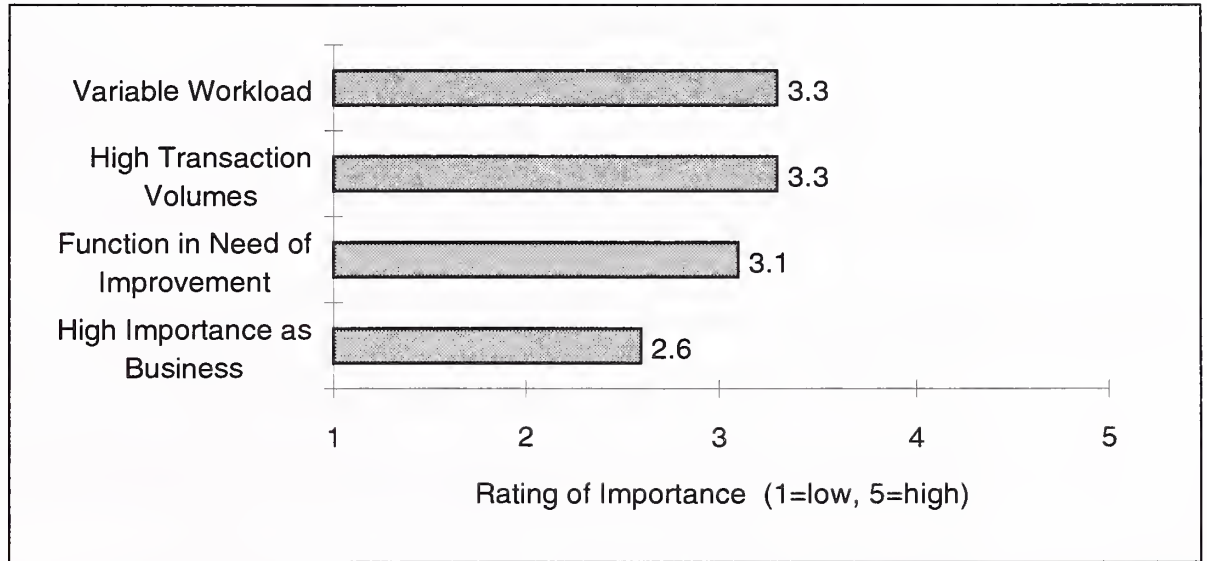
Major Characteristics of Processes Selected for Outsourcing



Source: INPUT

Exhibit III-5

Least Important Characteristics of Processes Selected for Outsourcing



Source: INPUT

The most important factors were high labor intensity and high technology content, both factors that create a high cost structure.

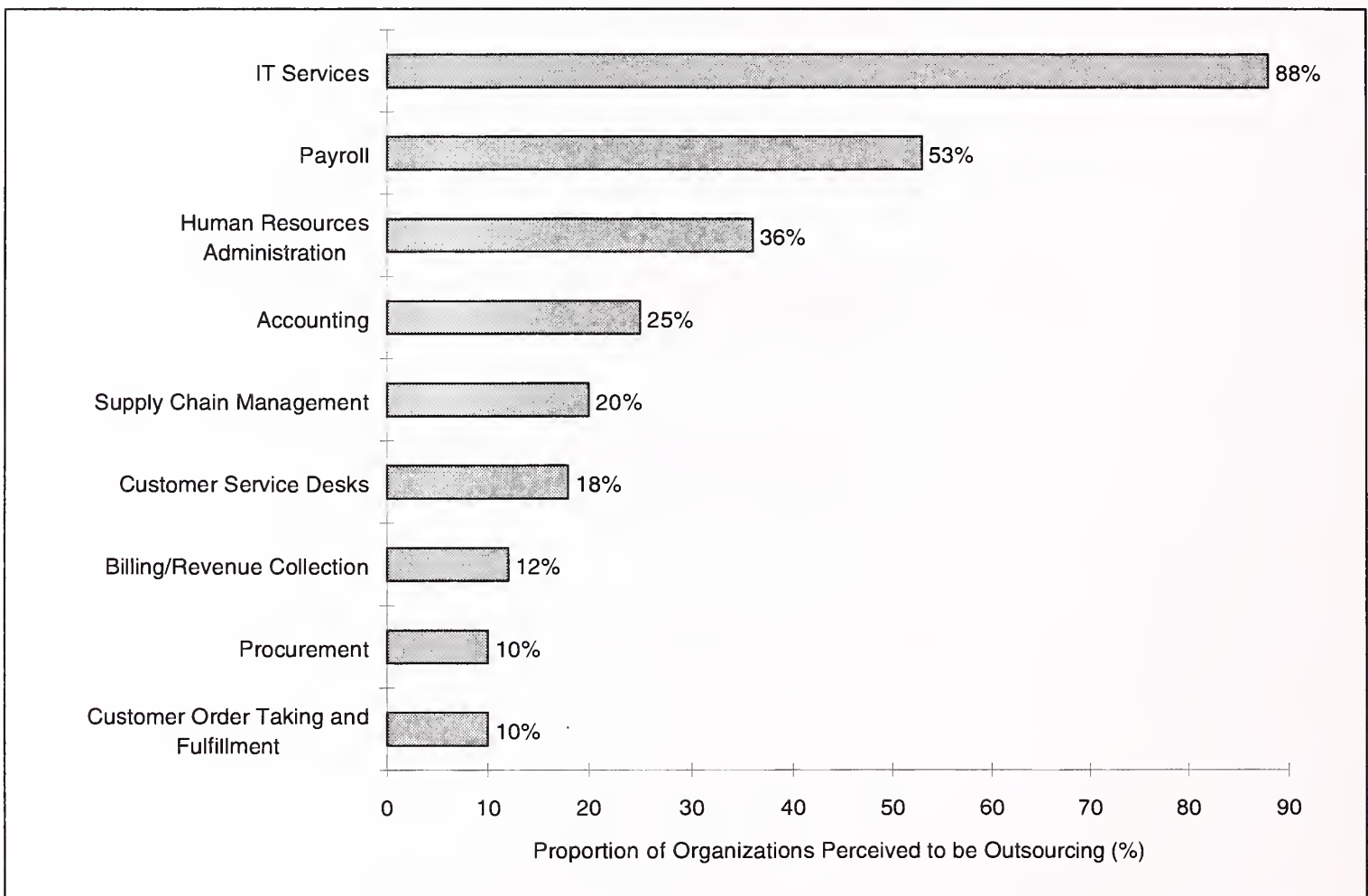
C

Payroll Services the Most Widely Outsourced Business Function

Exhibit III-6 lists the proportion of respondents whose organizations currently outsource each of a number of business processes. In practice, these figures are likely to be overestimates that include elements of partially subcontracted work. However, these estimates can be used to provide an indication of the relative level of outsourcing within each of these activities at present.

Exhibit III-6

Perceived Level of Outsourcing by Business Function



Source: INPUT

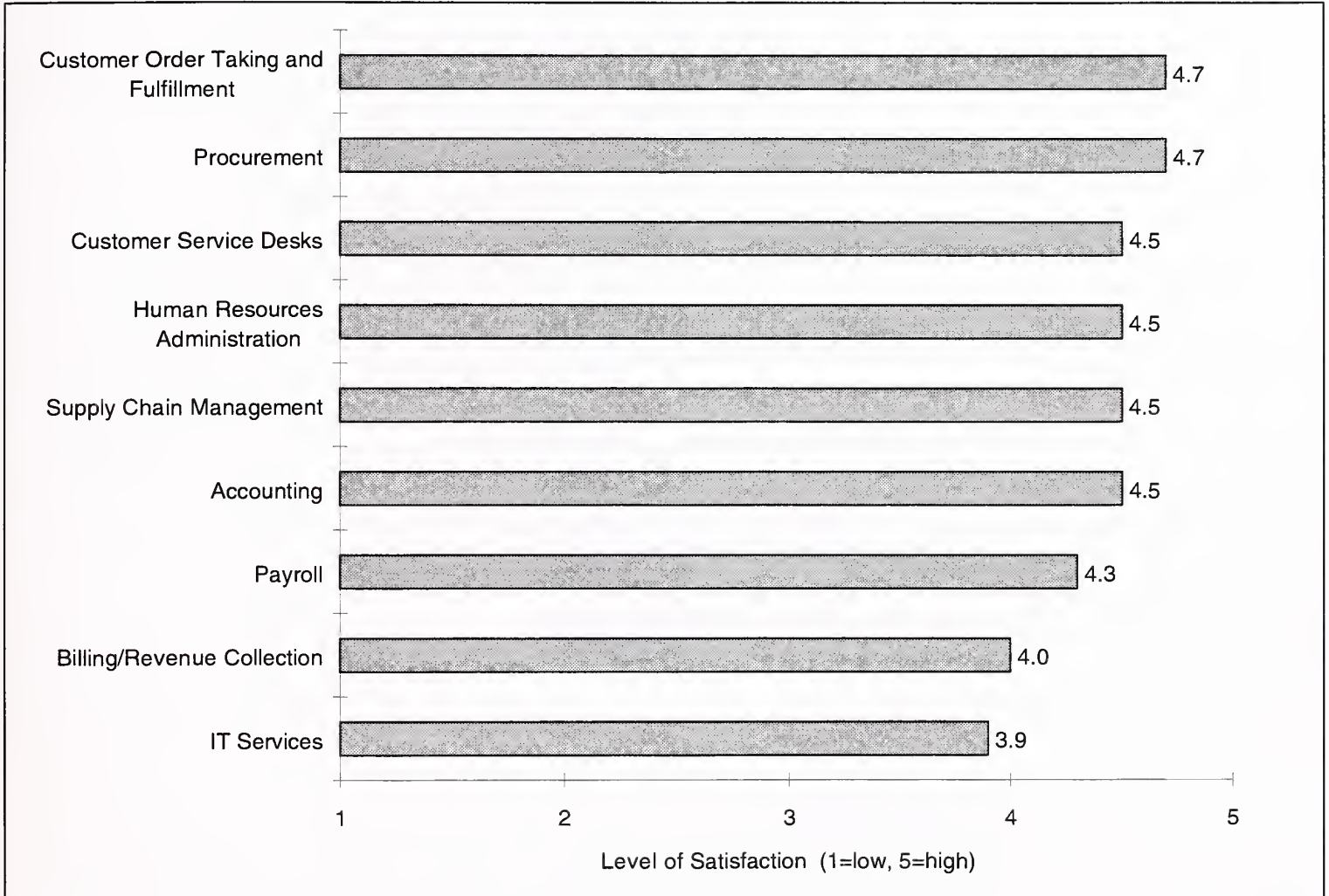
IT services is the most widely outsourced activity, with outsourcing of payroll and human resource services becoming increasingly commonplace.

Organizations appear to be somewhat slower to outsource functions involving close contact with their customers, such as customer order taking and customer service management.

Companies that have adopted business process outsourcing indicate a high level of satisfaction in general. The level of satisfaction by business function is listed in Exhibit III-7.

Exhibit III-7

Satisfaction with Outsourcing by Business Function



Source: INPUT

These statistics indicate that vendors are able to produce a high level of satisfaction, not only for noncore functions such as accounting, but also for the more business-critical functions such as customer order taking, procurement, and supply chain management.

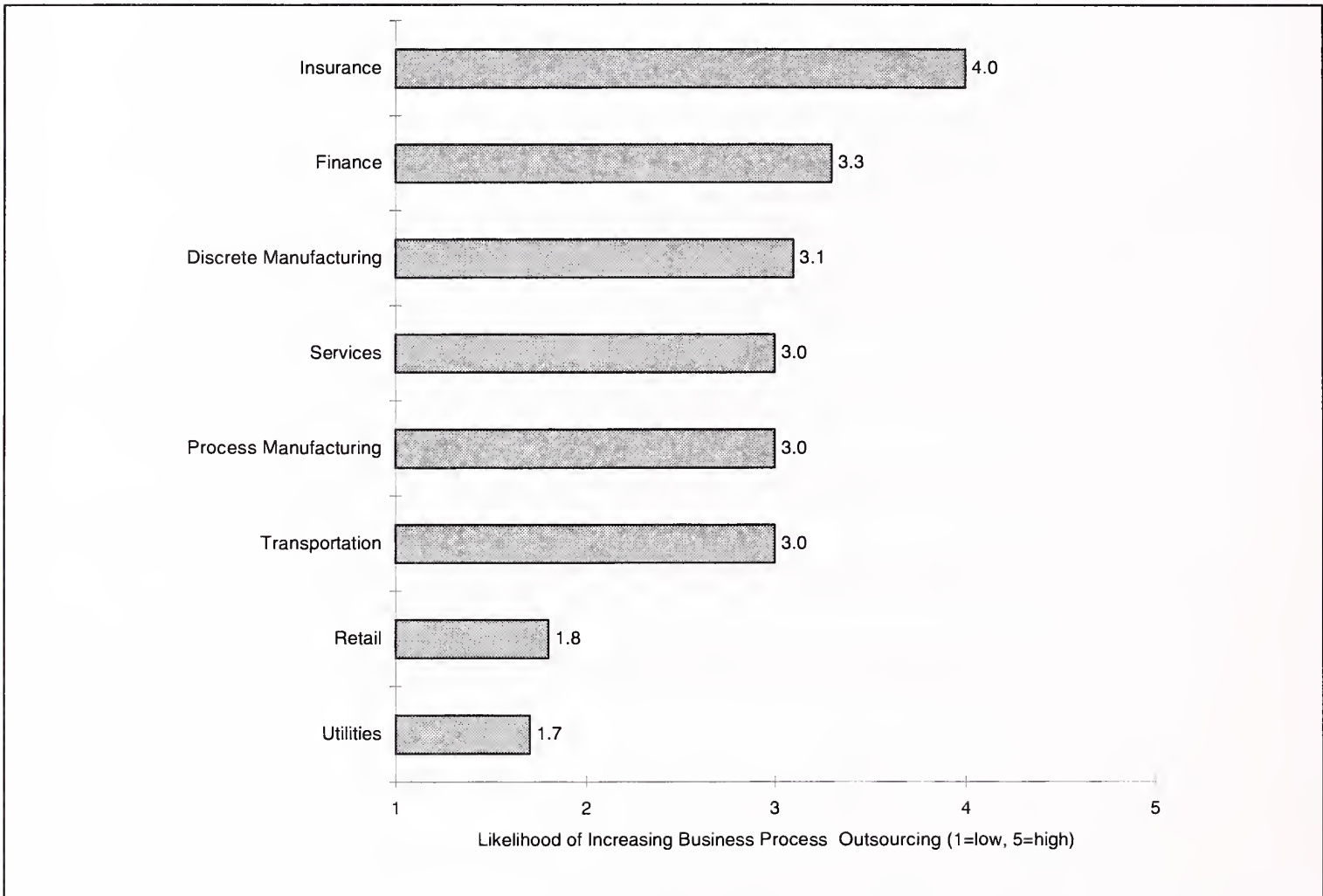
D

Areas of Growth in Business Process Outsourcing

Exhibit III-8 shows by industry the extent to which organizations are likely to extend their use of business process outsourcing over the next three years.

Exhibit III-8

Increase in Business Process Outsourcing by Industry Sector



Source: INPUT

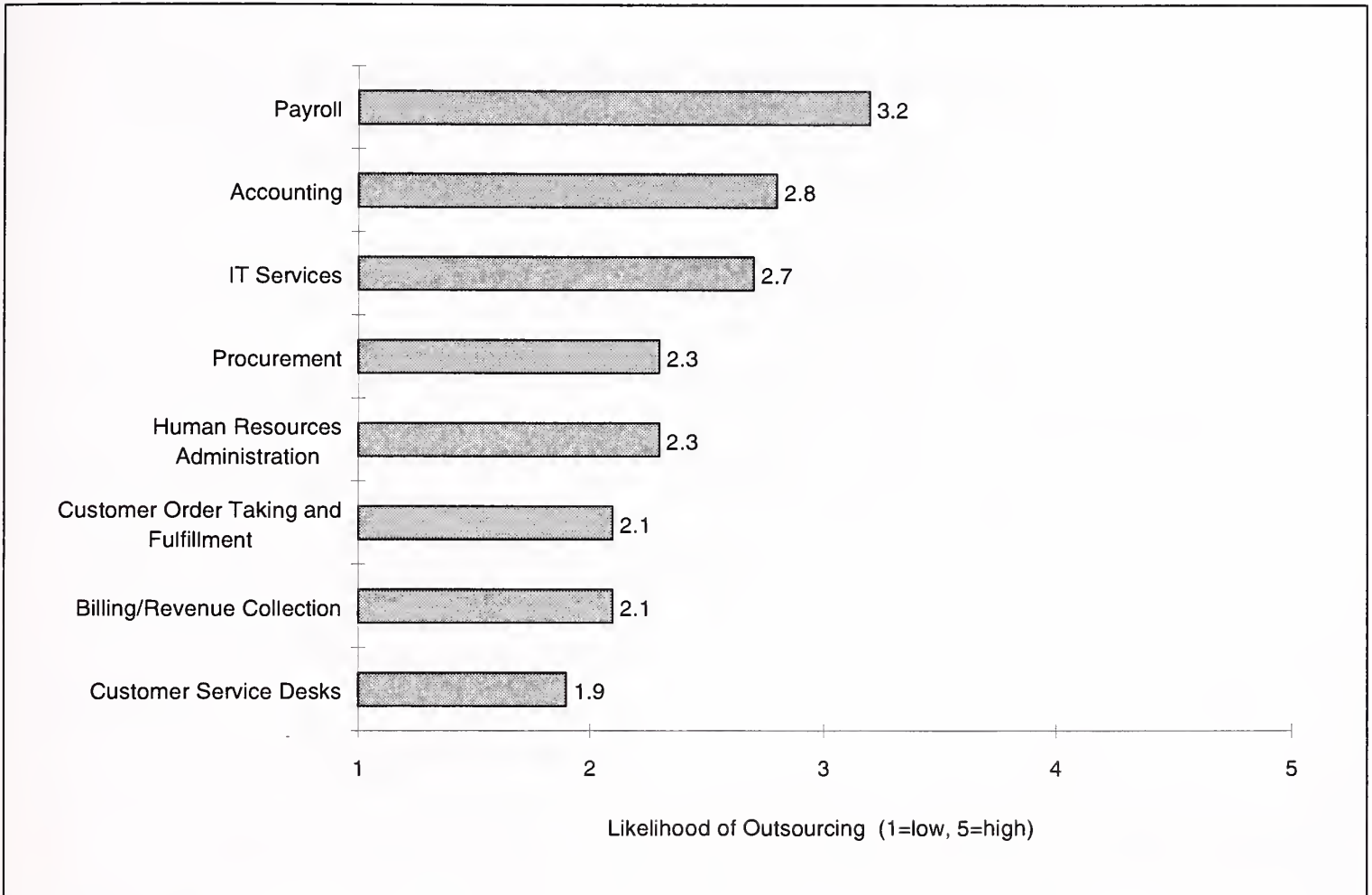
Managers in the insurance and finance sectors were most likely to extend their business process outsourcing activity. Discrete manufacturing, transportation, and services are also sectors of potential growth.

However, few managers in the retail and utilities sectors strongly expected their organizations to extend the use of business process outsourcing.

Exhibit III-9 shows the extent to which managers perceive that their organization is likely to outsource each of a number of activities.

Exhibit III-9

Business Process Outsourcing Intentions by Activity

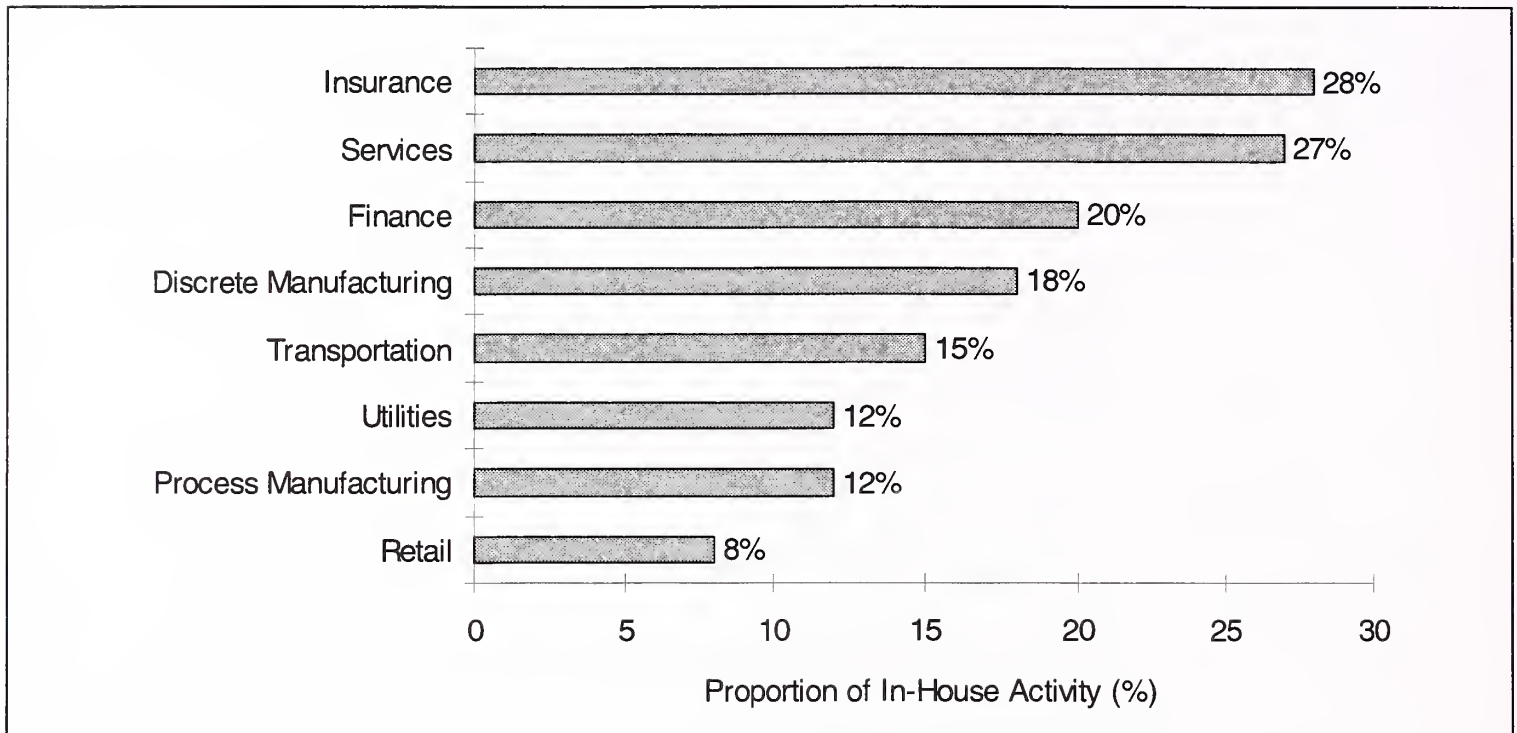


Source: INPUT

Payroll, accounting, and IT outsourcing are experiencing strong growth at present. Procurement and human resources are likely to constitute a second wave of growth, followed by customer order taking/fulfillment and billing/revenue collection. The outsourcing of customer service desks has yet to establish credibility outside a number of niche markets.

The insurance and services industries indicate the greatest likelihood of outsourcing activities currently performed in-house over the next five years. Exhibit III-10 lists the average proportion by sector of current in-house business activity that is expected to be outsourced by the year 2001.

Exhibit III-10

Increase in Outsourced Business Sector Activity by Year 2001

Source: INPUT

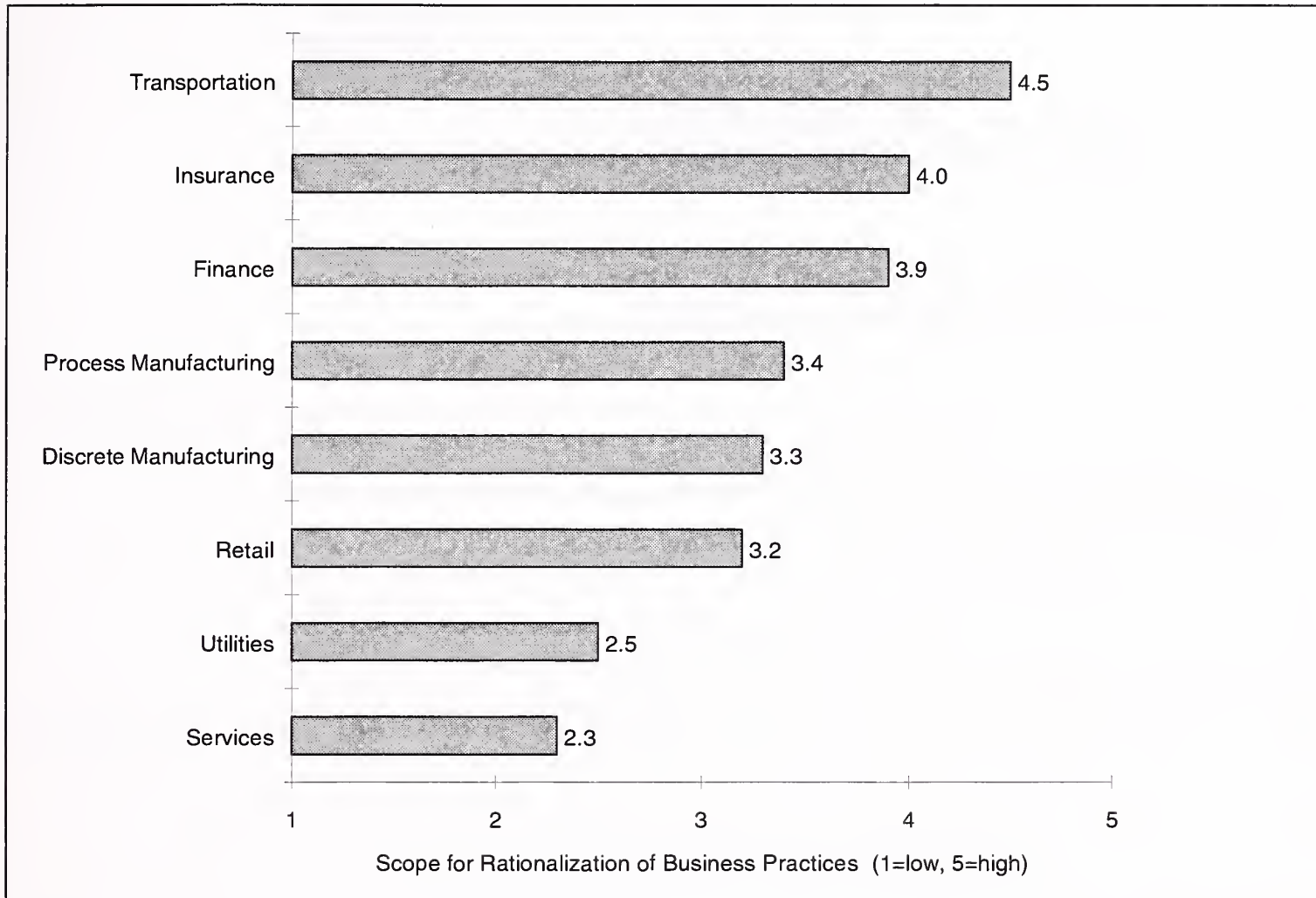
E**Transportation, Insurance and Finance Will Rationalize Business Processes**

A potential opportunity for outsourcing vendors is to identify organizations for which a set of common processes can be applied across a number of subsidiaries, business units, or departments. The transportation, insurance and finance industries are most likely to standardize processes on an enterprise-wide basis.

Exhibit III-11 shows, by industry sector, the extent to which managers perceive a scope for rationalization of business practices across business units or subsidiaries.

Exhibit III-11

Scope for Rationalization of Business Practices by Sector

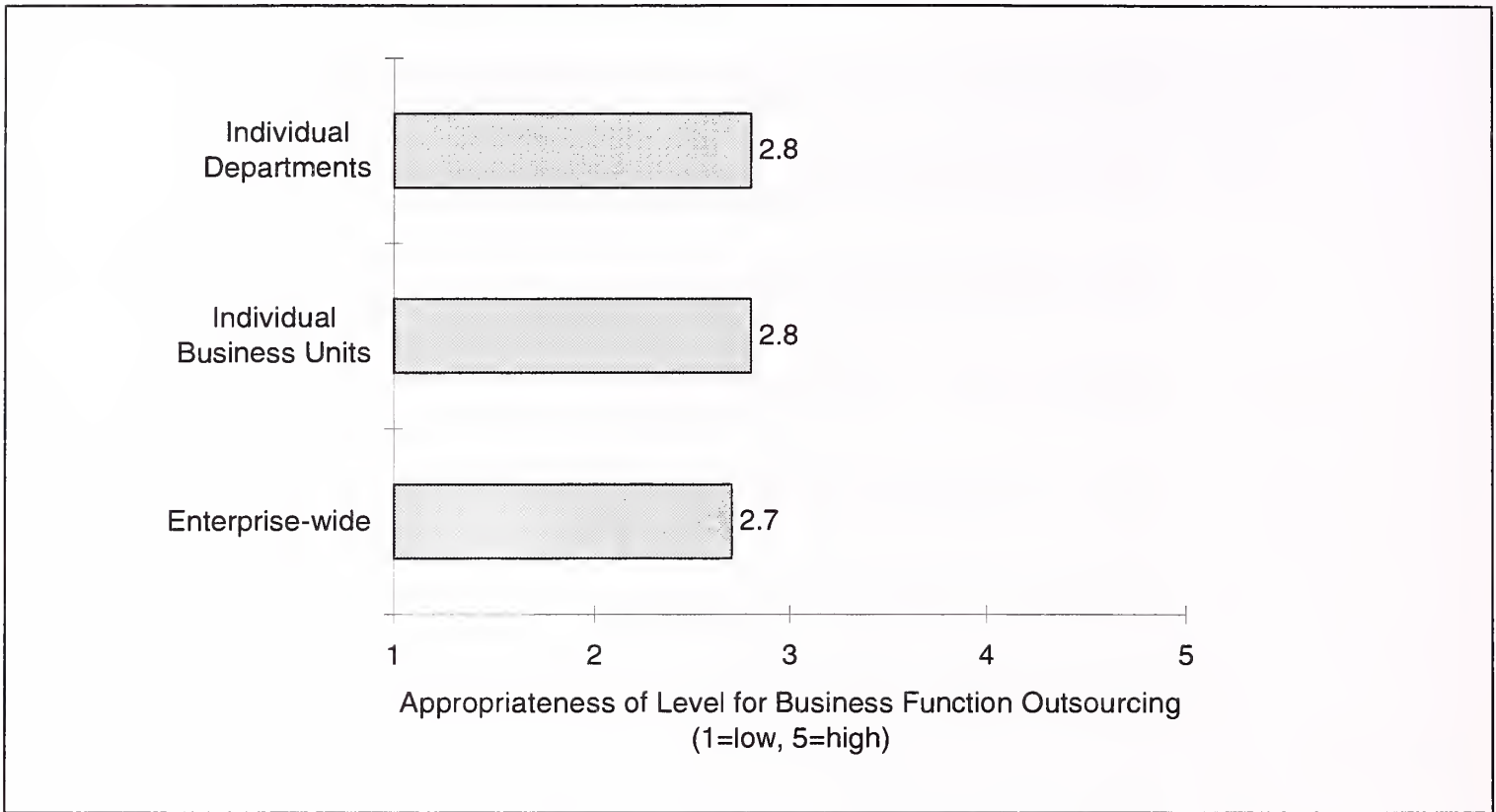


Source: INPUT

Exhibit III-12 shows the extent to which managers believe business process outsourcing should take place at various levels within the organization.

Exhibit III-12

Organizational Level for Business Process Outsourcing



Source: INPUT

The similarity in ratings indicates business process outsourcing opportunities at every level of the organization.



Industry Sector Opportunities

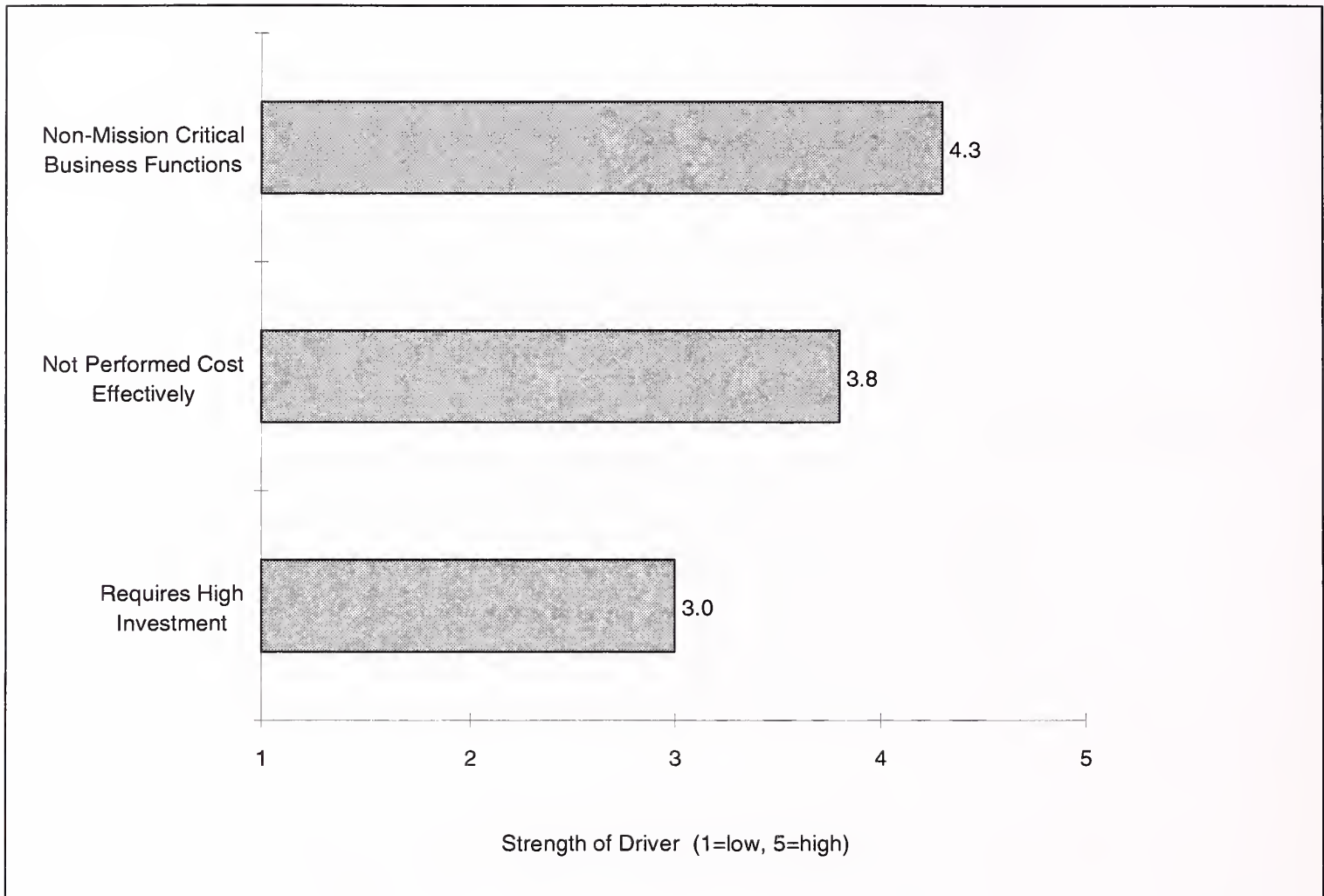
A

Finance/Insurance

Organizations in the finance and insurance sectors exhibit a comparatively high level of enthusiasm for the concept of the virtual corporation, making this sector a prime candidate for the adoption of business process outsourcing.

Exhibit IV-1 lists the relative importance of a number of potential drivers of business process outsourcing in the finance/insurance sectors.

Exhibit IV-1

Drivers of Business Process Outsourcing: Finance/Insurance

Source: INPUT

In these industries, the demand for greater core focus and efficiency is perceived to be the major factor driving business process outsourcing, followed by a need to fund high levels of investment.

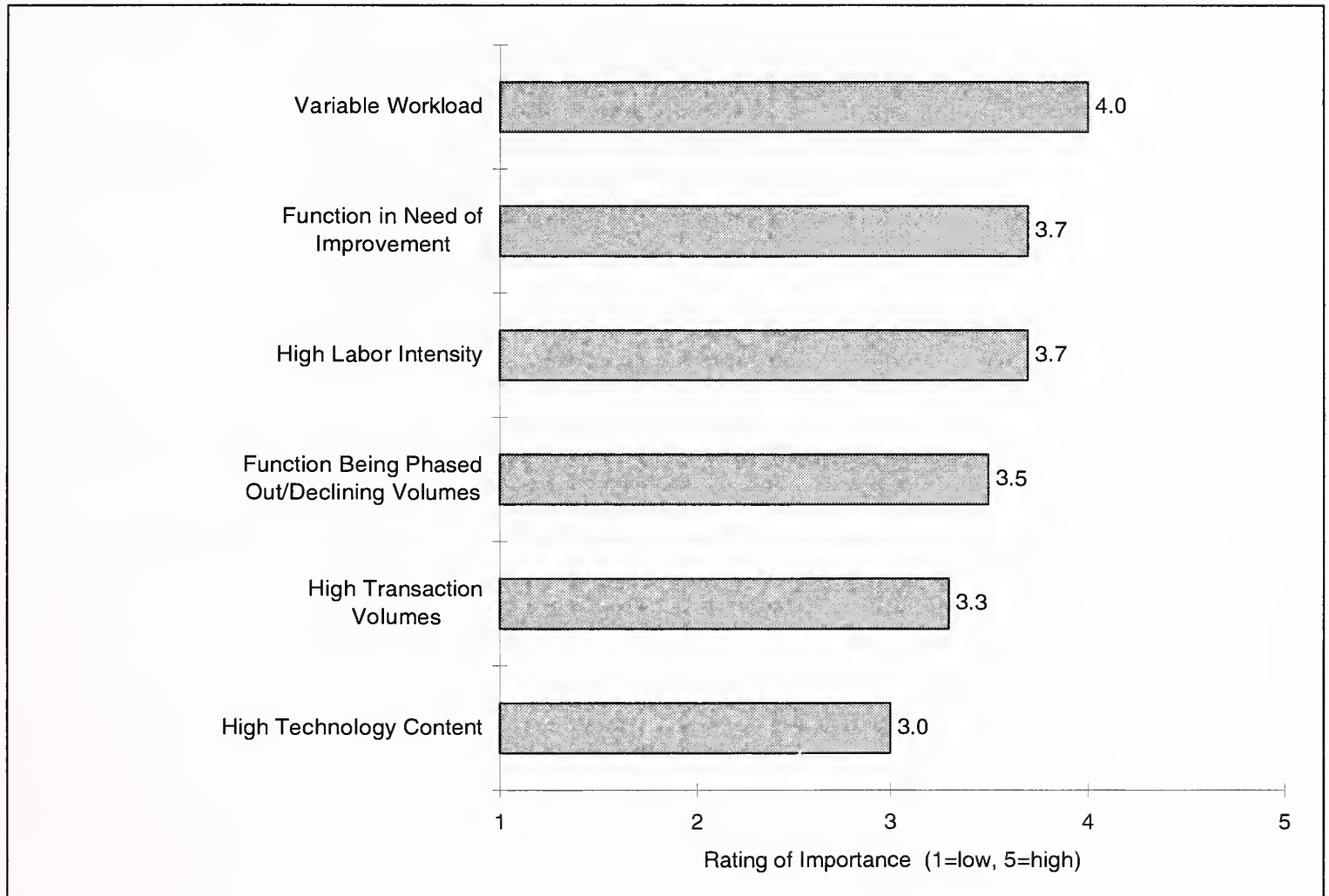
Banks and insurance companies have already adopted application operations outsourcing for their data centers, and network operations outsourcing, whereby they avoid the high investment required to re-implement their WAN infrastructures. In addition, they are more frequently using business process outsourcing in key process areas.

ALLTEL Information Services won an outsourcing contract in 1996 to manage the National Commerce Bancorporation's (NCBC's) call center in Memphis, TN. The arrangement enables NCBC to improve customer service while lowering costs. In the insurance sector, Aetna has outsourced "new business processing" to PMSI L.P., a partner of Policy Management Systems Corp. The arrangement will give agents more time to make sales.

Exhibit IV-2 lists the extent to which other process attributes are associated with process outsourcing in the finance/insurance sector.

Exhibit IV-2

**Major Characteristics of Processes Selected for Outsourcing:
Finance/Insurance**



Source: INPUT

Variable workload and high labor intensity are considered important factors, as banks make the transition from branch banking to telephone or electronic banking. The current shortage of skilled personnel in general should continue to drive business process outsourcing in these industry sectors.

There is strong need in the insurance industry, in particular, for assistance with the processing of declining volumes as service streams become obsolete.

Activities with high transaction volumes have already been a source of processing contracts in the finance sector. Check processing is particularly appropriate for outsourcing. Banks do not wish to continue to invest in this activity, as the use of personal checks is expected to decline in favor of

electronic banking methods. At the same time, a reduction in volumes processed will lead to an increased cost per transaction. Unisys has a contract with The Savings Bank of Utica, NY to provide comprehensive, image-based check processing services.

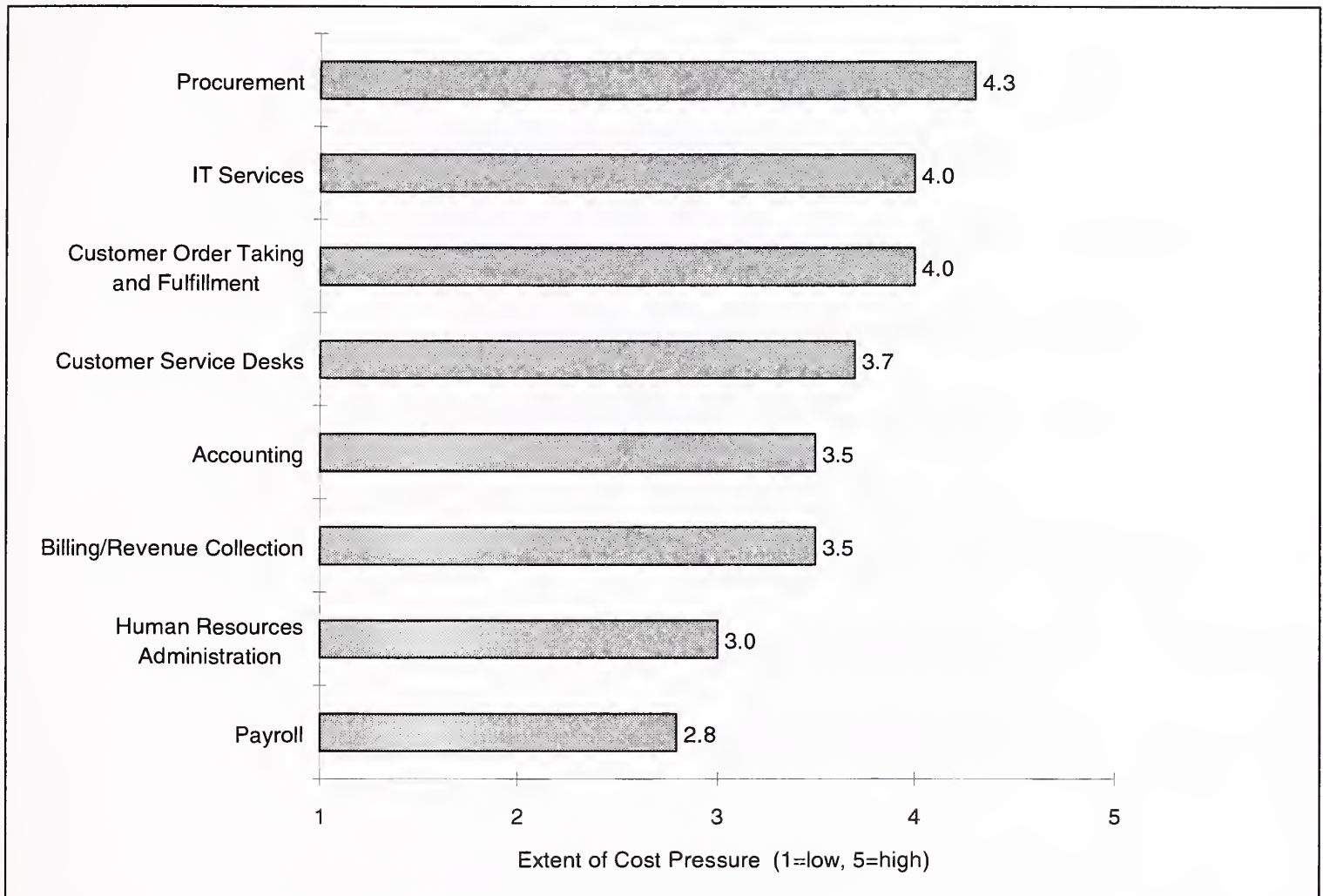
Claims processing in the insurance sector, outsourced to EDS, CSC, and others, has similar high transaction volumes. CSC and CNA Financial Corporation will jointly offer insurance companies services for issuing policies, claims processing, and record keeping.

Exhibits IV-3 to IV-5 list the extent to which a number of business functions within the finance/insurance sector are perceived to:

- Be subject to a high level of cost pressure
- Provide competitive differentiation for the organization
- Require high levels of future investment

Exhibit IV-3

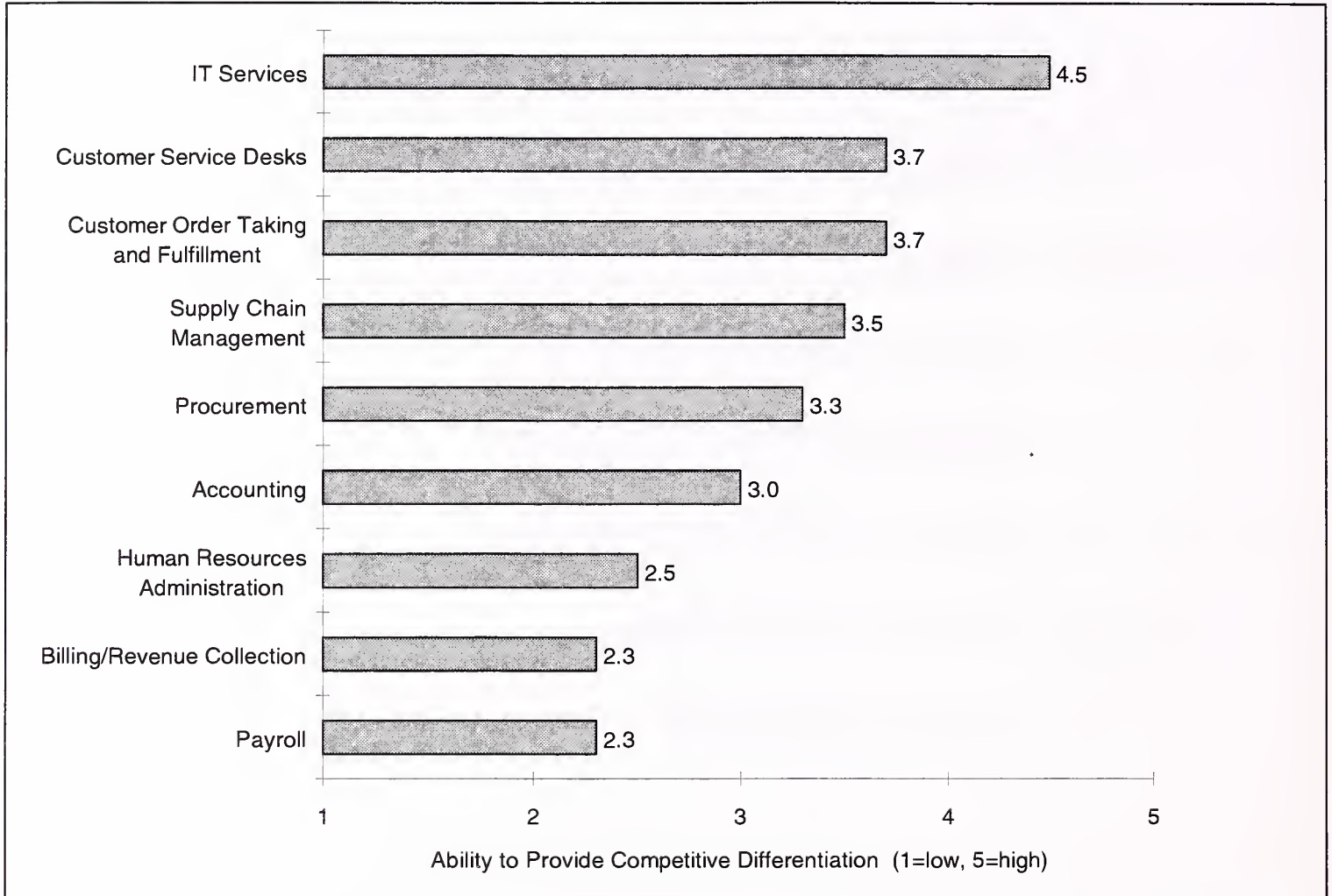
**Cost Pressure by Business Function:
Finance/Insurance**



Source: INPUT

Exhibit IV-4

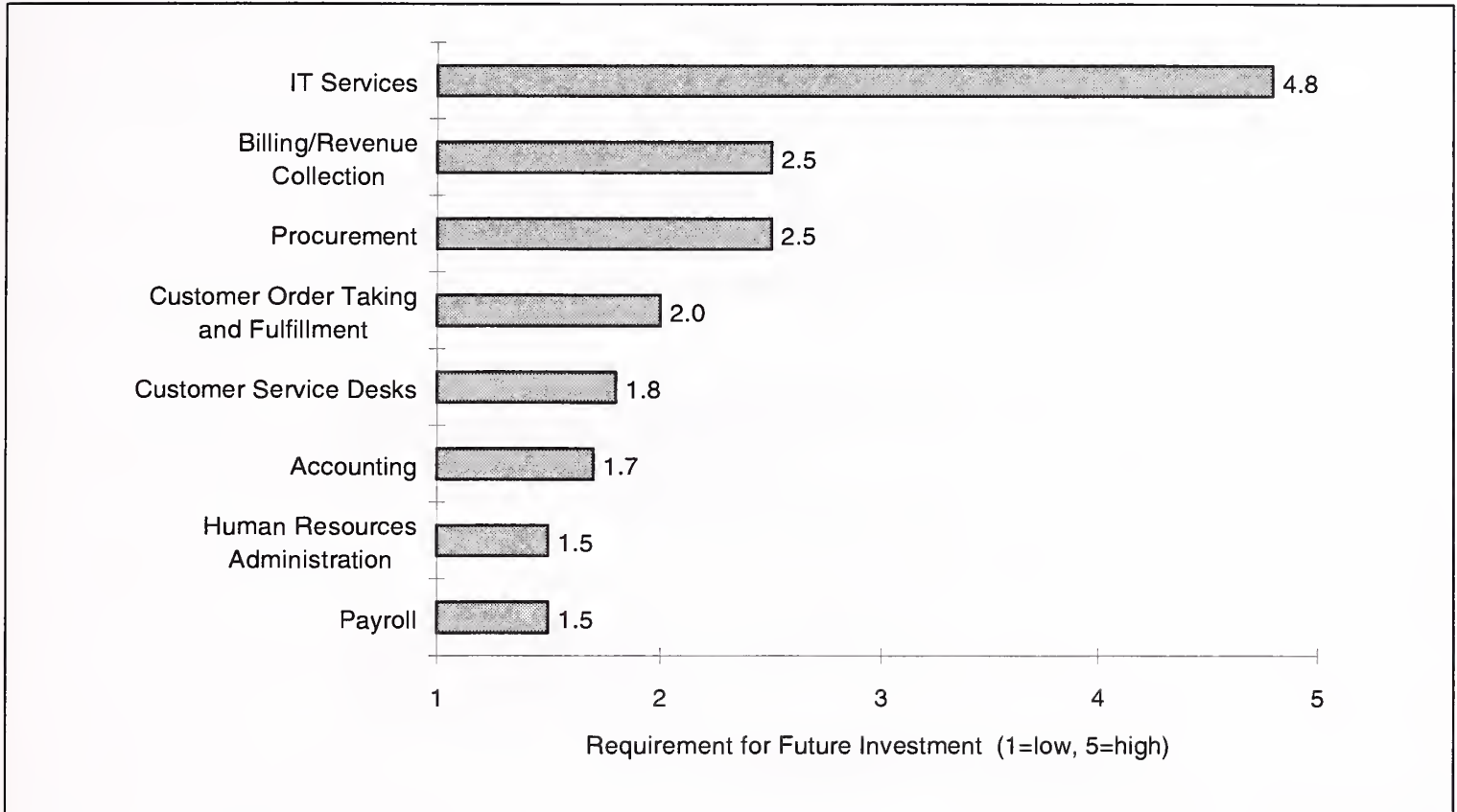
**Competitive Pressure by Business Function:
Finance/Insurance**



Source: INPUT

Exhibit IV-5

**Investment Pressure by Business Function:
Finance/Insurance**



Source: INPUT

IT services are perceived to be under considerable investment and cost pressure in the finance/insurance sectors.

Accordingly, the level of IT outsourcing in the finance/insurance sectors will continue to increase, but the pattern of outsourcing will frequently be selective in order for the banking organization to maintain a high degree of control over its use of IT.

As the banking sector moves to electronic rather than branch banking, customer service desks are becoming increasingly vital. This is reflected in the high ratings given to customer service desks and customer order taking as a means of competitive differentiation.

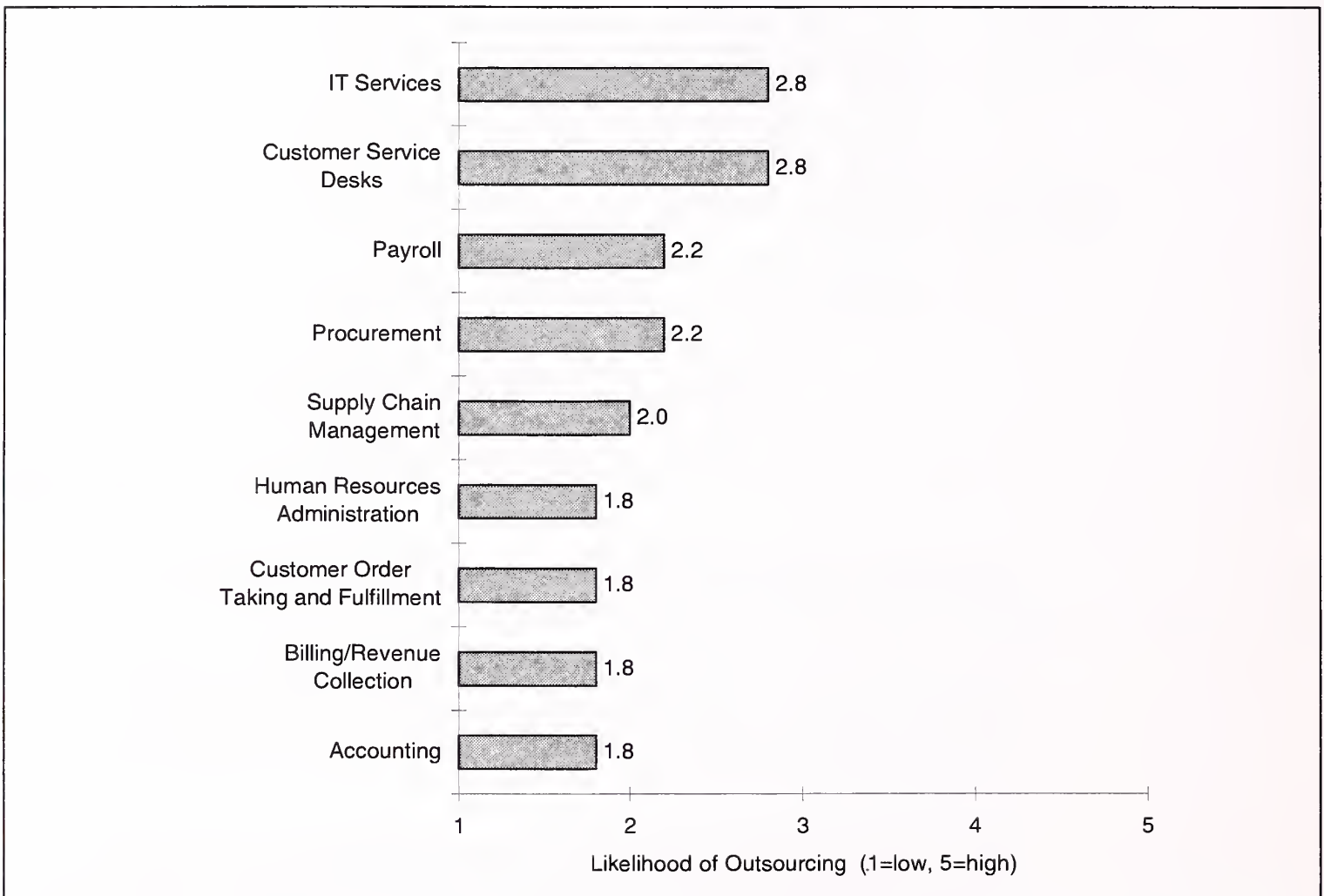
Cost pressures are highest for IT services, procurement, and customer order taking and fulfillment; these are also areas that are tied closely to competitive differentiation.

Banks and insurance companies will be faced with a greater need to provide their clients with technical support relating to their use of electronic transactions. This could become a major support opportunity for outsourcing vendors.

Exhibit IV-6 shows the likelihood of organizations in the finance/industry sectors to outsource each of a number of activities.

Exhibit IV-6

**Business Process Outsourcing Intentions:
Finance/Insurance**



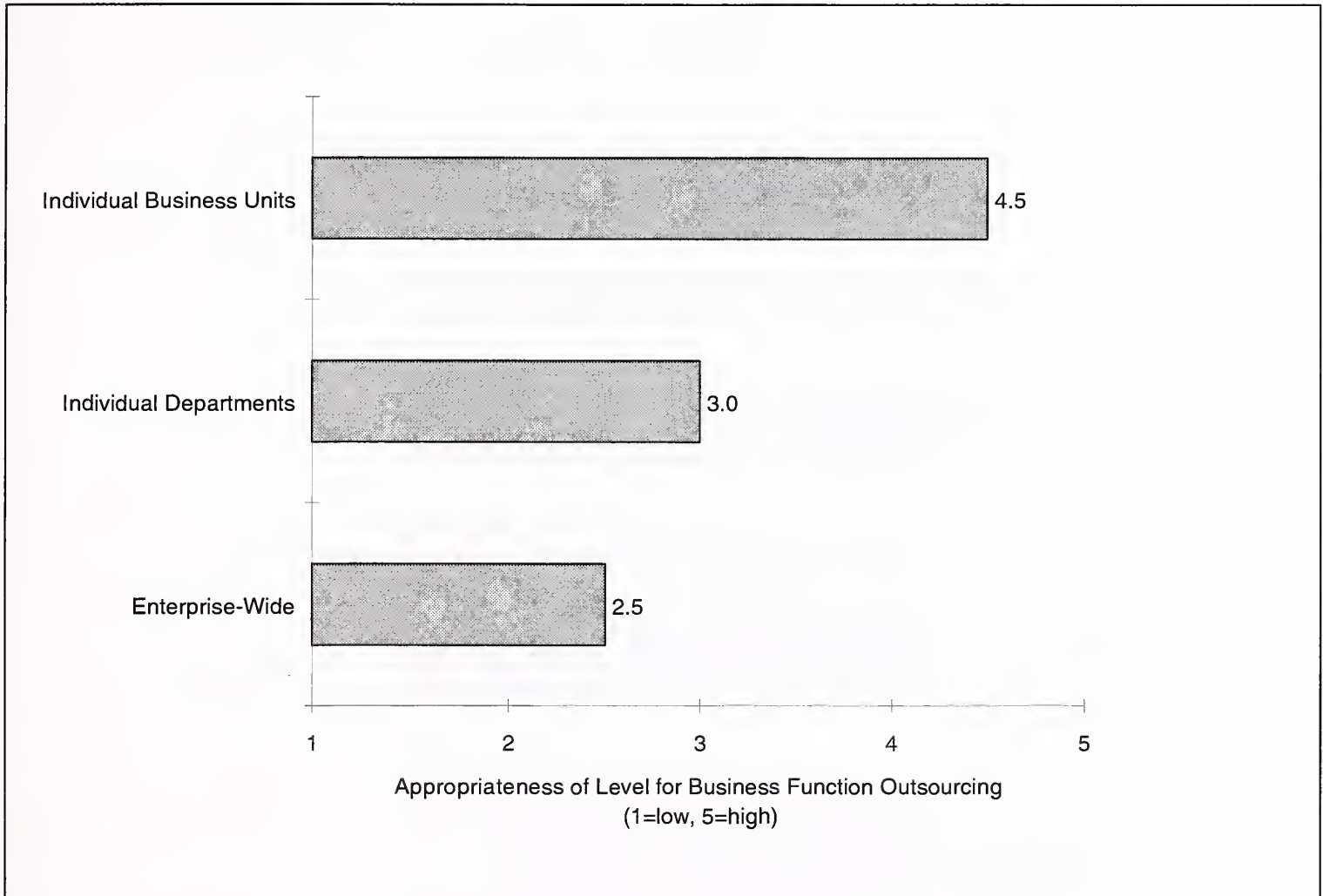
Source: INPUT

The highest level of outsourcing activity will be for customer service desks and IT services. However, opportunities are also emerging for the outsourcing of procurement services.

Managers within the finance/insurance sectors perceive that business process outsourcing is most appropriate at the individual business unit level rather than at the enterprise or departmental levels (Exhibit IV-7).

Exhibit IV-7

**Organizational Level of Business Process Outsourcing:
Finance/Insurance**



Source: INPUT

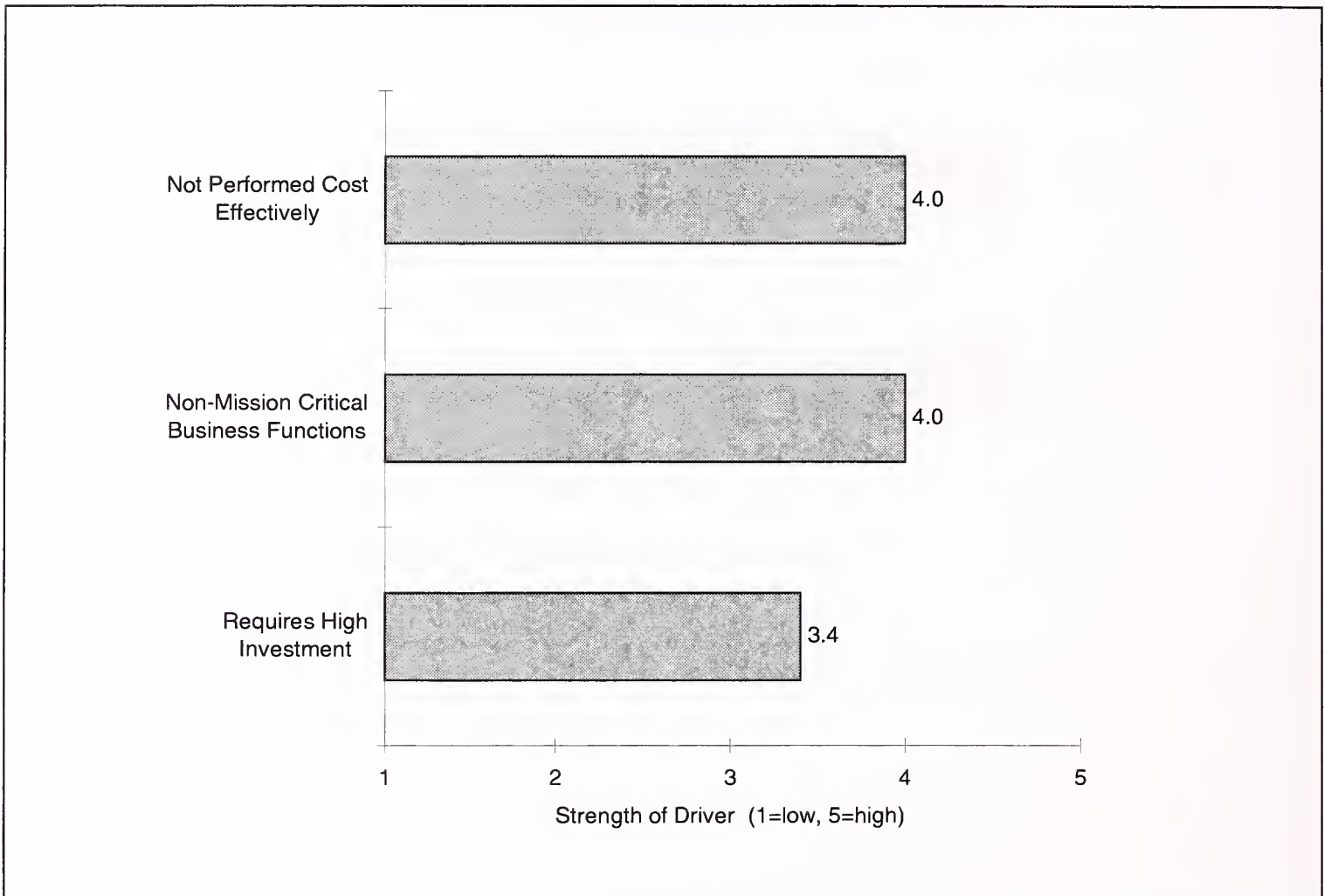
B

Discrete Manufacturing

Exhibit IV-8 lists the relative importance of a number of potential drivers of business function outsourcing in the discrete manufacturing sector.

Exhibit IV-8

**Drivers of Business Process Outsourcing:
Discrete Manufacturing**



Source: INPUT

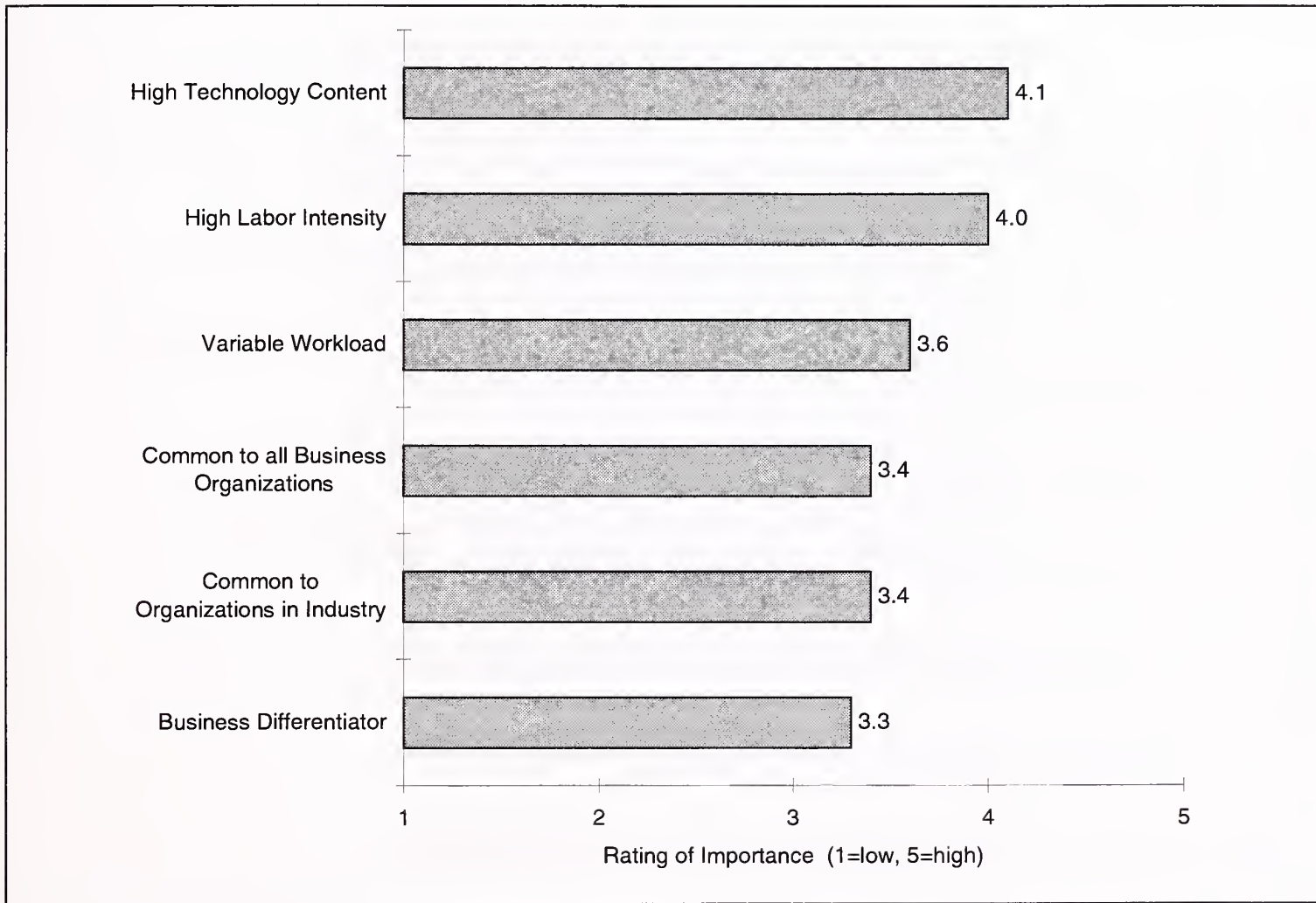
Organizations in the discrete manufacturing sector appear to judge business processes as to their suitability for outsourcing primarily on the basis of their core relevance and on the cost effectiveness with which they are currently performed. Investment requirements are a less important factor in the decision to outsource.

Exhibit IV-9 lists the extent to which other process attributes are associated with business process outsourcing in the discrete manufacturing sector.

High technical content and labor intensity are seen as the major factors. Many organizations in the discrete manufacturing sector are moving their production facilities out of the U.S. to regions of low labor cost.

Exhibit IV-9

**Major Characteristics of Processes Selected for Outsourcing:
Discrete Manufacturing**



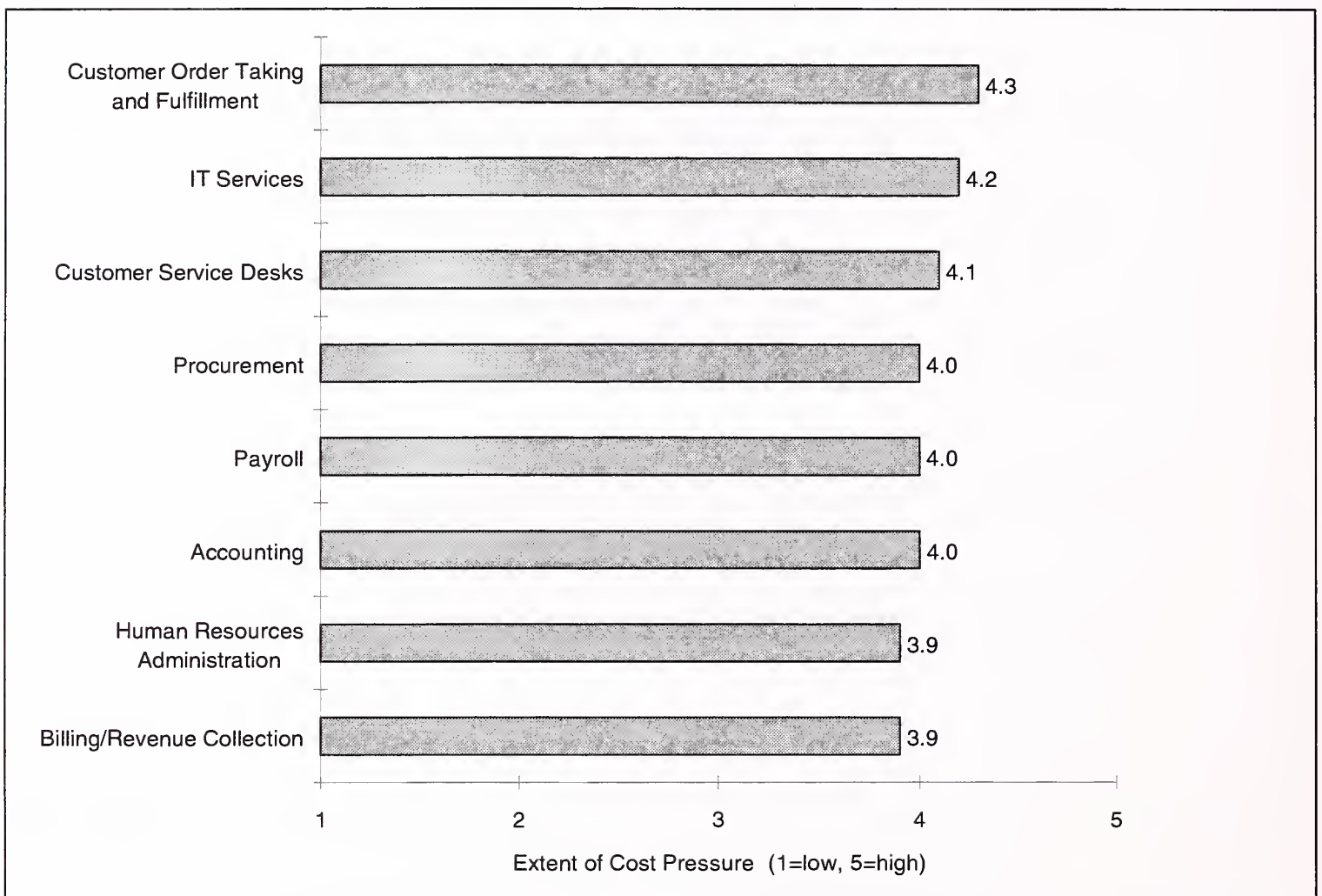
Source: INPUT

Exhibits IV-10 to IV-12 list the extent to which a number of business functions within the discrete manufacturing sector are perceived to:

- Be subject to a high level of cost pressure
- Provide competitive differentiation for the organization
- Require high levels of future investment

Exhibit IV-10

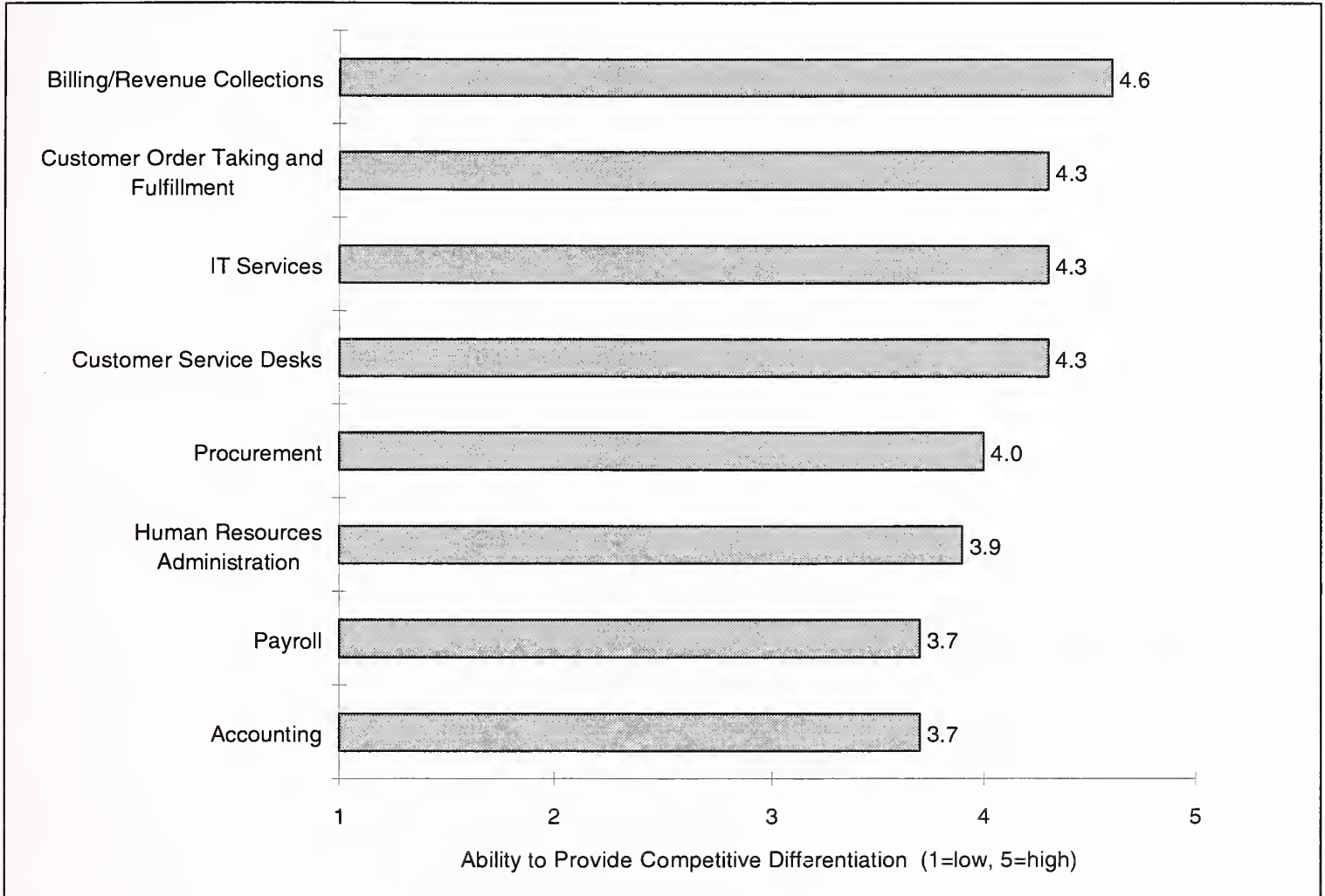
**Cost Pressure by Business Function:
Discrete Manufacturing**



Source: INPUT

Exhibit IV-11

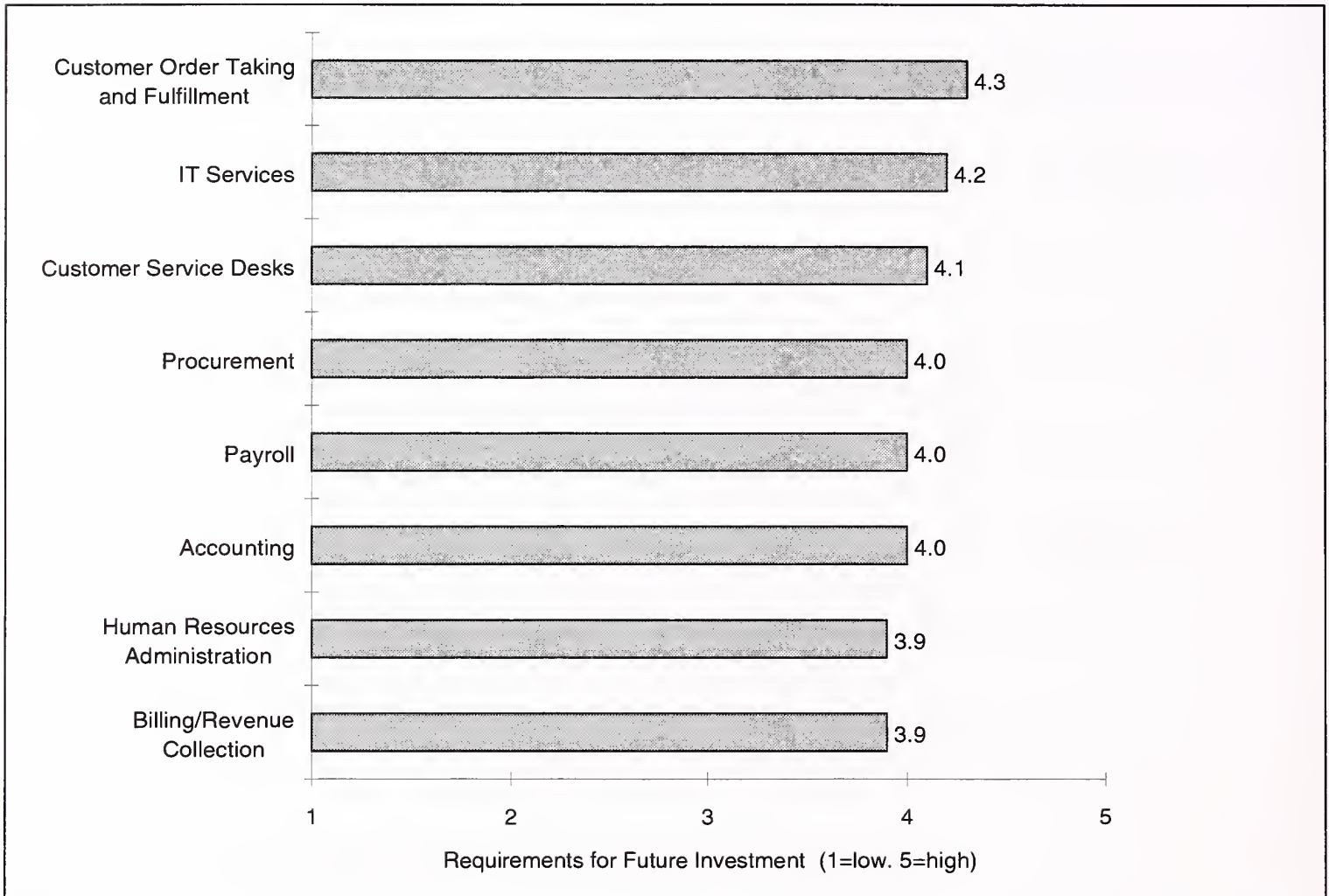
**Competitive Pressure by Business Function:
Discrete Manufacturing**



Source: INPUT

Exhibit IV-12

**Investment Pressure by Business Function:
Discrete Manufacturing**



Source: INPUT

The five areas under the most investment pressure in the discrete manufacturing sector are:

- Customer order taking and fulfillment
- IT services
- Customer service desks
- Procurement
- IT services
- Accounting

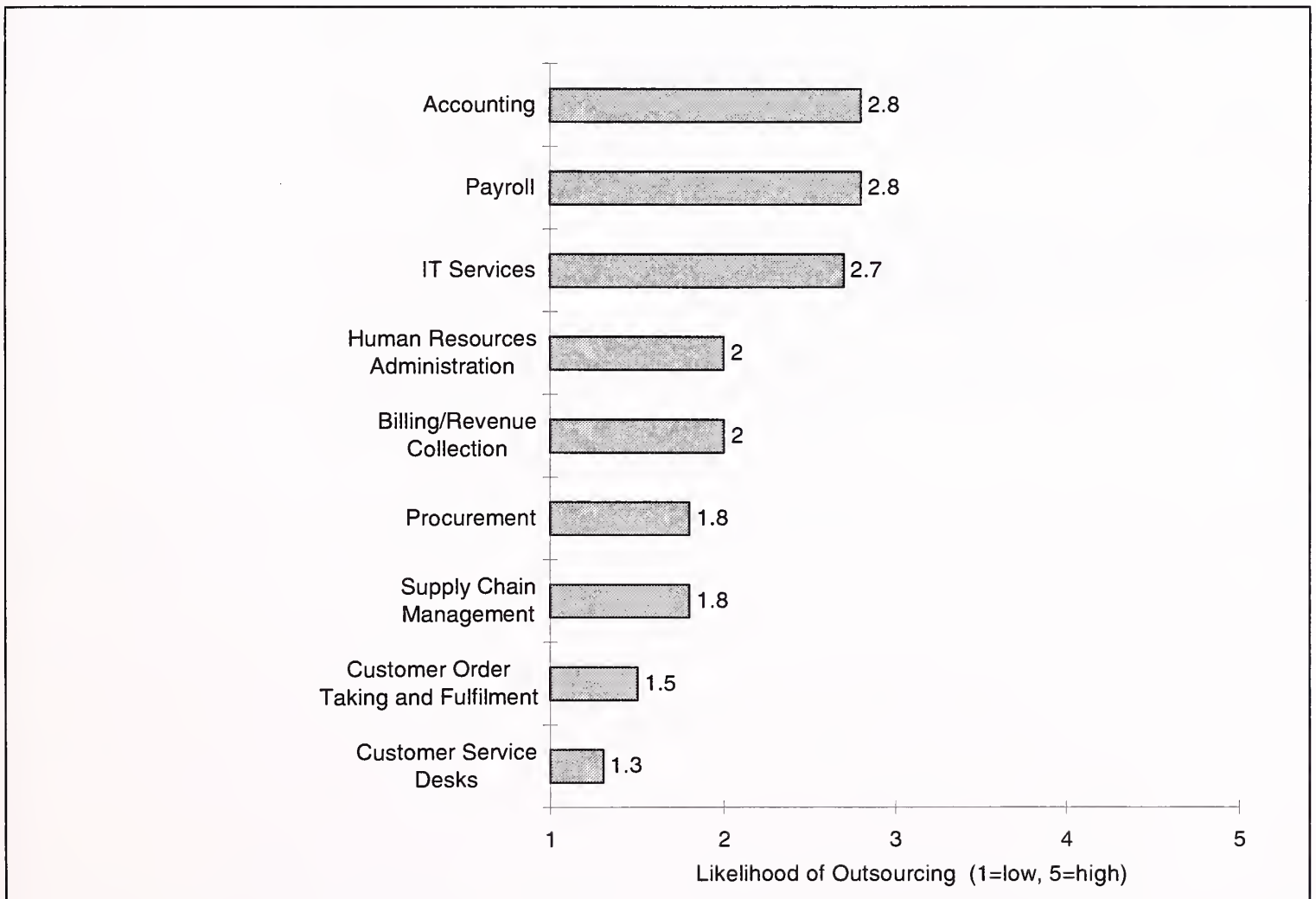
Of these, cost pressure is highest for customer order taking and fulfillment, IT services, and customer service desks, all of which present potential opportunities for outsourcing vendors.

Procurement and payroll also present increasing opportunities. EDS has a ten-year contract to manage the procurement function for Federal Mogul, a vehicle parts manufacturer. EDS is managing maintenance, repair, and operations (MRO) procurement functions, providing access to its own supplier network, and streamlining procurement processes for Federal Mogul.

Exhibit IV-13 shows the likelihood of organizations in the discrete manufacturing sector to outsource each of a number of activities.

Exhibit IV-13

**Business Process Outsourcing Intentions:
Discrete Manufacturing**



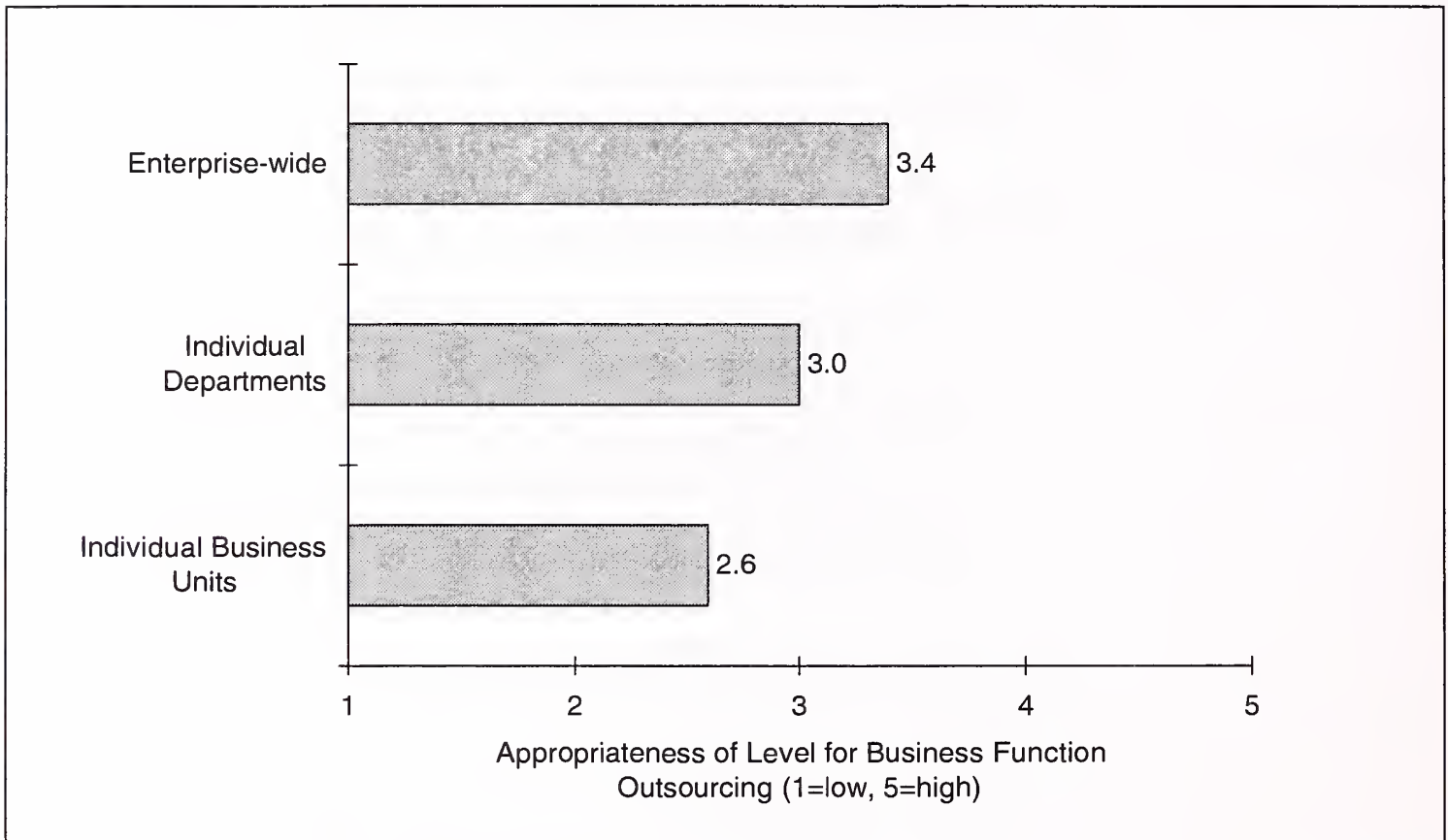
Source: INPUT

The principal opportunities for vendors appear to be in outsourcing accounting, payroll, and IT services.

Managers within the discrete manufacturing sector perceive business process outsourcing to be most appropriate at the enterprise level, rather than at the business unit or departmental level (Exhibit IV-14).

Exhibit IV-14

**Organizational Level of Business Process Outsourcing:
Discrete Manufacturing**



Source: INPUT

C**Process Manufacturing**

Managers in the process manufacturing sector exhibit a relatively high level of enthusiasm for the concept of the virtual corporation, making this sector a prime candidate for the adoption of business process outsourcing.

This sector already contains an excellent example of a subsector in which multiple organizations have outsourced a business process to an individual vendor: five oil companies operating in the North Sea have outsourced the provision of day-to-day accounting services to Andersen Consulting.

Andersen Consulting is also providing financial administrative services to five major British Petroleum businesses in the U.S. The standardization of these processes is expected to increase efficiency, reduce costs, and enable British Petroleum to focus on core activities.

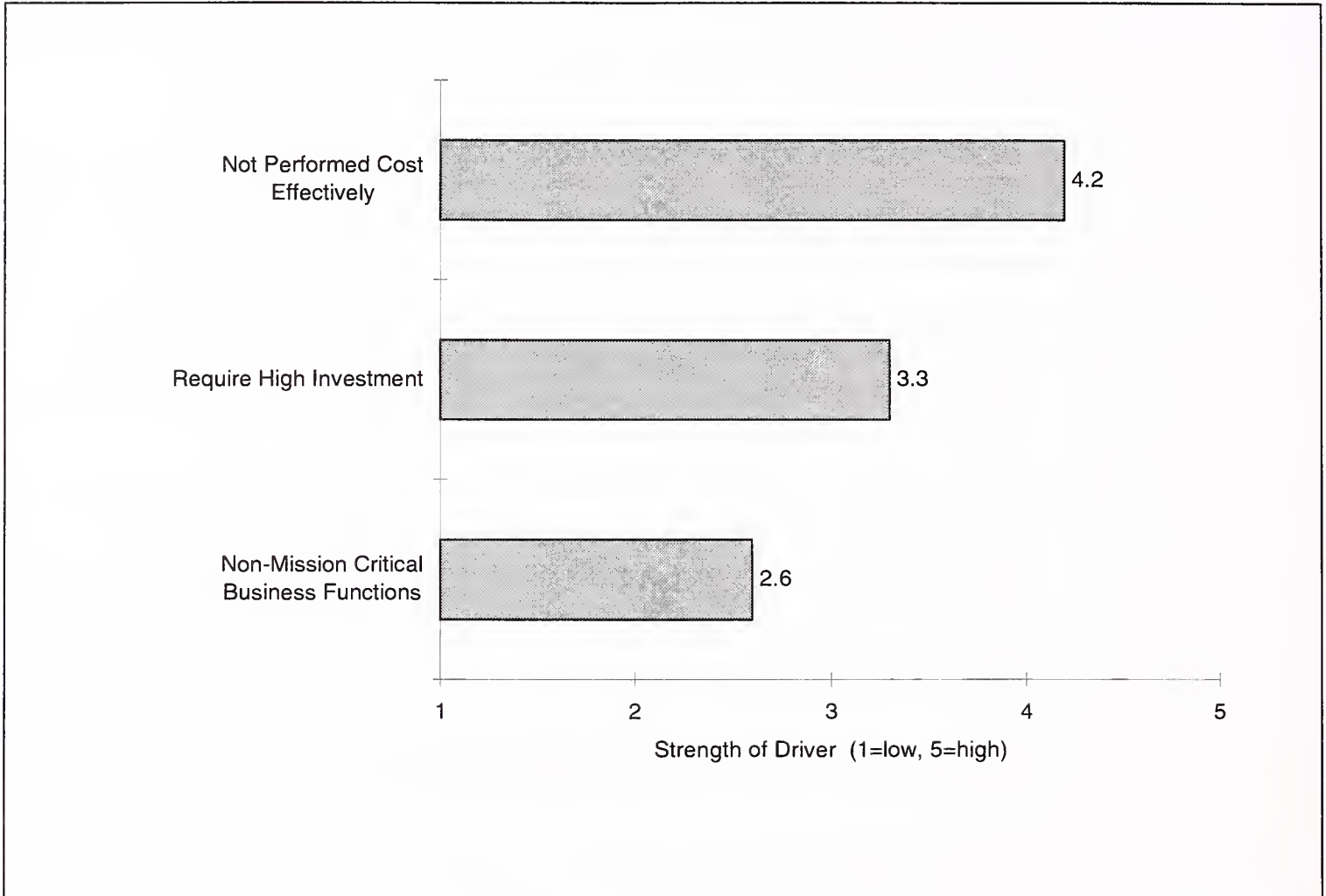
The acceptance of business process outsourcing is also evident elsewhere in the process manufacturing sector. EDS has an outsourcing contract with Spain's largest oil company, REPSOL, to provide a comprehensive Dispatching Analysis Study and to improve REPSOL's distribution logistics. And Exel Logistics North America is managing the logistics business for Du Pont's Printing and Distribution unit.

The acceptance of the business process outsourcing approach is also evident to a less marked extent elsewhere in the process manufacturing sector.

Exhibit IV-15 lists the relative importance of a number of potential drivers of business function outsourcing in the process manufacturing sector.

Exhibit IV-15

**Drivers of Business Process Outsourcing:
Process Manufacturing**



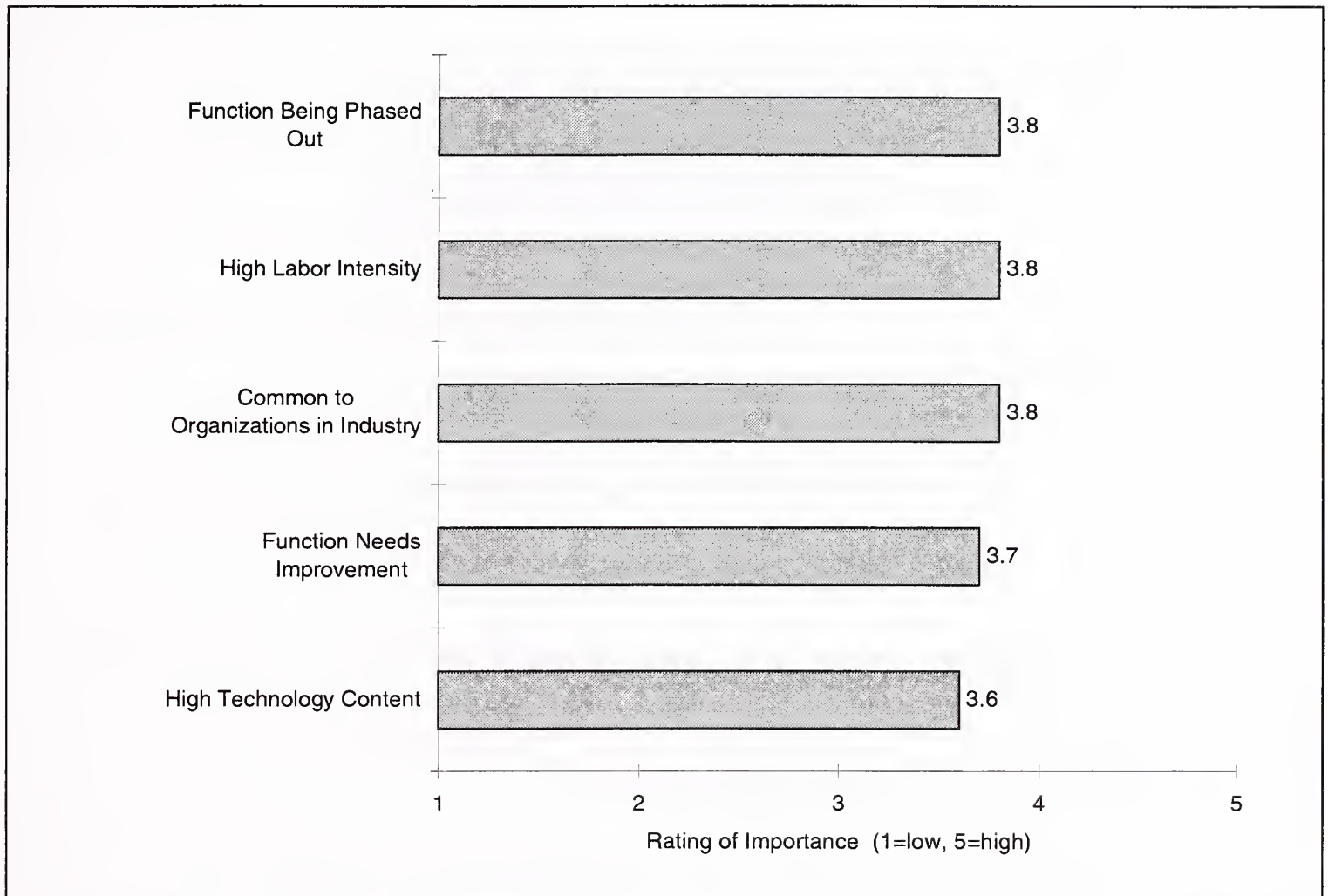
Source: INPUT

Cost effectiveness is the strongest driver of business process outsourcing in the process manufacturing sector, followed by high investment requirements to do the work in-house.

Exhibit IV-16 lists the extent to which other attributes are associated with business process outsourcing in the process manufacturing sector.

Exhibit IV-16

Major Characteristics of Processes Selected for Outsourcing: Process Manufacturing



Source: INPUT

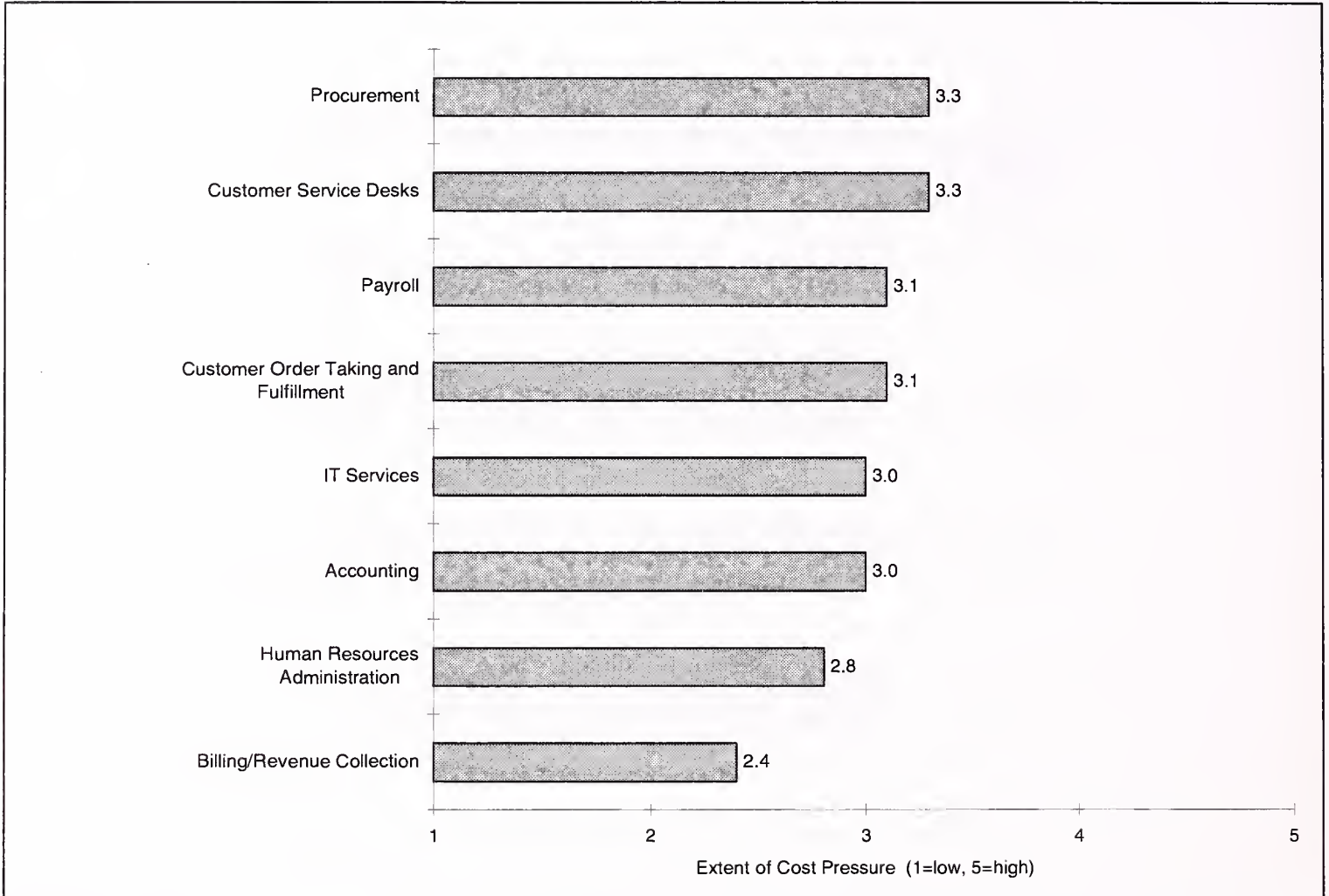
High labor intensity, common industry processes, and the phasing out of a function appear to be the most significant drivers of business process outsourcing in the process manufacturing sector.

Exhibits IV-17 to IV-19 indicate the extent to which a number of business functions within the process manufacturing sector are perceived to:

- Be subject to a high level of cost pressure
- Provide competitive differentiation for the organization
- Require high levels of future investment

Exhibit IV-17

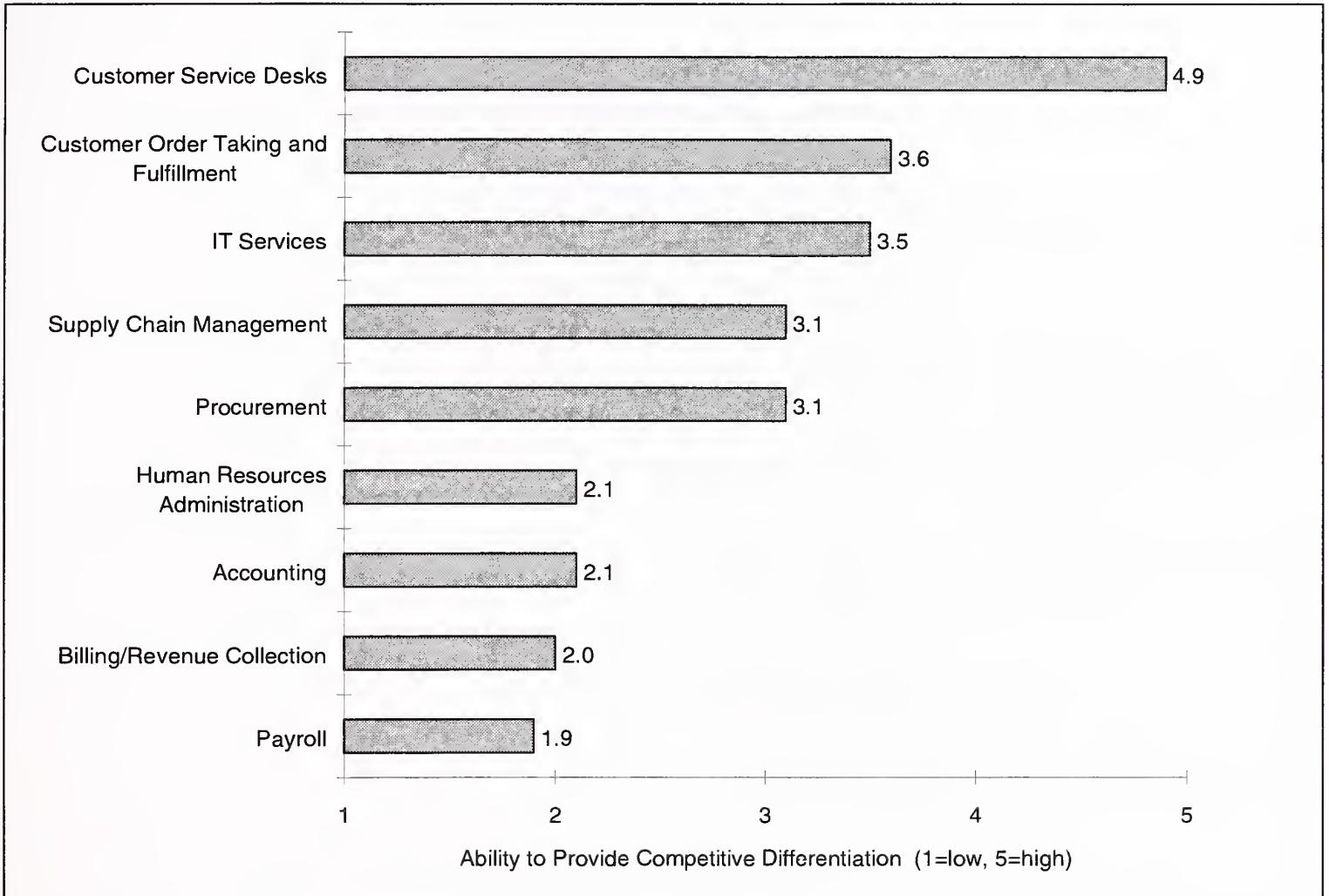
**Cost Pressure by Business Function:
Process Manufacturing**



Source: INPUT

Exhibit IV-18

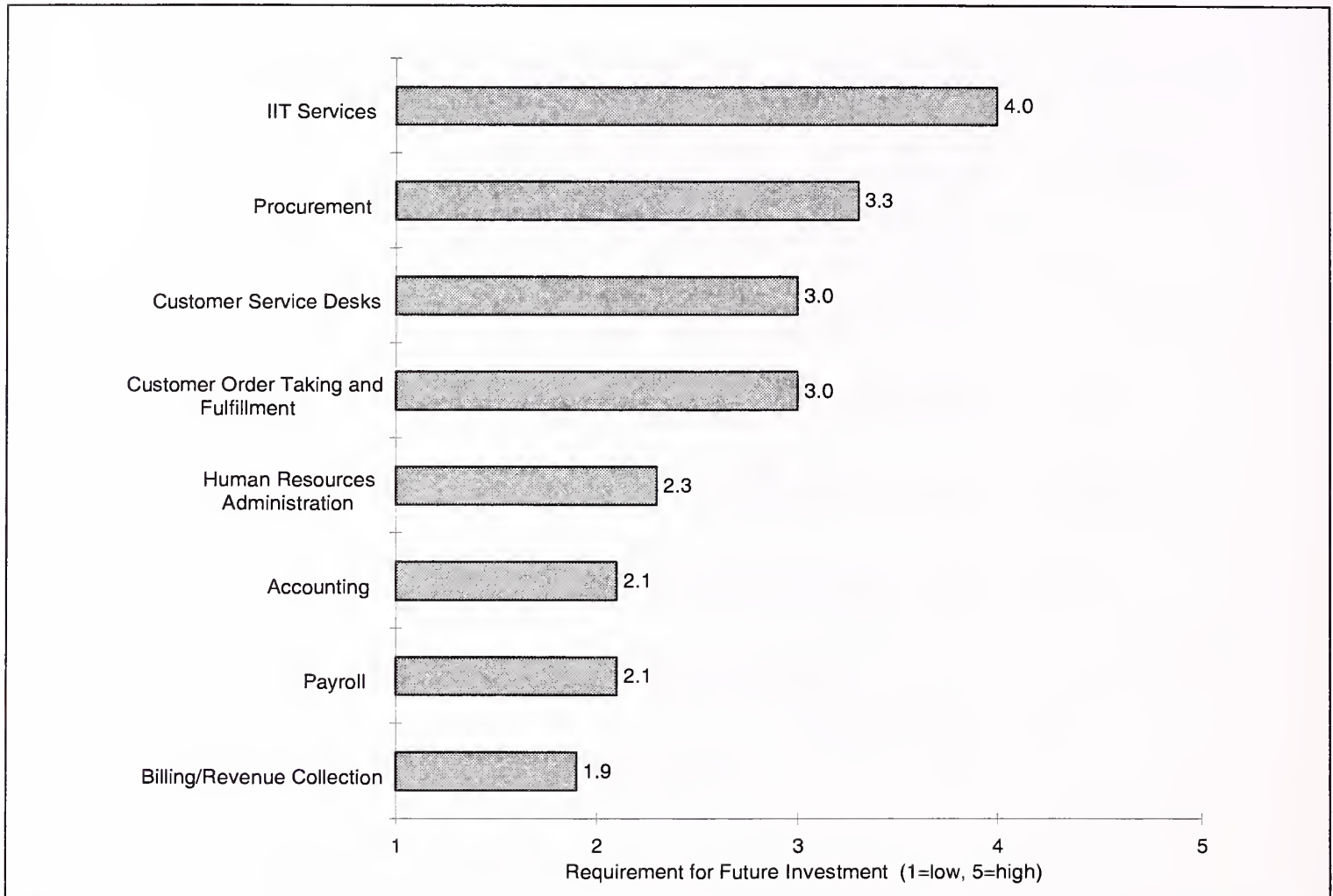
**Competitive Pressure by Business Function:
Process Manufacturing**



Source: INPUT

Exhibit IV-19

Investment Pressure by Business Function: Process Manufacturing



Source: INPUT

The five activities in the process manufacturing sector with the highest levels of investment and cost pressure are:

- Customer service desks
- IT services
- Customer order taking and fulfillment
- Procurement
- Supply chain management

These functions are also perceived to deliver the highest levels of competitive differentiation to the organization. The challenge for vendors is implementing business processes in a manner that benefits the client by

reengineering the process and sharing the reengineered facility across a number of organizations.

It can be difficult sometimes for the vendor to justify reengineering on behalf of a single client, given that the contract can be expected to include:

- Improved service levels
- Reduced transaction costs over time

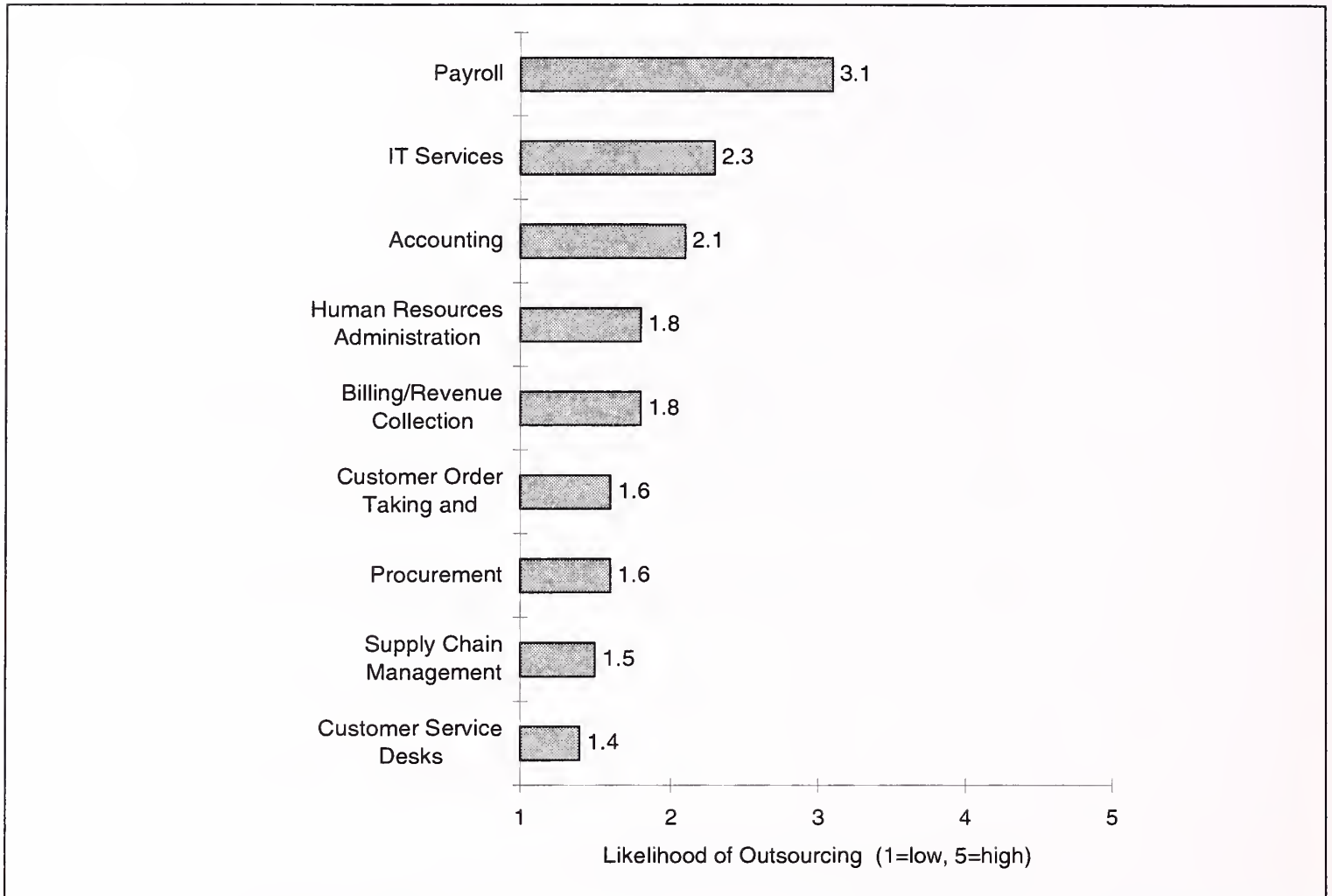
However, without reengineering the process, it may be difficult to achieve an ongoing reduction in transaction costs.

Ideally, the vendor needs to identify a group of organizations with common processes. This probably means identifying a specific industry subsector with companies that wish to reduce the investment and costs related to a process, such as supply chain management, but do not see this activity as a major source of competitive differentiation.

The activities most likely to be outsourced within the process manufacturing sector are payroll, IT services, and accounting (Exhibit IV-20).

Exhibit IV-20

**Business Process Outsourcing Intentions:
Process Manufacturing**

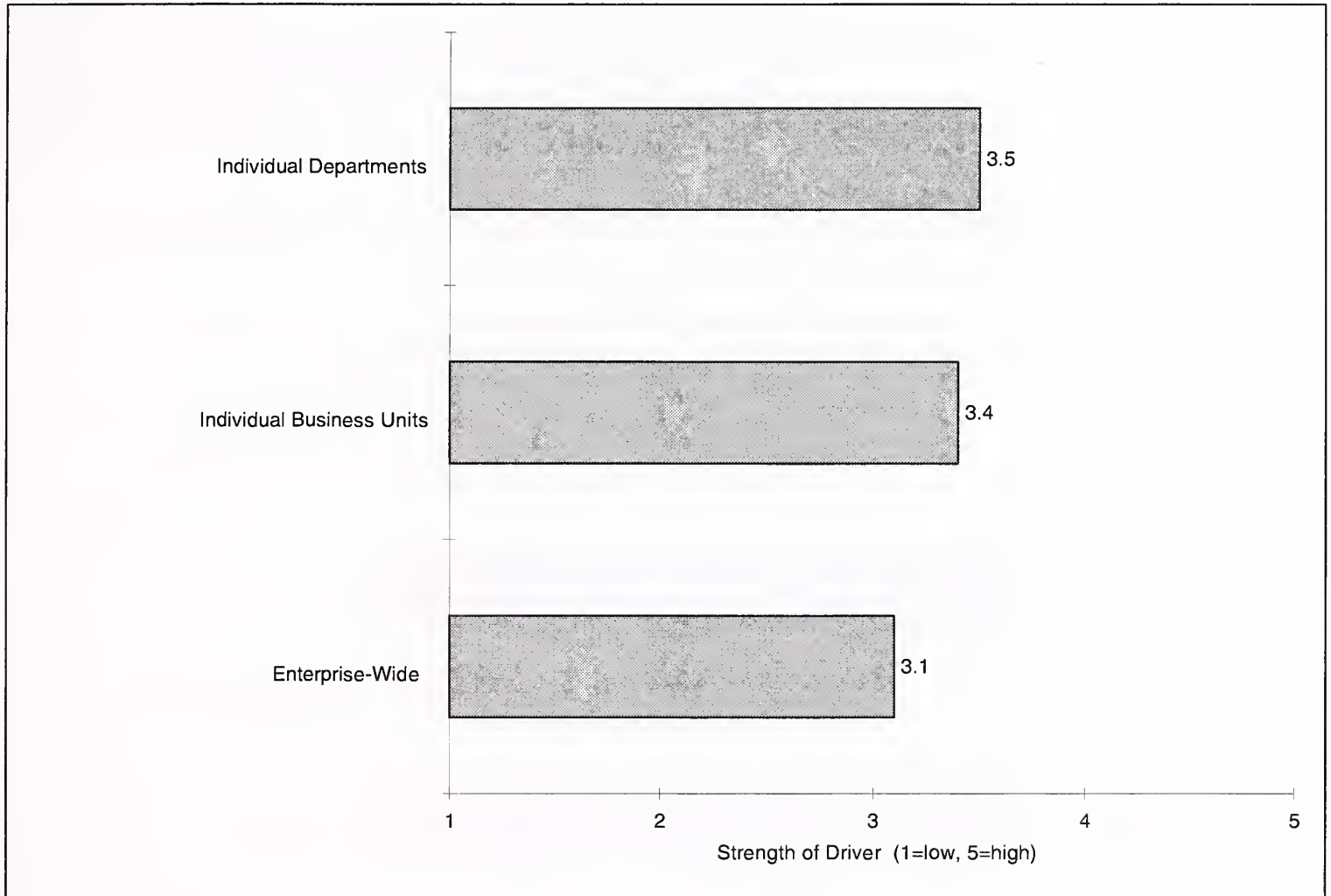


Source: INPUT

Managers within the process manufacturing sector perceive that business process outsourcing is more appropriate at the individual department and business unit levels than at the enterprise level. (Exhibit IV-21).

Exhibit IV-21

**Organizational Level of Business Process Outsourcing:
Process Manufacturing**



Source: INPUT

D

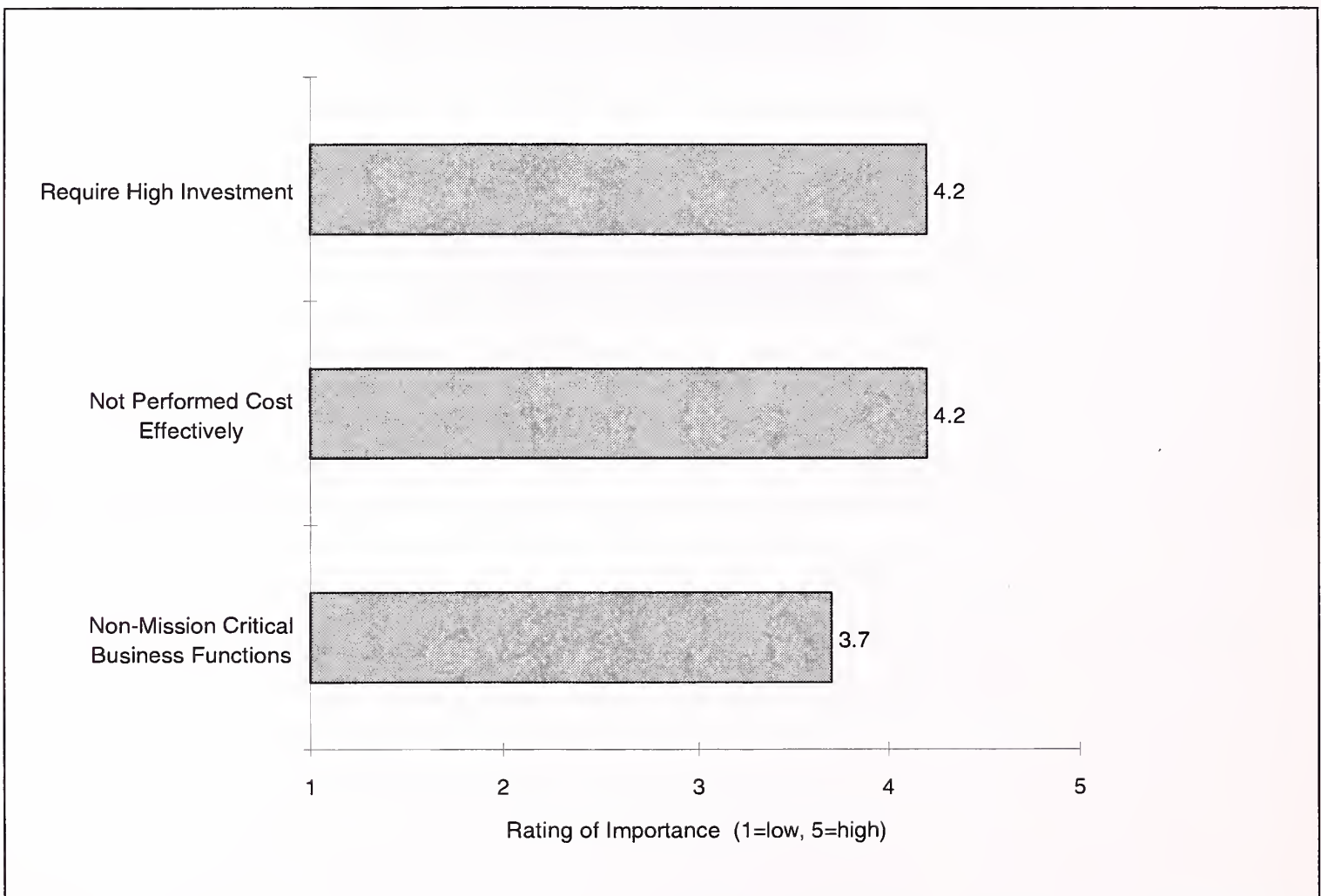
Retail

Managers in the retail sector have a relatively lower acceptance rate for the concept of the virtual corporation. This sector tends to operate as a closed community with a comparatively low exchange of management with other business sectors. In addition, the sector has so far been comparatively slow to adopt IT outsourcing.

Exhibit IV-22 lists the relative importance of a number of potential drivers of business process outsourcing in the retail sector.

Exhibit IV-22

Drivers of Business Process Outsourcing: Retail



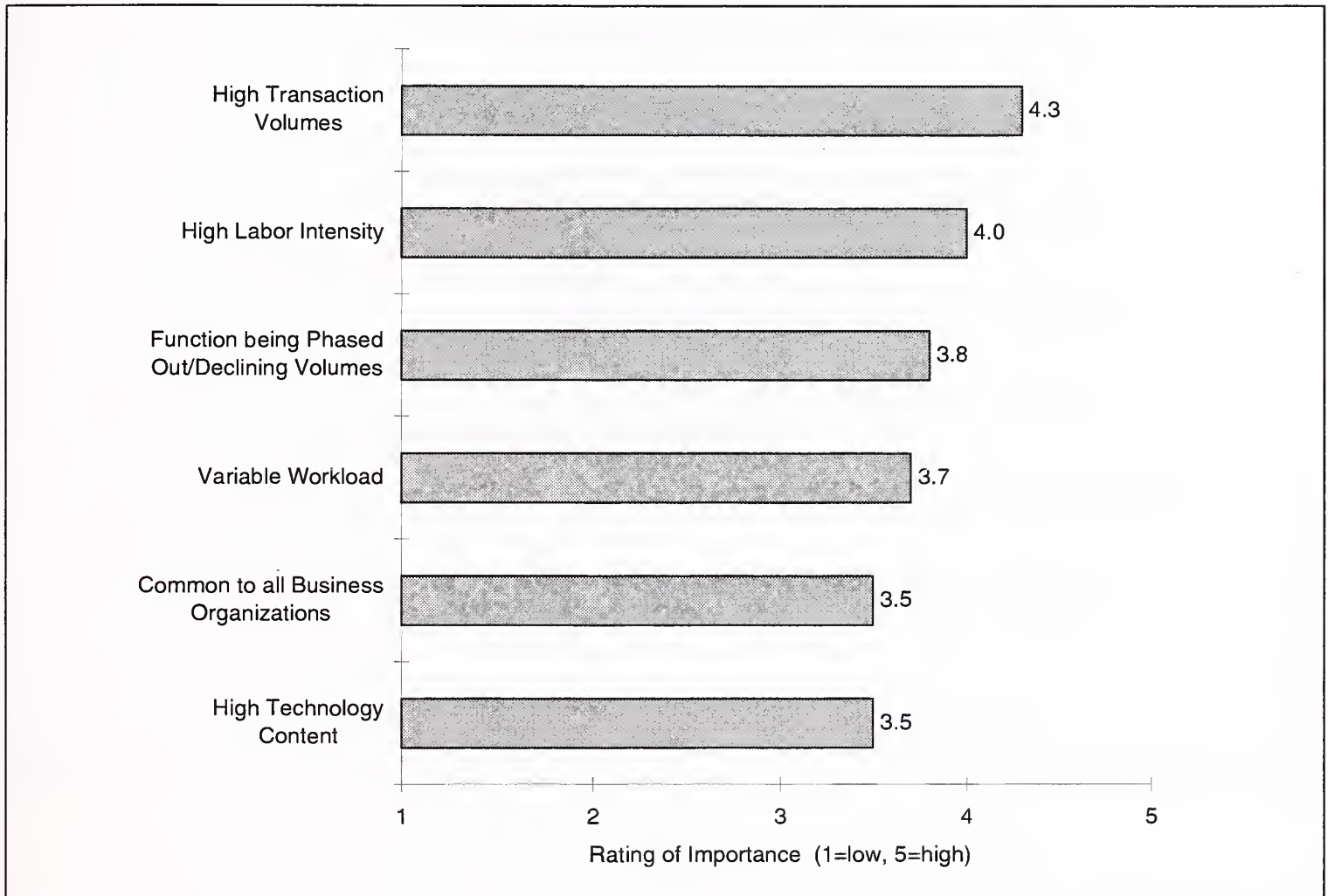
Source: INPUT

The need for high investment and internal process cost effectiveness are significant drivers of business operations outsourcing within the retail sector.

Exhibit IV-23 indicates the extent to which other process attributes are associated with process outsourcing in the retail sector.

Exhibit IV-23

Major Characteristics of Processes Selected for Outsourcing: Retail



Source: INPUT

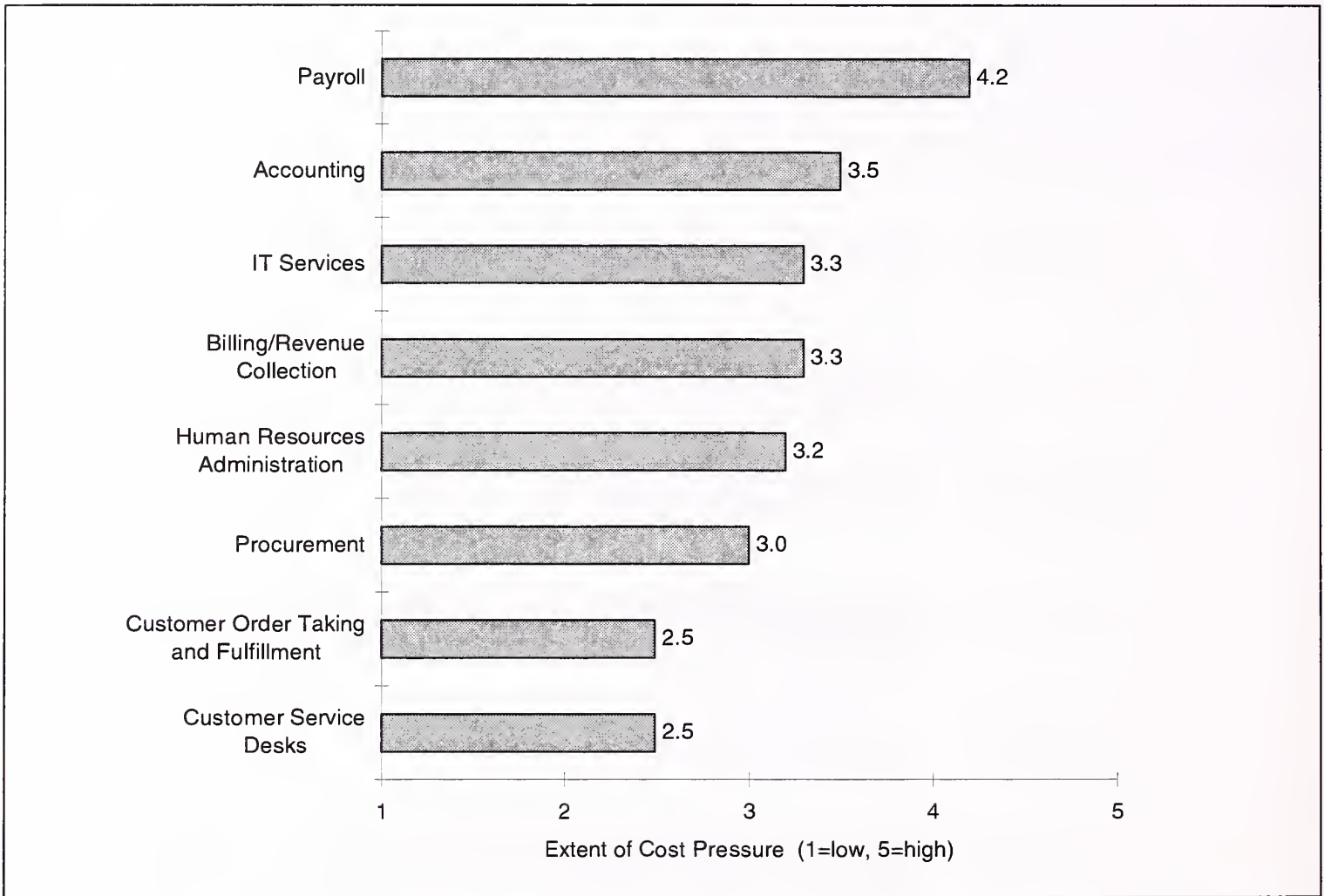
High transaction volumes are the most important factor considered in the retail sector in determining a process's suitability for outsourcing.

Exhibits IV-24 to IV-26 list the extent to which a number of business functions within the retail sector are perceived to:

- Be subject to a high level of cost pressure
- Provide competitive differentiation for the organization
- Require high levels of future investment

Exhibit IV-24

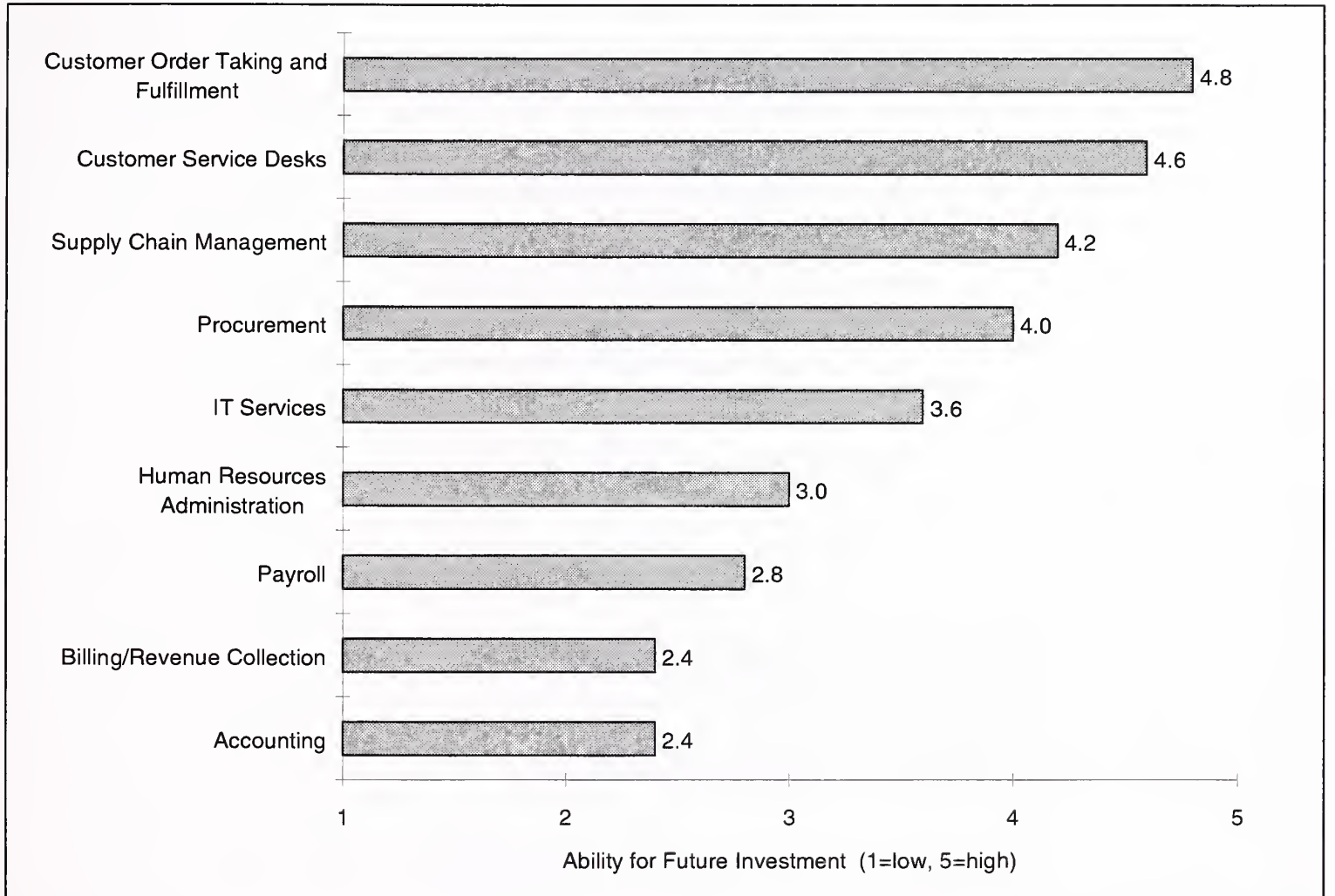
Cost Pressure by Business Function: Retail



Source: INPUT

Exhibit IV-25

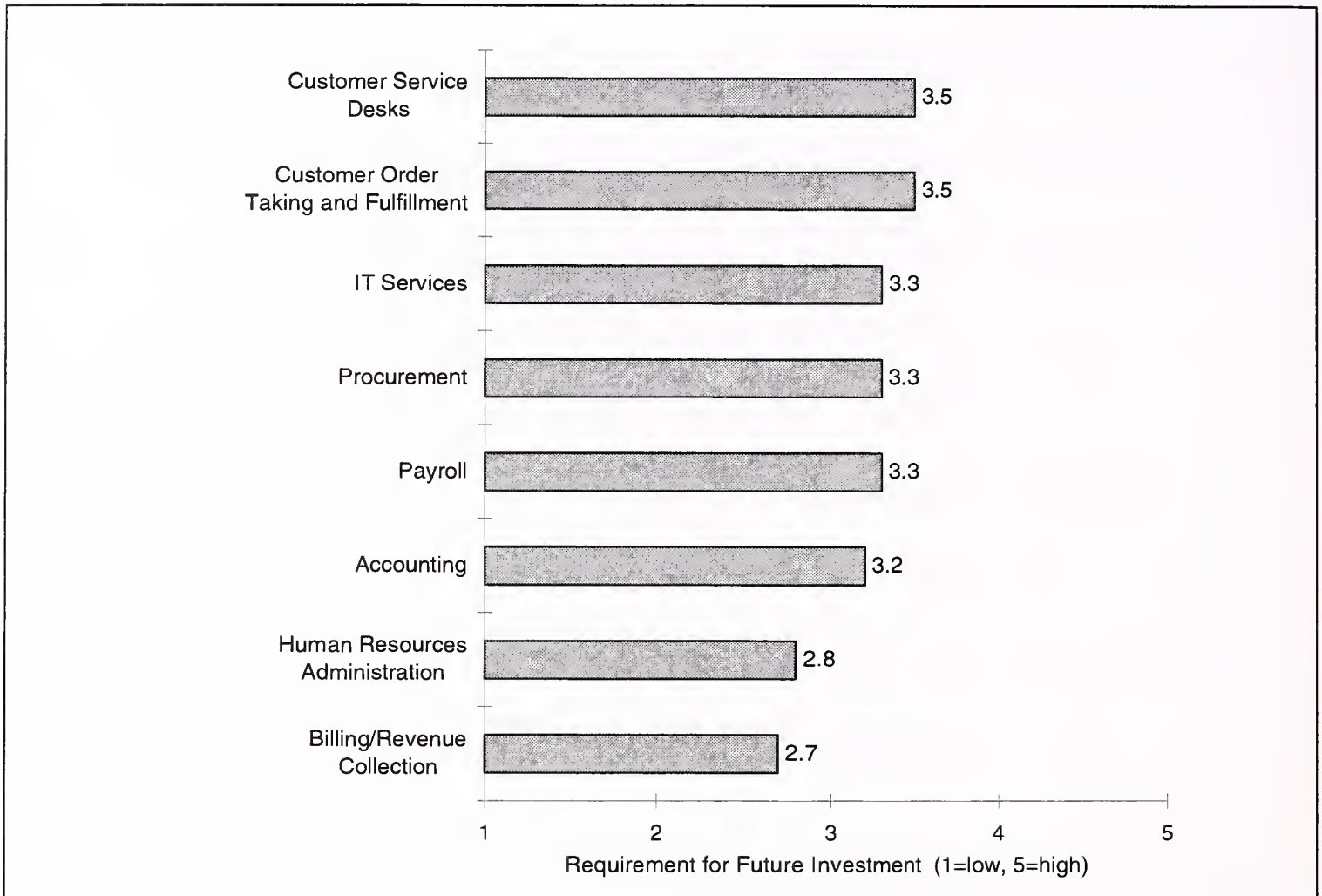
Competitive Pressure by Business Function: Retail



Source: INPUT

Exhibit IV-26

Investment Pressure by Business Function: Retail



Source: INPUT

The business function facing the greatest cost pressure is payroll. The functions facing the greatest investment pressure are payroll, customer order entry and fulfillment, customer service desks, procurement, and IT services.

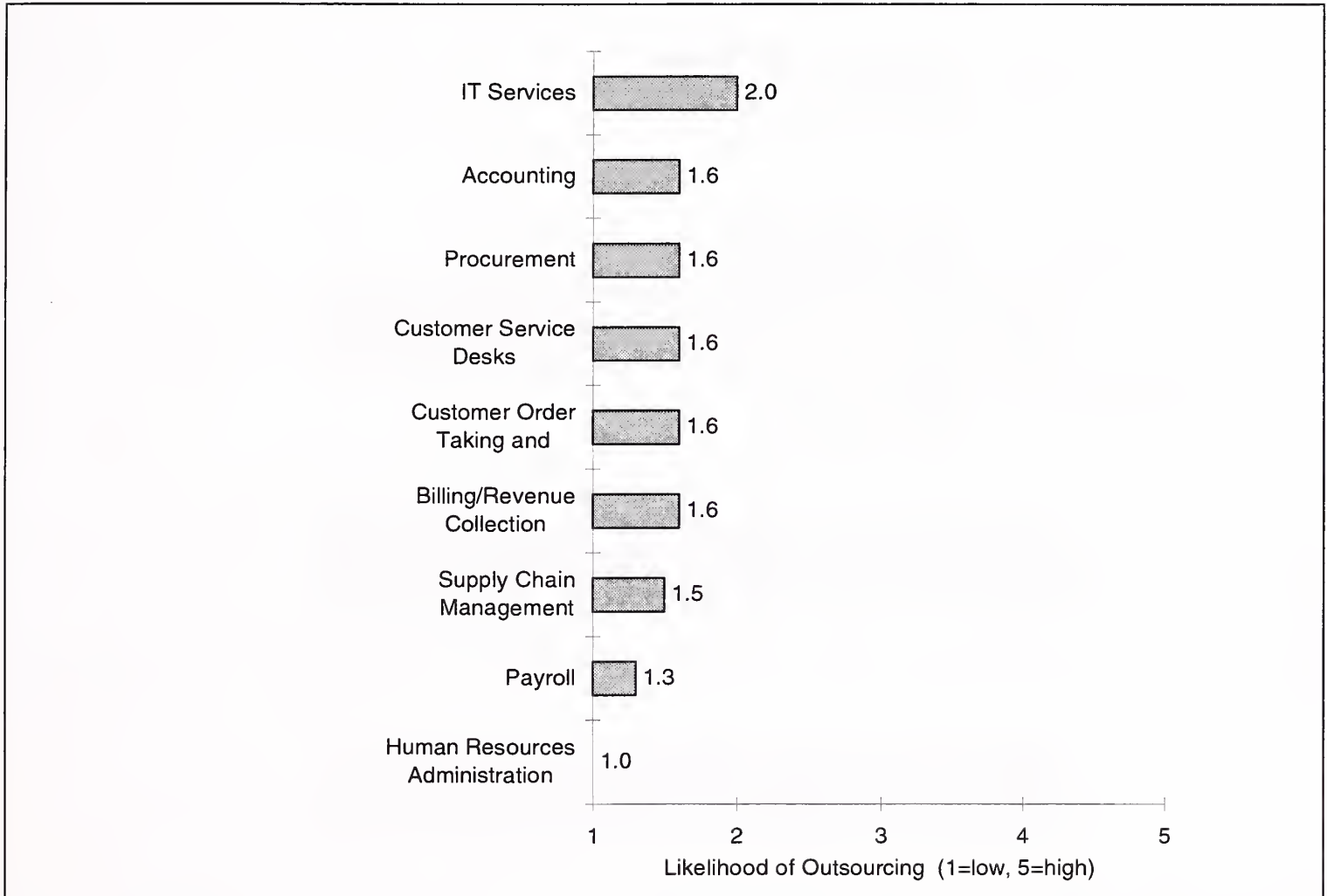
Competitive pressure is felt to be greatest in differentiating processes such as customer order entry and fulfillment, customer service desks, supply chain management, and procurement. This is a strong indicator of opportunity for vendors of business process outsourcing.

In the retail sector, Systems Maintenance Specialists (SMS) is managing financial, inventory management, and distribution activities for Warehouse Entertainment, a retailer of prerecorded home entertainment. And EDS is designing an order processing and distribution system for electronics retailer Computer City, with which it has formed a partnership to help develop Computer City's business with corporate clients.

Exhibit IV-27 indicates the likelihood of organizations in the retail sector outsourcing each of a number of activities.

Exhibit IV-27

Business Process Outsourcing Intentions: Retail



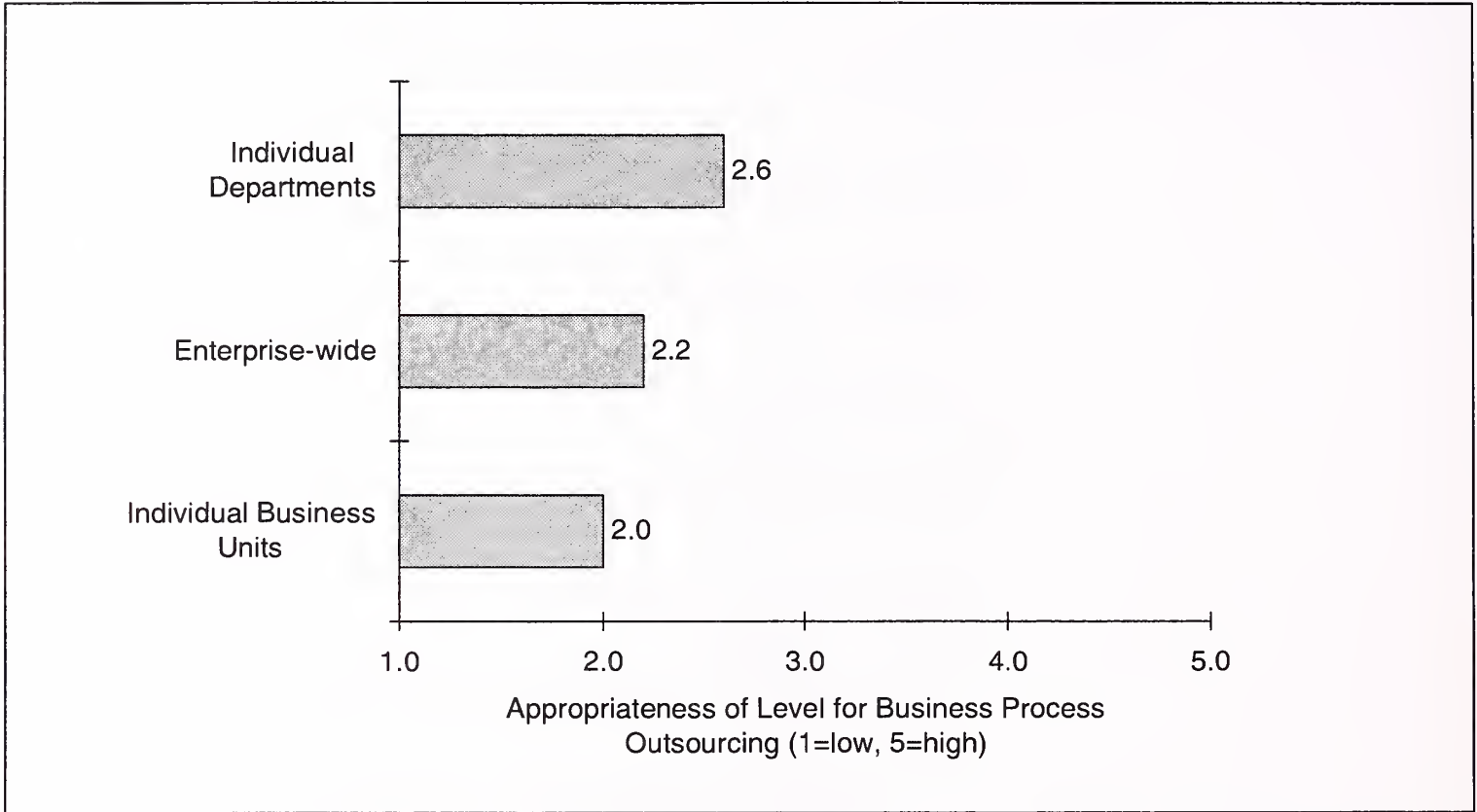
Source: INPUT

The activity that managers in the retail sector show the greatest propensity to outsource is IT, followed by processes such as customer order entry and fulfillment, customer service desks, procurement, accounting, and supply chain management-most of which can be strong differentiators in this industry.

Managers within the retail sector appear to perceive that business process outsourcing is more appropriate at the departmental rather than the enterprise or business unit levels (Exhibit IV-28).

Exhibit IV-28

Organizational Level of Business Process Outsourcing: Retail



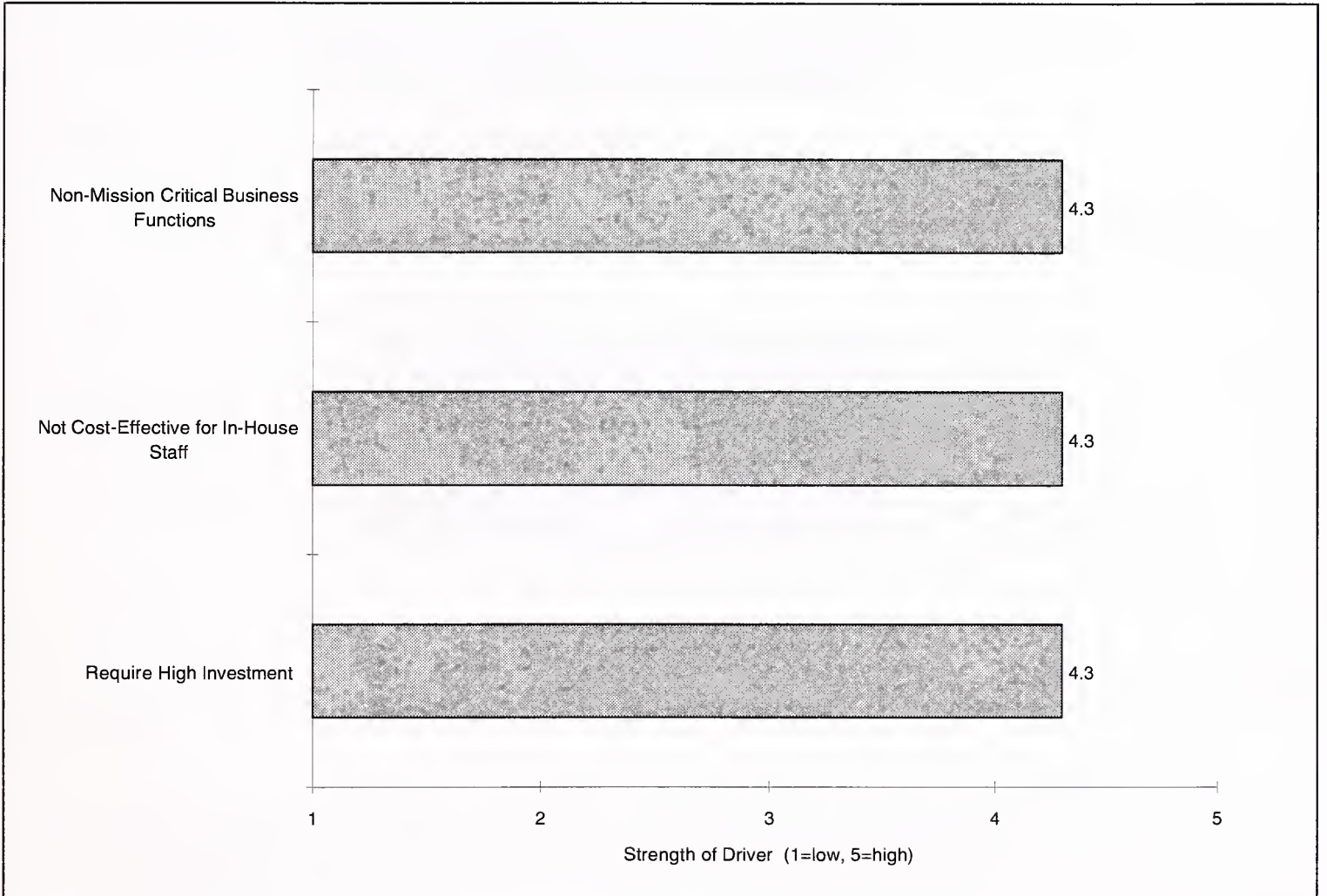
Source INPUT

E
Services

Exhibit IV-29 indicates the relative importance of a number of potential drivers of business process outsourcing in the services sector.

Exhibit IV-29

Drivers of Business Process Outsourcing: Services



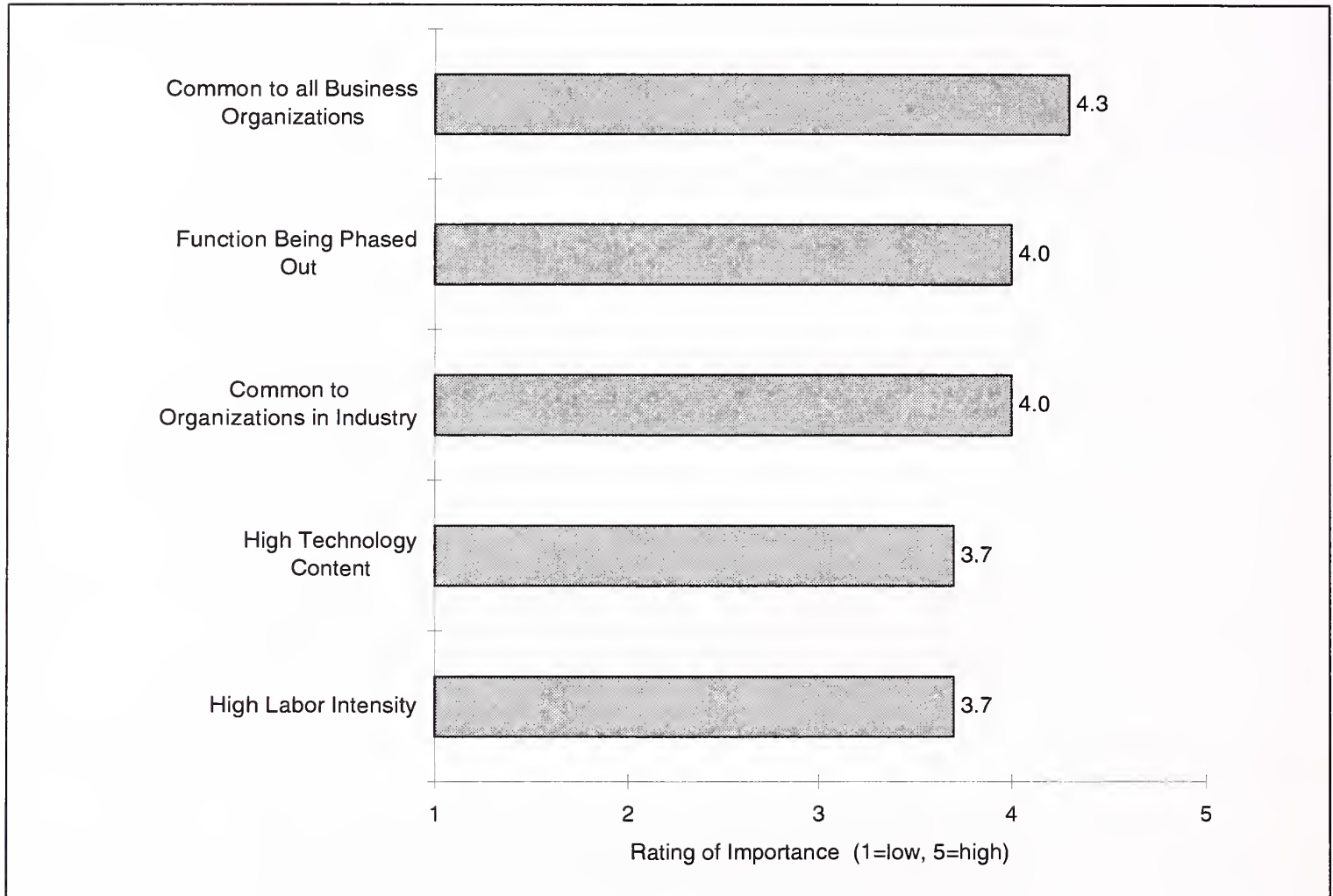
Source: INPUT

All three factors appear to be equally strong drivers of business operations outsourcing in the services sector.

Exhibit IV-30 lists the extent to which other process attributes are associated with process outsourcing in the retail sector.

Exhibit IV-30

Major Characteristics of Processes Selected for Outsourcing: Services



Source: INPUT

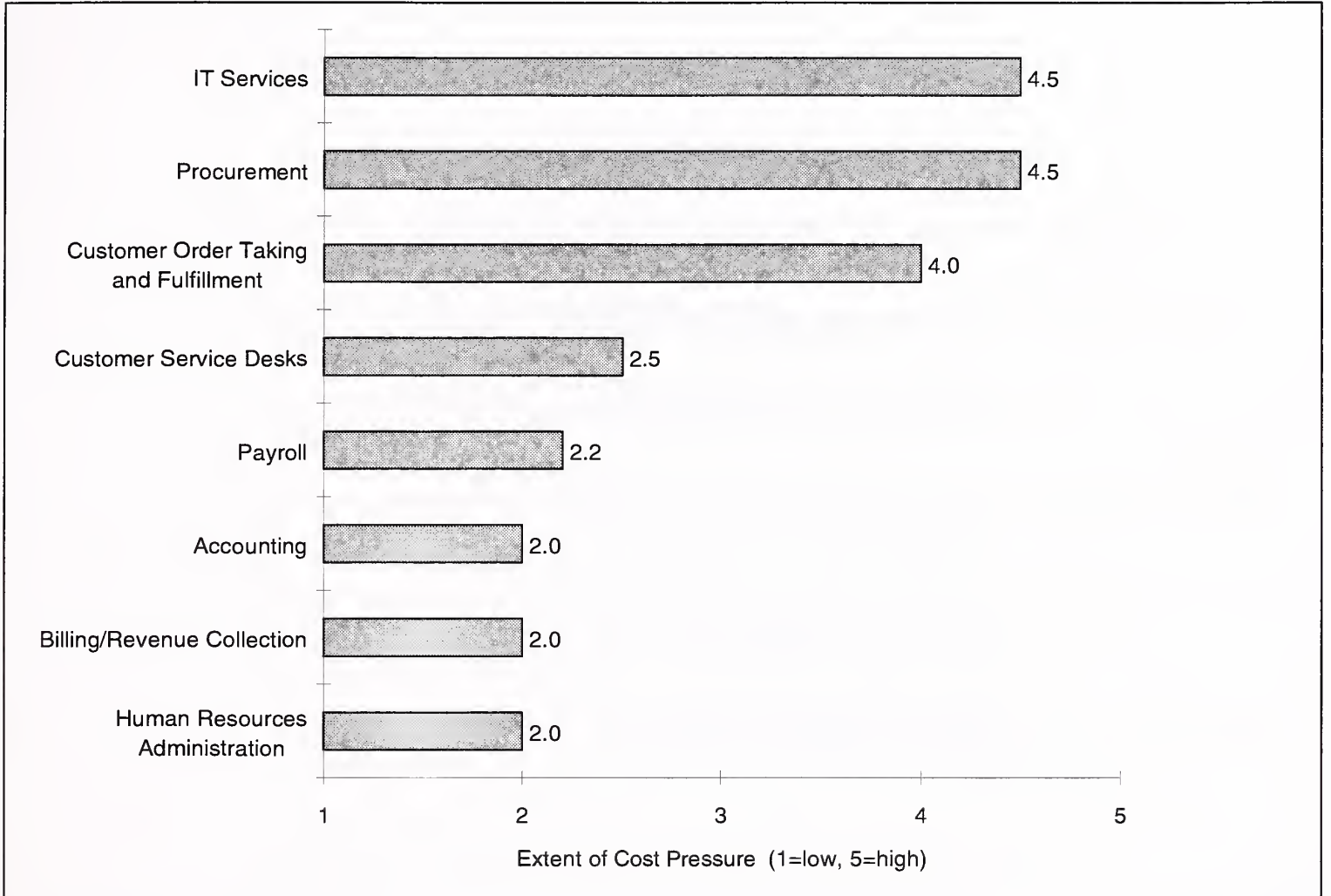
Processes common to organizations in the industry and functions that are being phased out appear to be the major factors in determining the suitability of business processes for outsourcing in the services sector.

Exhibits IV-31 to IV-33 indicate the extent to which a number of business functions within the services sector are perceived to:

- Be subject to a high level of cost pressure
- Provide competitive differentiation for the organization
- Require high levels of future investment

Exhibit IV-31

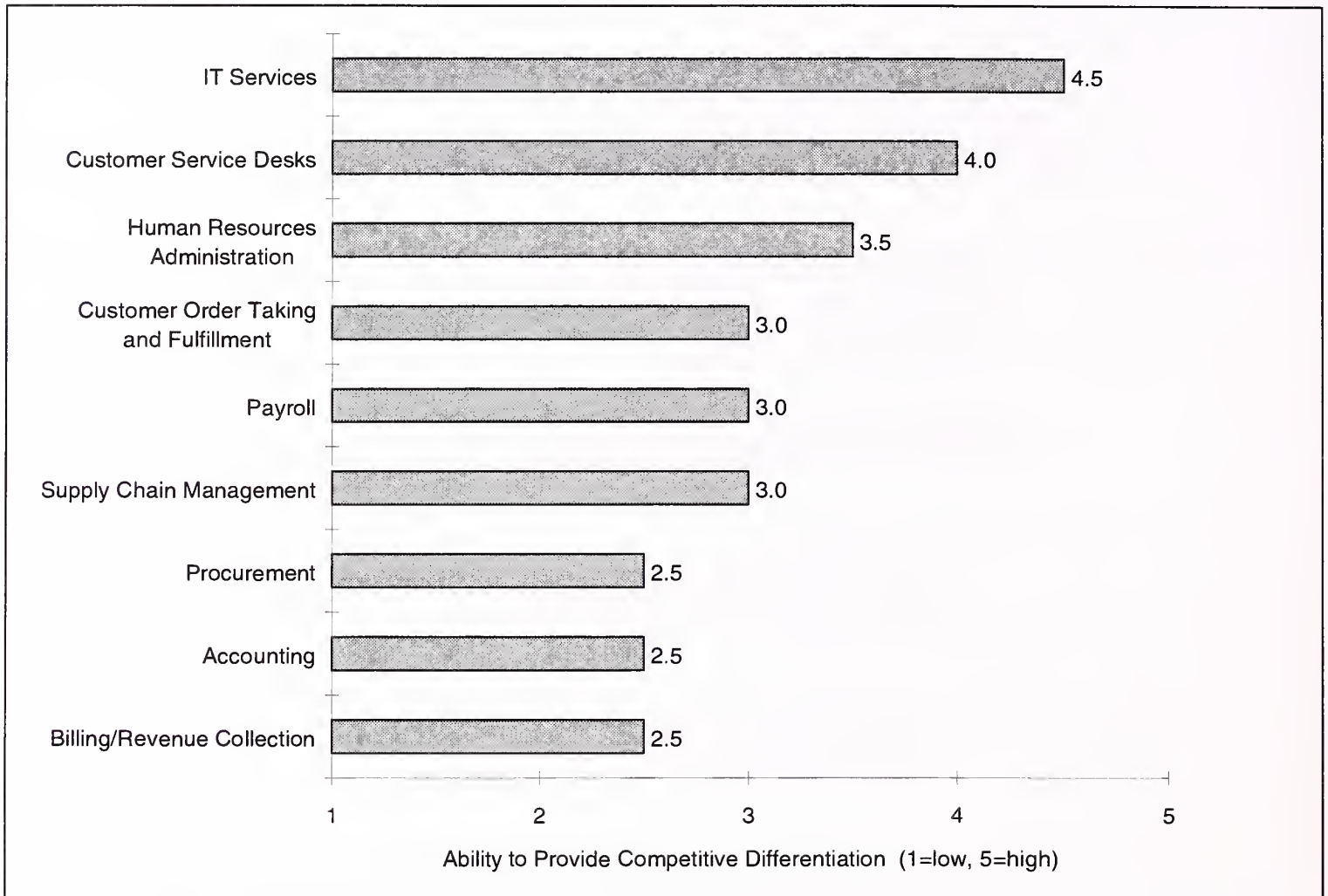
Cost Pressure by Business Function: Services



Source: INPUT

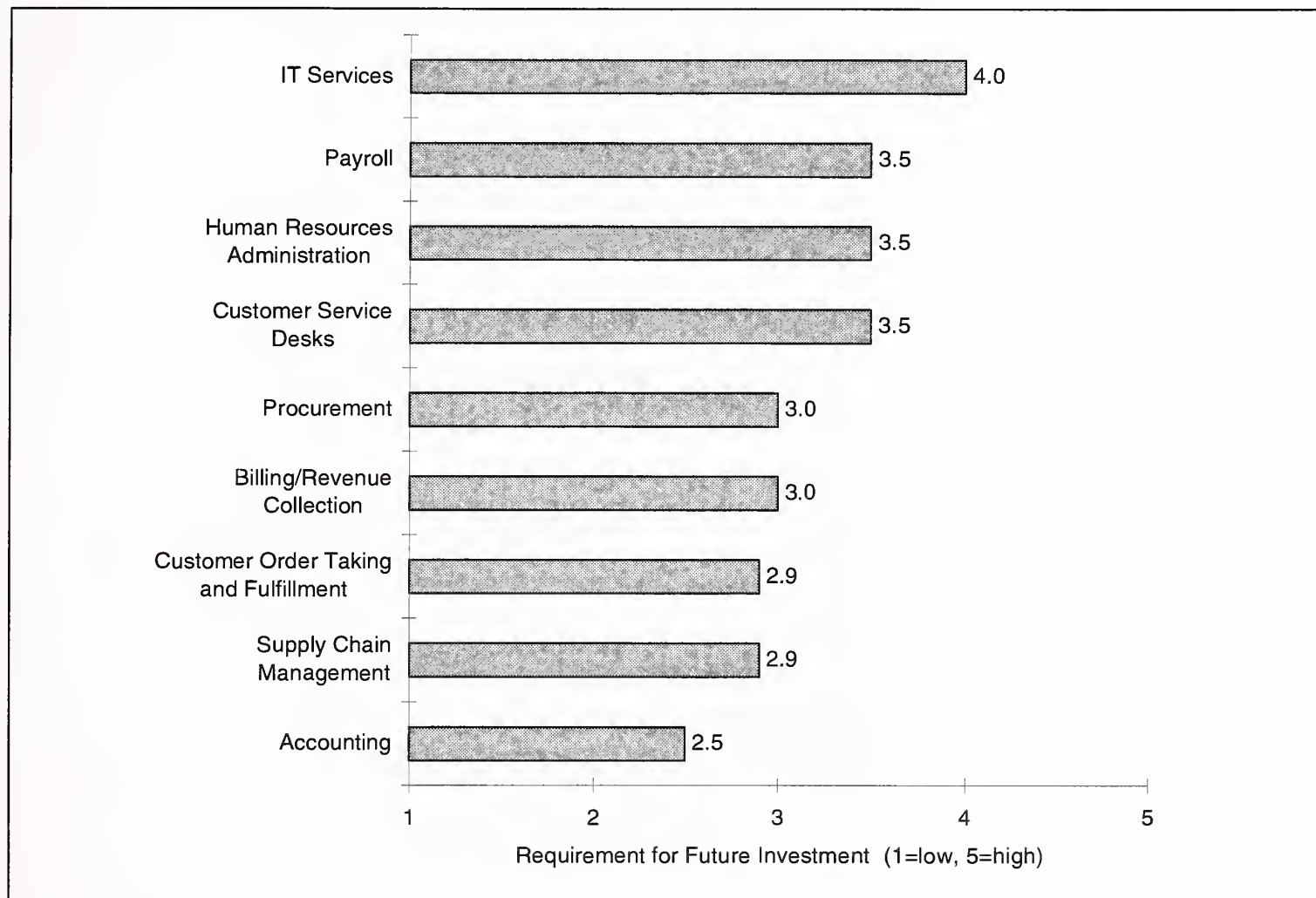
Exhibit IV-32

Competitive Pressure by Business Function: Services



Source: INPUT

Exhibit IV-33

Investment Pressure by Business Function: Services

Source: INPUT

There are three areas facing relatively high investment pressure in the services sector, namely:

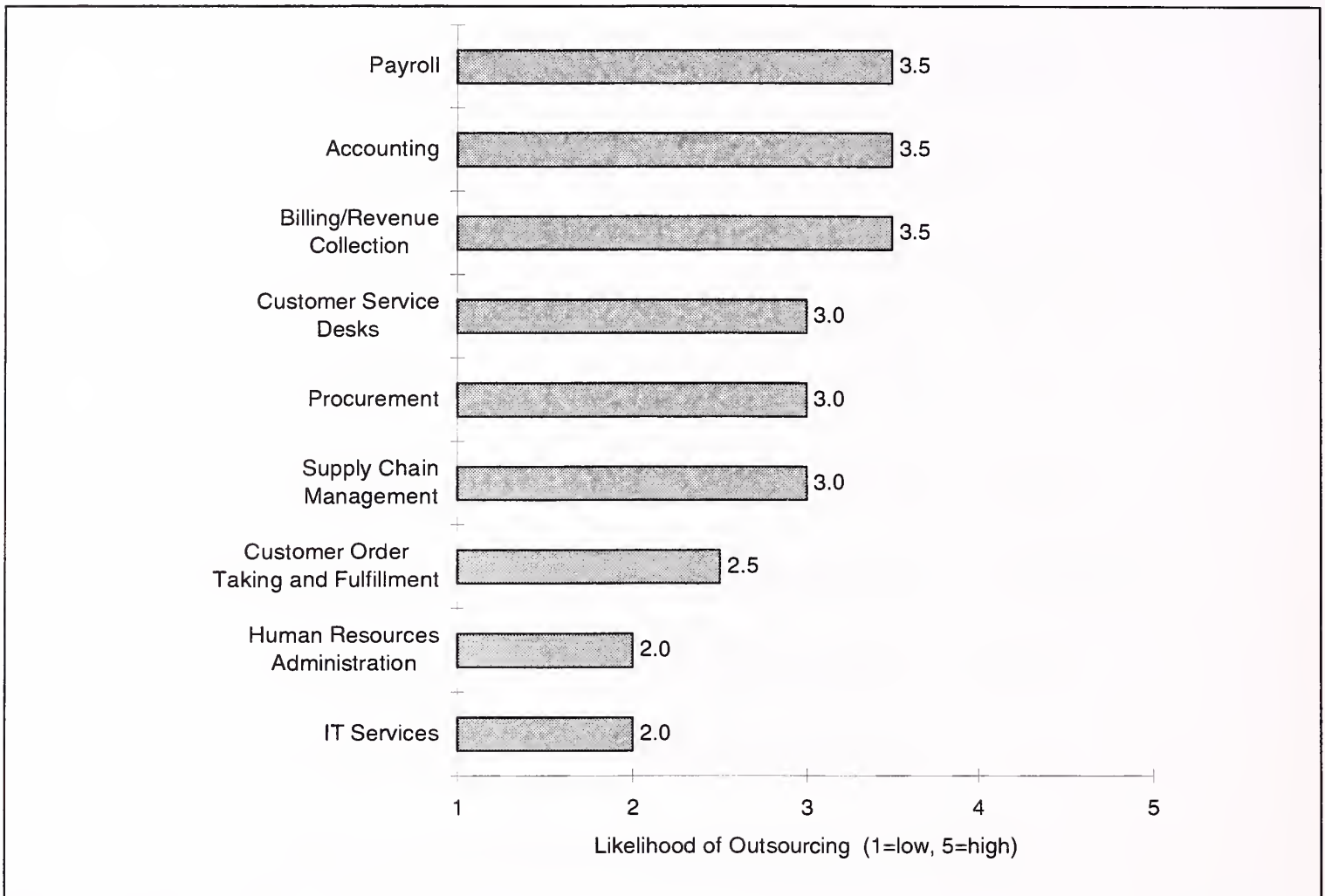
- IT services
- Human resource administration
- Customer service desks

Of these, IT services and customer service desks have the greatest potential ability to provide the organization with competitive differentiation. These are likely to be areas that service organizations will outsource increasingly in the medium term.

Exhibit IV-34 indicates the likelihood of organizations in the services sector to outsource each of a number of activities.

Exhibit IV-34

Business Process Outsourcing Intentions: Services



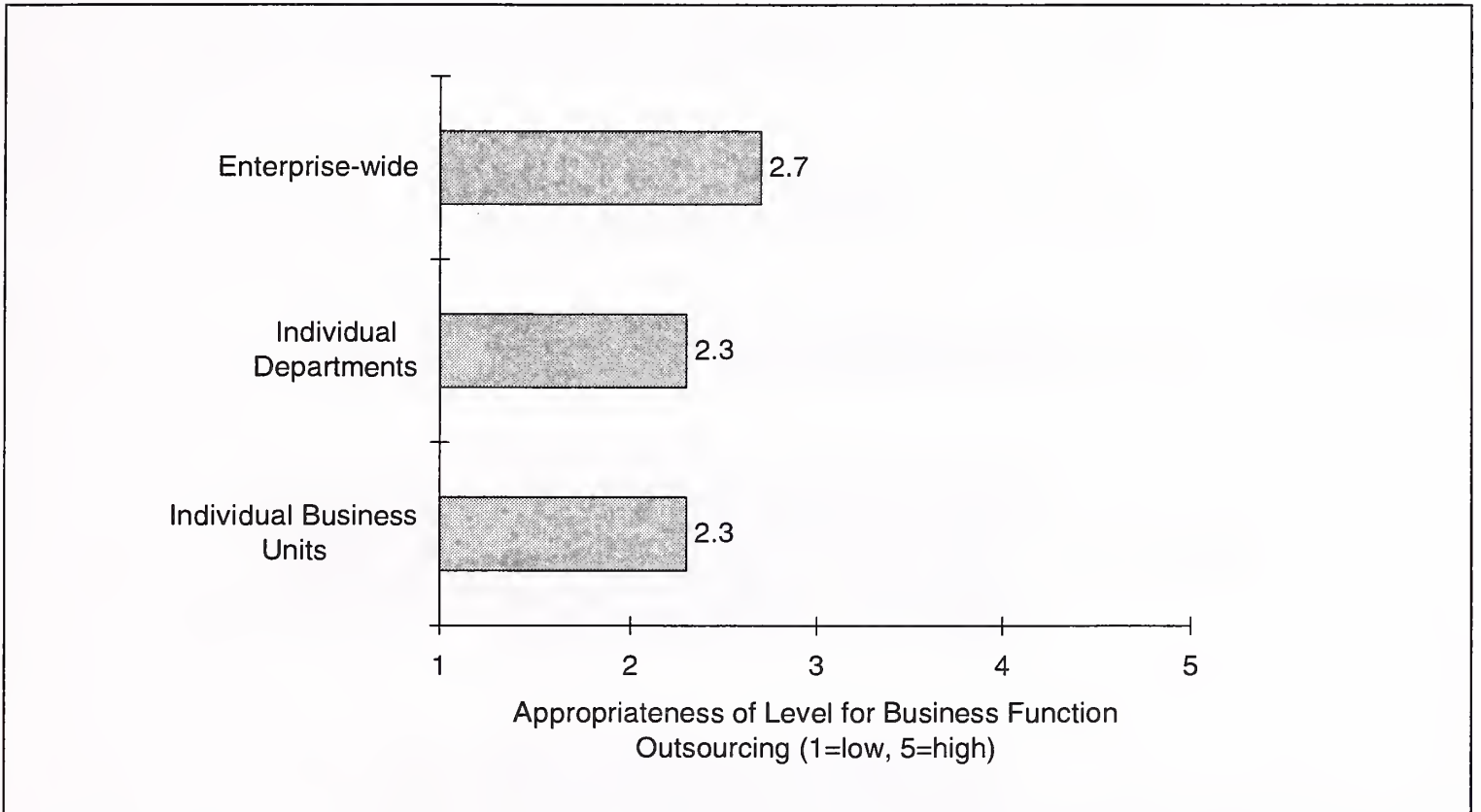
Source: INPUT

The principal activities that organizations in the services sector expect to outsource in the short term are payroll administration, billing/revenue collection, and accounting.

Managers within the services sector appear to perceive that business process outsourcing is more appropriate at the enterprise-wide level than at the business unit or departmental levels (Exhibit IV-35).

Exhibit IV-35

Organizational Level of Business Process Outsourcing: Services



Source: INPUT

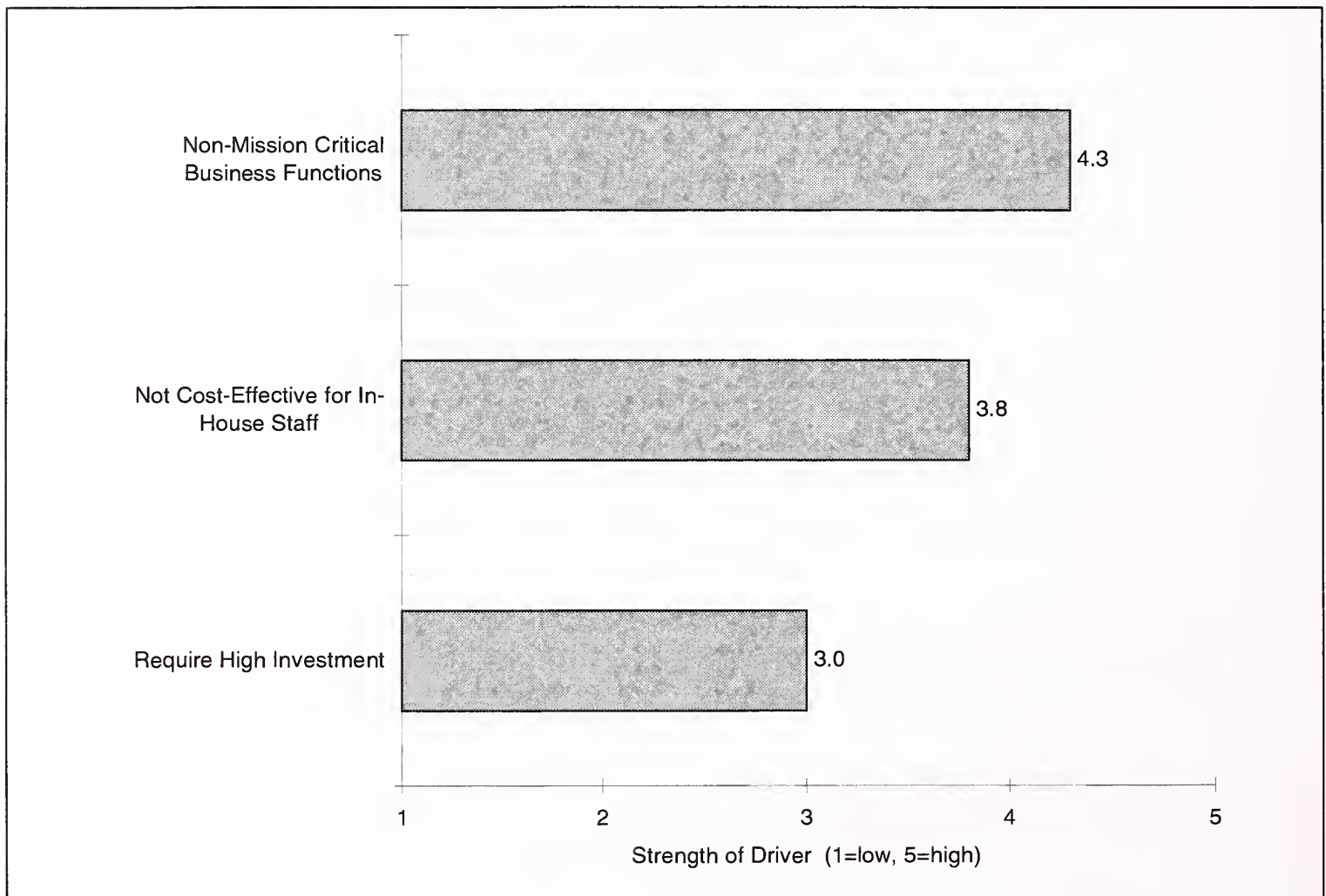
F
Utilities

The utility industry is in flux due to deregulation. As a result, there is a trend to increased emphasis on core focus and efficiency to enable competitiveness.

Exhibit IV-36 indicates the extent to which process attributes are associated with process outsourcing in the utilities sector.

Exhibit IV-36

Drivers of Business Process Outsourcing: Utilities



Source: INPUT

Major drivers of outsourcing in this industry are the desire to offload responsibility for business functions that are not mission critical and/or that are inefficiently performed in-house.

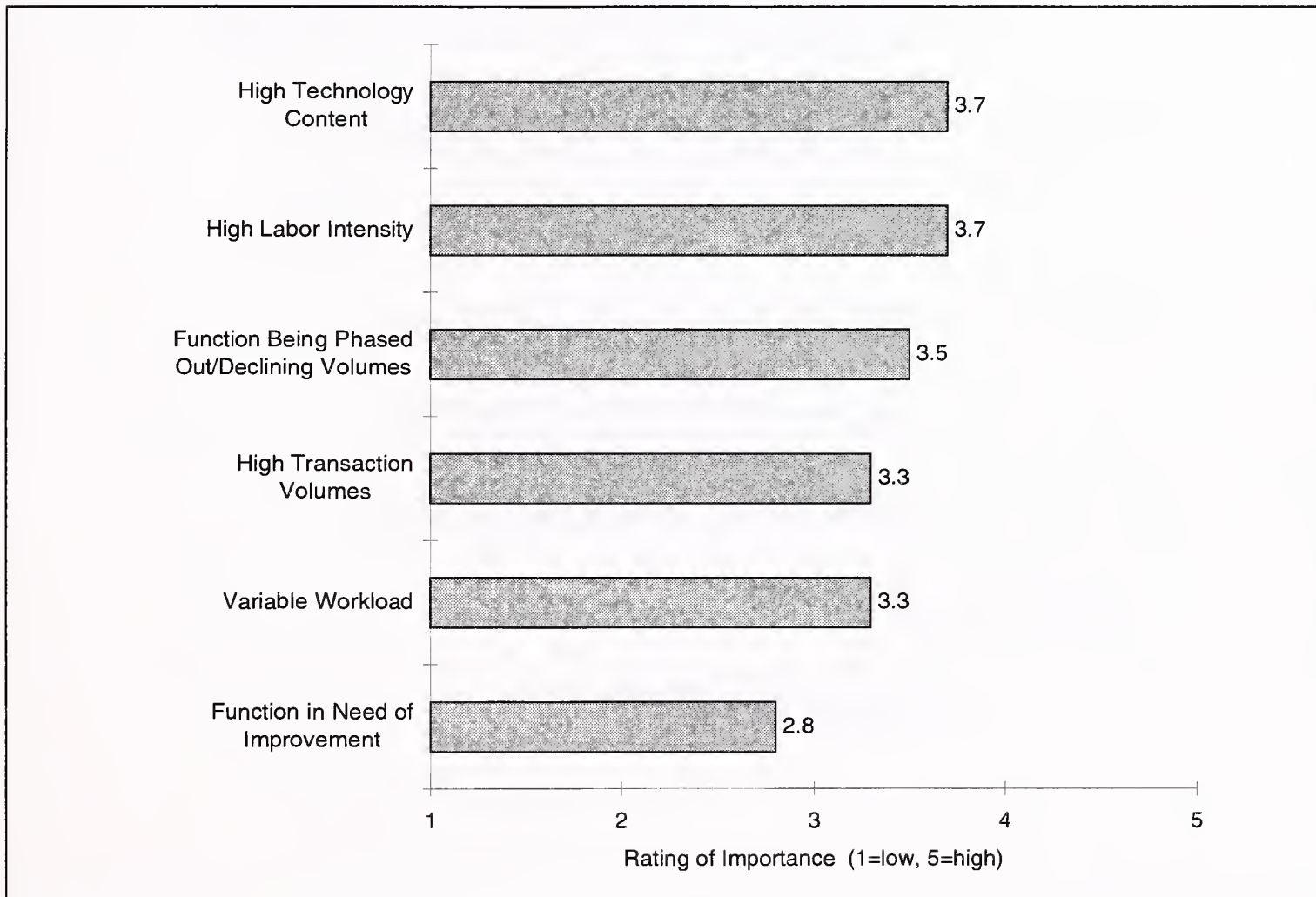
Billing is a process that lends itself well to outsourcing in this sector. For example, Affiliated Computer Services is providing Central Louisiana

Electric Co., Inc. with bill-image preparation, address cleansing and presorting, bill printing, and intelligent-mail insertion services.

Exhibit IV-37 lists the extent to which a number of process attributes are associated with process outsourcing in the utilities sector.

Exhibit IV-37

Major Characteristics of Processes Selected for Outsourcing: Utilities



Source: INPUT

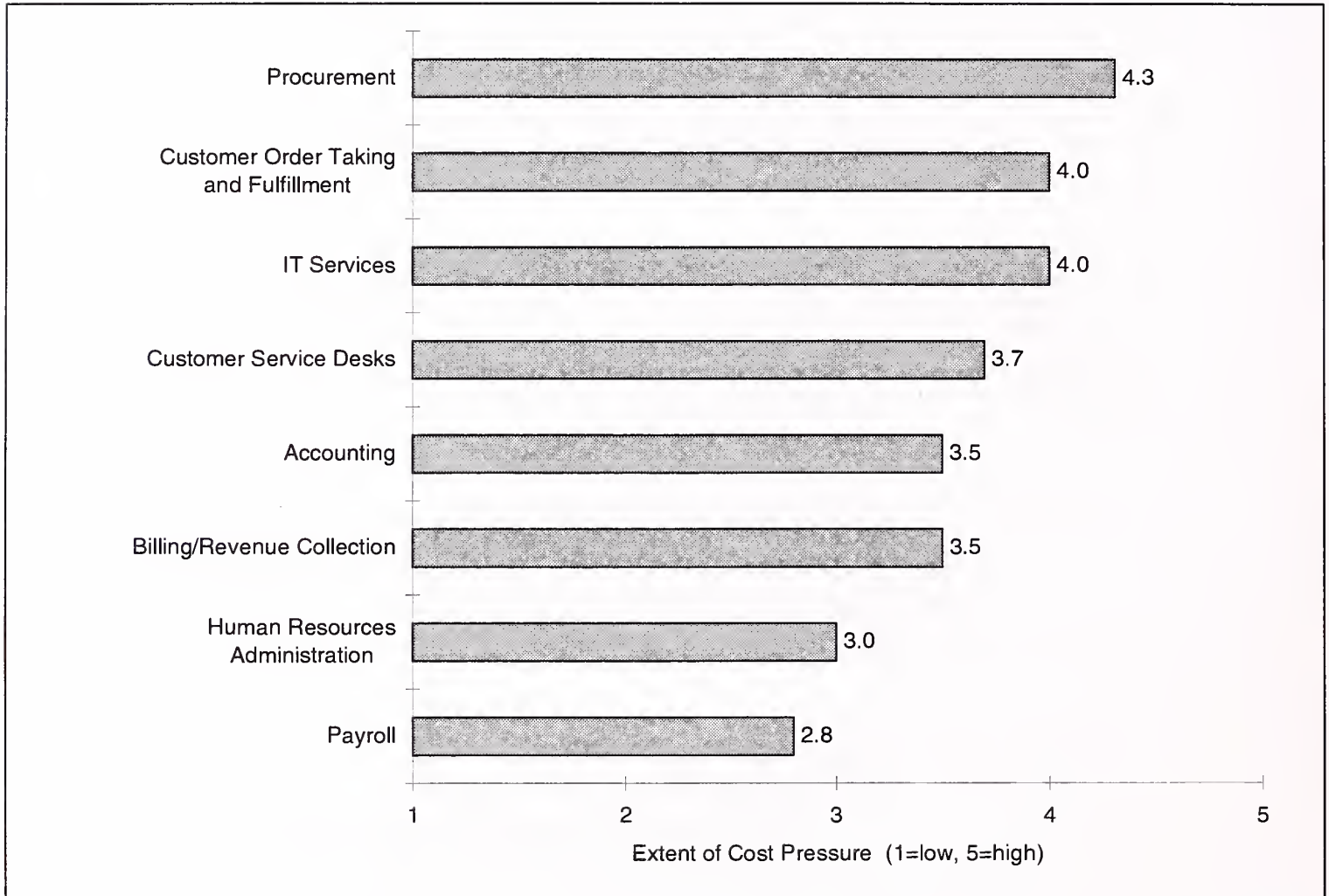
Managers within the utilities sector appear to rate high labor intensity and high technology content as key criteria in identifying processes for business process outsourcing. This indicates a strong opportunity for business process outsourcing vendors.

Exhibits IV-38 to IV-40 list the extent to which a number of business functions within the utilities sector are perceived to:

- Be subject to a high level of cost pressure
- Provide competitive differentiation for the organization
- Require high levels of future investment

Exhibit IV-38

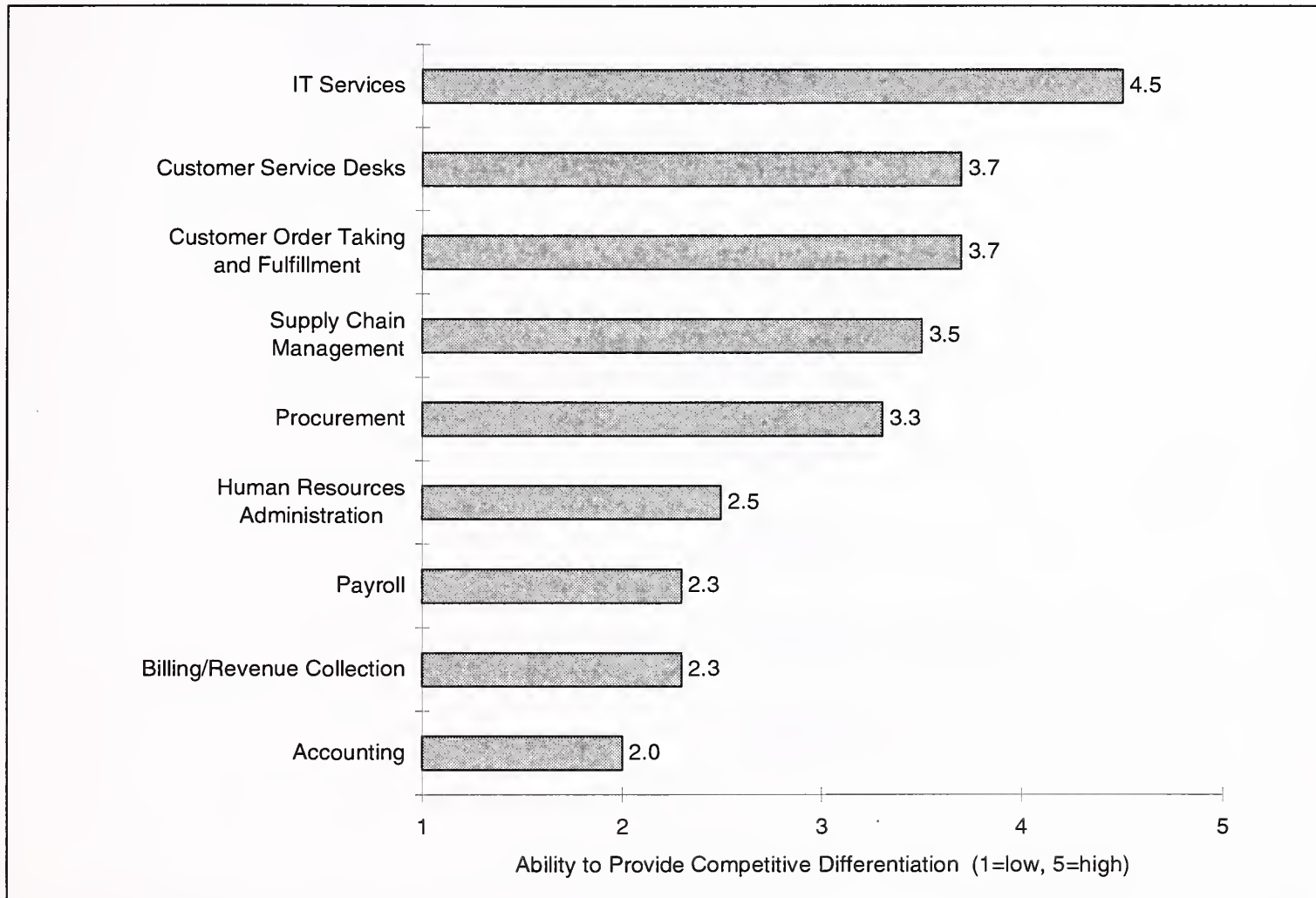
Cost Pressure by Business Function: Utilities



Source: INPUT

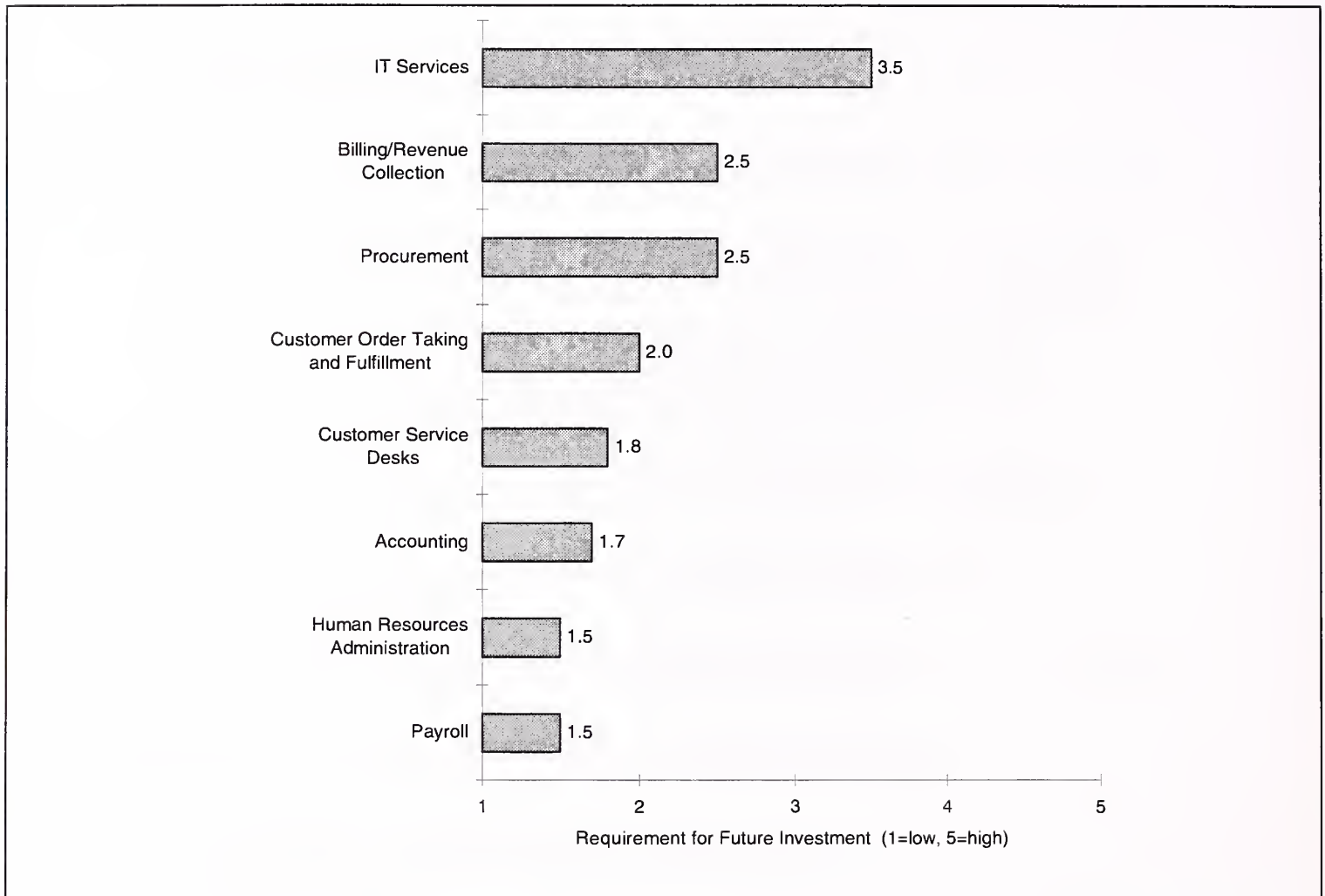
Exhibit IV-39

Competitive Pressure by Business Function: Utilities



Source: INPUT

Exhibit IV-40

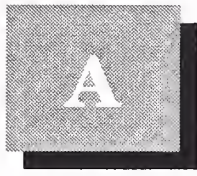
Investment Pressure by Business Function: Utilities

Source: INPUT

The functions in the utilities sector facing the greatest combination of investment and cost pressure are:

- IT services
- Customer order taking and fulfillment
- Customer service desks
- Procurement

Again, these are the areas identified as providing the organization with its greatest competitive differentiation. As competition intensifies in this deregulating industry, outsourcing opportunities will multiply.



User Questionnaire

USER QUESTIONNAIRE

Opportunities in Business Process Outsourcing

Support for Business Process Outsourcing

1. On a scale of 1 - 5, how would you rate the usefulness of the concept of the virtual organization as a business model? (1 = not useful, 5 = very useful)

2. Would you also rate the importance of the following factors in determining whether a business function should be outsourced? (1 = not important, 5 = very important) [Also add as many other factors as possible]

Factor	Importance
Non-mission critical business functions	
Not cost effective for in-house staff	
Requires high investment	
Mission critical business function	
Other	

3. The following is a list of potential characteristics of a business operation. Would you rate the importance of each in making the business operation a candidate for outsourcing? (scale of 1 - 5, 5 = high)

Characteristics	Importance
Common to organizations in your industry	
Common to all business organizations	
High labor intensity	
High technology content	
High transaction volumes	
Variable workload or transaction volumes	
High importance as a business differentiator	
Strong need for ongoing process investment	
Function in need of improvement	
Function being phased out/declining volumes	
Other	

4. Which business functions within your organization do you perceive as:
- a. Becoming more generic in nature?
 - b. Declining in importance or transaction volumes?
 - c. Having rapidly increasing business volumes?
 - d. Requiring high levels of ongoing investment?
 - e. Supporting processes that add little competitive differentiation?
 - f. Being under high levels of cost pressure?
 - g. Being best performed by an external agency?

5. On a scale of 1 - 5, to what extent do you see each of the following functions to be under a high level of cost pressure, as providing competitive differentiation for the company, as requiring high levels of future investments? (1 = low, 5 = high)

Function	Cost pressure	Competitive differentiation	Future investment
Day-to-day accounting activities			
Billing/revenue collection			
Payroll			
Human resource administration			
Customer service desks			
Customer order taking and fulfillment			
Supply chain management			
Procurement			
IT services			

Current Business Function Outsourcing

6. Does your company currently outsource any major business functions?

Yes (go to Q7)

No (go to Q9)

7. Which of the following functions do you outsource and to whom? Why did your company decide to outsource this function? And how satisfied are you with the service provided? [scale of 1 - 5]

Function	Outsourced (Y/N) - Vendor	Reason	Satisfaction
Day-to-day accounting activities			
Billing/revenue collection			
Payroll			
Human resource administration			
Customer service desks			
Customer order taking and fulfillment			
Supply chain management			
Procurement			
IT services			
Other			
Other			

8. What vendors have you considered?

Outsourcing Intentions

9. On a scale of 1 - 5, to what extent do you think your company should reduce the range of activities performed in-house? [1 = disagree, 5 = strongly agree]

10. And how likely is your company to extend its use of business function outsourcing over the next three years? [1 = not likely, 5 = very likely]

11. How likely is your company to consider outsourcing the following functions: (1 - 5)

Function	Likelihood to outsource	Likelihood to extend
Day to day accounting activities		
Billing/revenue collection		
Share registration		
Payroll		
Human resource administration		
Customer service desks		
Customer order taking and fulfillment		
Supply chain management		
Procurement		
IT services		
Other		
Other		

12. In many large companies, the business practices are relatively unique within each business unit. How likely is it that your company would standardize business practices across all business units or subsidiaries? (scale of 1 - 5, 1 = unlikely, 5 = very likely)

13. Which business functions do you think are candidates for standardization across the organization?

14. To what extent do you believe business function outsourcing should take place at each of the following levels within your company? [1 = not appropriate, 5 = very appropriate]

Individual departments _____

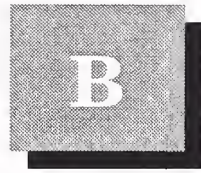
Individual business units/subsidiaries _____

Enterprise-wide _____

15. What proportion of business activity that is currently carried out in-house do you think will be outsourced by the year 2001?

_____%

16. Do you have any other comments on business process outsourcing?



Definition of Terms: Outsourcing

Outsourcing

Outsourcing (previously called Systems Operations and Facilities Management) was introduced as a product/service category in the 1990 Market Analysis and Systems Operations programs.

Outsourcing is a long-term (greater than one year) relationship between a client and a vendor in which the client delegates all, or a major portion, of an operation or function to the vendor. The operation or function may either be solely information systems outsourcing-based, or include information systems outsourcing as a major component (at least 30%) of the operation.

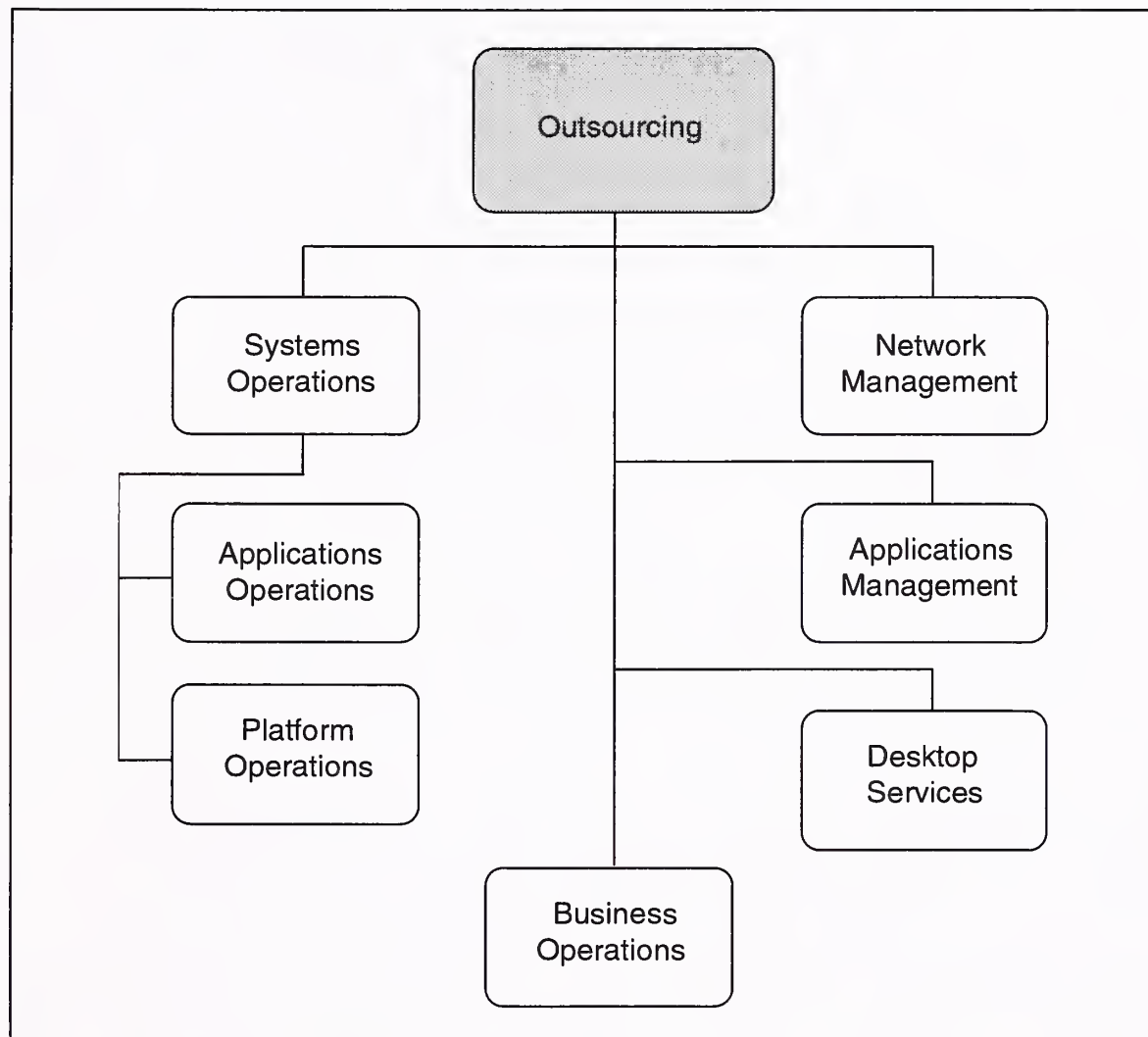
The critical components that define an outsourcing service are:

- Delegating an identifiable area of the operation to a vendor
- Single-vendor responsibility for performing the delegated function
- Intended, long-term relationship between the client and the vendor, where:
 - The contract term is for at least one year
 - The client's intent is not to perform the function with internal resources
- The contract may include non-information systems outsourcing activities, but information systems outsourcing must be an integral part of the contract.

The outsourcing product/service subcategories have been defined as shown in Exhibit B-1 on the following page:

Exhibit B-1

Outsourcing Components



Source: INPUT

- *Platform Operations* - The vendor manages and operates the computer systems, to perform the client's business functions, without taking responsibility for the client's application systems.
- *Applications Operations* - The vendor manages and operates the computer systems to perform the client's business functions, and is also responsible for maintaining, or developing and maintaining, the client's application systems.
- *Network Management* - The vendor assumes responsibility for operating and managing the client's data communications systems. This may also include the client's voice communications resources. A network management outsourcing contract may include only the management services or it may cover the full costs of the communications services and equipment plus the management services.

- *Desktop Services* - The vendor assumes responsibility for the deployment, maintenance, and connectivity among the personal computers and/or workstations in the client organization. The services may also include performing the help-desk function. Equipment as well as services can be part of a desktop services outsourcing contract.

Note: This type of client service can also be provided through traditional professional services where the contractual criteria of outsourcing are not present.

- *Applications Management* - The vendor has full responsibility for maintaining and upgrading some or all of the application systems that a client uses to support business operations and may also develop and implement new application systems for the client.

An applications management contract differs from traditional software development in the form of the client/vendor relationship. Under traditional software development services, the relationship is project based. Under applications management, it is time and function based.

These services may be provided in combination or separately from platform outsourcing.

- *Business Process or Operations* - Business process or business operations outsourcing (also known as functional outsourcing) is a relationship in which one vendor is responsible for performing an entire business/operations function, including the information systems outsourcing that supports it. The information systems outsourcing content of such a contract must be at least 30% of the total annual expenditure in order for INPUT to include it in the outsourcing market. Examples of business operations that are outsourced include telephone company billing and employee benefits processing.

Outsourcing vendors now provide a wide variety of services in support of existing information systems. The vendor can plan, control, provide, operate, maintain and manage any or all components of the client's information systems environment (equipment, networks, applications systems), either at the client's site or the vendor's site.

