

Rating Methodology by Sector **Information Services**

This rating methodology is assumed to be applied to information service providers who are responsible for the construction and operation of information systems, software development, and information processing and providing services, and is mainly concerned with system integrators (SIer), which is a business category that undertakes implementation consulting, design, development, operation, and maintenance as a total for users in a wide range of industries.

1. Business base

SIer has a pyramid structure with the major companies at the top and middle-scale and small- and medium-sized companies spreading out toward the bottom, and large companies are using lower-tier companies as subcontractors to fill their staffing resources. In the rating evaluation, JCR places importance on market position, customer base, and project management skills.

(1) Characteristics of industry

(i) Market overview

SIer is a business category that has been developed by comprehensively capturing users' needs for outsourcing information system operations, and is basically an industry based on internal demand. In addition to domestic economic trends, the industry is susceptible to the IT investment trends of users, such as renewal cycle of information systems. However, with the advancement of digitalization, the use of IT in various social activities is on the rise. Business relationships are relatively stable due to the importance of IT as a management infrastructure for users. A certain level of IT investment is expected to be maintained even during recessions, and demand volatility is relatively small.

The domestic information services market has been growing and the market size is relatively large. The market is expected to grow thanks to the addition of digital transformation (DX) and other needs to the investments made to improve productivity, which has been the main driver to date.

Meanwhile, overseas markets are expected to grow at a higher rate than the domestic market. In addition to the large European and U.S. markets, which are expected to continue to expand, emerging markets are also expected to grow. Overseas, business practices and laws and regulations are often different from those in Japan, and M&A is generally used for business development.

(ii) Competitive situation

The information services industry has a large number of small- and medium-sized companies and micro businesses due to its low initial investment and relatively easy entry into the market, and has a pyramid structure with the major companies at the top and middle-scale and small- and medium-sized companies spreading out toward the bottom. When developing large-scale systems on consignment, the major companies assume project management as the prime contractor and subcontract the development process to the multi-tiered subcontractors in many cases.

There are a large number of major companies, including hardware vendors and independent firms. In some cases, such as in the public sector, they win orders through bidding, and there is competition for orders among the different tiers. However, depending on how they were established, the business types and business fields in which they have strengths differ, and there is a certain degree of separation among the providers. Many users' information systems have been developed on a tailor-made basis based on their specific needs. Due to their uniqueness, switching costs to other information services providers are high, and the continuity of transactions is relatively high.

(iii) Cost structure

Basically, the information services business has a labor-intensive structure, so the main costs are personnel and subcontracting costs. In particular, the larger the prime contractor, the greater the weight of subcontracting costs. In addition to personnel costs, it is not easy to reduce subcontracting costs in order to secure future mobilization capacity. Therefore, downward pressure is likely to be placed on profits when the order environment deteriorates. On the other hand, in a favorable order environment, the ability to mobilize personnel becomes a constraint in getting orders. In addition to productivity improvements such as automation of development, the ability to appropriately control human resources in response to demand is required. In addition, a shortage of human resources is expected in Japan due to the decline in working population, which may lead to a heavier cost burden due to improved compensation and other factors. JCR also focuses on the status of passing on of the price to users.

In contracted system development, attention should be paid to unprofitable projects. Not only development losses may occur due to additional costs, but also opportunity losses may occur due to constraint on human resources. JCR confirms whether appropriate project management and cost control are in place.

Cloud services and other service-based businesses, in which service providers make capital investments to build services in advance and collect usage fees from multiple users, are spreading. Although the payback period is longer due to the upfront capital burden, it does not depend on human resources and can ensure stable earnings. However, if the number of users falls below expectations, there is a risk that the investment will not be recovered. JCR confirms the impact of these changes in business structure on the overall cost structure.

(2) Important factors in market position and competitiveness

(i) Market position

The industry has a pyramid structure, and competitiveness is highly correlated with its hierarchy. JCR focuses on whether the company has the ability to become a prime contractor for contracted system development. In large-scale system development, the prime contractor uses subcontractors to develop the system. The prime contractor is responsible for the overall project, including development costs and development period, and this entails risk. On the other hand, if the project goes smoothly, the prime contractor can earn relatively high earnings, and can also earn continuous earnings by taking on post-development operations and maintenance. The prime contractor who is in such a position is required to have comprehensive capabilities, including not only technical capabilities but also the ability to mobilize personnel. In particular, in the case of mission-critical systems that require high reliability, the top-ranking companies in the industry often serve as prime contractors.

(ii) Business structure

The main businesses can be broadly classified into (a) contracted system development, (b) system operation and maintenance, (c) business process outsourcing (BPO), and (d) service-based business. Contracted system development is susceptible to users' IT investment trends and demand volatility is relatively high, and there is also a risk of unprofitable projects. On the other hand, system operation and maintenance and BPO are often contracted for relatively long periods of time, and the risk of unprofitable projects is generally low. Many of the service-based businesses are assumed to be used by users over the long term. These businesses generally contribute to stabilization of cash flow, and are expected to provide a certain level of performance support even during a decline in contracted system development. In the rating evaluation, JCR focuses on the business structure of each company based on the characteristics of each of these businesses.

(iii) Customer base

The information systems of domestic users are highly unique, with requirements and specifications differing from company to company. Therefore, one of the key points for users selecting a prime contractor for system development is whether or not it is familiar with the user's existing systems and business model. As a result, the business relationship between users and prime contractors is considered to become relatively stable. On the other hand, attention should be paid to the in-house production of information system operations by users. JCR confirms the status of transactions with major users and the degree of dispersion by user and industry. Although only a few operators have been able to establish business foundations overseas, JCR pays attention to their future development policies and their progress. Through these attention points, JCR identifies the trends and fluctuation patterns of earnings of the company.

(iv) Ability to control subcontracting

The larger the prime contractor, the greater the use of subcontracting. In a phase of declining orders for system development, it is necessary to strive to maintain earnings levels by adjusting the amount of orders for

development processes to subcontractors to increase the ratio of in-house production, or by lowering subcontracting unit price to secure a spread with the order unit price. JCR places emphasis on whether the company is managing subcontracting in a balanced manner that also considers securing resources quantitatively and qualitatively when the order environment improves. In addition, since it is considered essential to improve the capabilities of in-house personnel in order to properly manage subcontracting, the status of in-house training and acquisition of qualifications is also a focus of attention.

(v) Project management skills

In contracted system development, there are cases where projects become unprofitable because the Company is forced to take measures such as the introduction of additional subcontracting personnel due to (a) unclear requirement definitions in contracts with customers, (b) insufficient follow during the process, and (c) occurrence of defects in the development process. Information services business is a labor-intensive business model, and completely avoiding unprofitable projects would be difficult, but the information services providers are required to take measures to reduce the number of unprofitable projects by strengthening their pre-order screening and review systems during the project process. In the rating evaluation, JCR carefully examines the strengthening in order acceptance policy and project management system in addition to changes in the amount of orders received, and subsequently evaluates profitability.

2. Financial base

(1) Earnings strength

To evaluate the overall earnings strength of the company, which reflects its technological capabilities, project management skills, and ability to respond to changes in demand, JCR focuses on operating income and the ratio of operating income to net sales.

Key financial indicators:

- Operating income
- Operating margin

(2) Cash flow generation capacity

JCR focuses on the ability to generate cash flow, which is the source of redemption of interest-bearing debt. As SIs generally lack assets that can be pledged as collateral and their financing is limited to maintaining their ability to generate cash flow, cash flow generation capacity is important. JCR also focuses on the balance between interest-bearing debt and cash flow. The methods of recording development costs and payback period differ between contracted development businesses and service-based businesses, and JCR analyzes and evaluates these businesses based on the characteristics of each business model.

Key financial indicators:

- Cash flow from operating activities
- Free cash flow

- EBITDA
- Ratio of interest-bearing debt to EBITDA

(3) Safety

Slers generally do not require large capital investments, except in cases such as data center construction. The ratio of fixed assets to total assets is low, and many companies have low interest-bearing debt. As a result, they have a good balance between debt and equity and a stable financial base. In recent years, the need for flexible investments, such as upfront investment in service-based businesses and M&A to acquire business foundation and know-how, has increased, and maintaining a good financial structure remains important. JCR therefore places emphasis on equity ratio and other indicators for safety.

Key financial indicators:

- Shareholders' equity
- Equity ratio
- Debt equity ratio

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