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**Research on a New Occupational Information Network  
Designed to Place the Right Person in the Right Job**

**Survey on the needs of corporations and individuals;  
on the systems used in other countries;  
and on developing a Japanese-style system**

**(Summary)**

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The chapters and sections listed above indicate the parts written in the original report.

What follows is an executive summary of a report on the research project, Research on a New Occupational Information Network commissioned by Japan's Ministry of Health, Labour and Welfare in 2000.

The project's first objective was to ascertain how and what occupational information—e.g., occupation title, type of occupation, job content, job tasks, etc.--was being sought and used by job seekers, including those wanting to change jobs, and by companies wanting to hire employees, as well as by employment brokers such as private and public job employment supply-demand adjustment organizations and job placement agencies. With the idea of helping people make a smooth transition from one job to a more appropriate job, and by examining how other countries are handling job migration in terms of information system development, the research endeavored to identify the approaches that should be taken to develop such systems in Japan.

## **1. Research approach and how it proceeded**

To begin the project, we set up a committee within the Japan Institute of Labor (JIL). The committee was named Research Committee Concerning the Provision of Occupational Information via the Internet and was comprised of 16 scholars from private and public institutes. The research began with a survey on how and what occupational information was being sought and used. In addition, the committee gathered data on similar information systems being used in other countries.

O\*NET (Occupational Information Network) was developed by the U.S. Department of Labor. Based on this particular system, we created an experimental Japanese-language version to better understand the system, such as its structures and contents. We, then, went on to study its viability for Japan. We looked to a future of using such an information model as a foundation, trying to envision the kinds of application systems that could be created.

Finally, the committee completed a summation about the current situation of occupational information, and looked at system developments for the future.

## **2. Research results for the current situation and needs**

We surveyed three groups regarding the current situation and needs for occupational information network systems; corporations, individuals, and private employment supply-demand adjustment organizations such as recruitment magazines and job placement agencies. In the case of individuals, separate surveys were conducted: one in the standard paper questionnaire format and the other via an interactive Internet website. Thus, in effect, we conducted a total of four surveys.

In parallel with the above surveys, we conducted interviews among samples from each group. All survey data gathering took place during December 2000.

Results from the questionnaire survey conducted among corporations found that corporations wanted, but were not getting, information on “attitudes and behavior (competency),” “morale,” “basic ability, suitability” for employing younger age groups, including new graduates, and individuals trying to change jobs. And, the response to a similar question that asked about the repositioning of personnel within a company found corporations wanting information on “employee objectives,” “morale,” “attitude, behavior (competency),” “basic ability, suitability,” and “interests, attention.”

Notions about the hard-to-get information tended to be ambiguous within companies. In other words, the information lacked a common conceptual framework and a common set of standards. On the other hand, information easily acquired through documentation included “academic credentials and curricula majors,” “license and certification,” “experience and job background,” “performance and achievement,” “physical stamina and health condition.”

We took a detailed look at the occupational information items said to be needed. Answers to questions concerning the mobilization of personnel inside and outside of organizations and placing the right people in the right positions included “indicators for levels of technologies and skills required to perform jobs,” “qualification levels such as education, training and experience,” and “descriptions of each occupation.”

In the questionnaire and Internet surveys conducted among individuals, the item most respondents in both surveys regarded as most important was information on “job descriptions” at the time of choosing a job. By the same token, “job description” was cited as very difficult information to get while job hunting. “Guidance on occupations and employment on the web” was listed as the most requested item in both the website and questionnaire surveys. Survey findings indicate a strong need for making more “job description” information available.

From the results of the survey conducted among private employment supply-demand adjustment organizations, “job description” was considered by both the youth and middle-aged groups as important information when searching for work, supporting the findings of the surveys among individuals.

Information considered important by corporations when hiring included discovering what “techniques, skills and knowledge” were held by educated youth candidates, and what “experience and job backgrounds” were possessed among the middle-aged seeking management positions. This finding also supports the need for the creation and dissemination of “job description” information. Further, a means of accurately representing “techniques, skills and knowledge” and “experience” would greatly assist the employing process.

More precisely, the private employment supply-demand adjustment organizations wanted “terms and standards which describe job content accurately,” and “terms and standards which describe personnel attributes accurately” to advance information systems within their organizations. The requisite was for a systemization of terms and standards that was synonymous with job and personnel descriptions.

As for occupational classification, the majority of supply-demand adjustment organizations stated that they created their own classification system for in-house use, revealing the lack of standardized occupational classifications.

Summarizing the current situation and need for occupational information, job description information is most important among individual job seekers. However, there is no reliable source of this information. Similarly, information on an individual’s technologies, skills, knowledge, experience, and job background is important for corporations hiring, placing, or moving employees. However, there are no common terms and standards to guide in evaluations. Not only is there a lack of common standards on which to base occupational and personnel decisions, but there is also a lack of common occupation terms and classifications forcing employment supply-demand adjustment organizations to make up their own.

### **3. Foreign occupational information systems**

We studied the information systems in other countries including O\*Net-- developed by U.S. Department of Labor and a main focal point of our study,--the UK’s WorkTrain, and France’s ROME, which provided information in a small book format.

Regarding U.S. systems, we focused on how occupational system developments have been organized going back to the time of DOT (Dictionary of Occupational Titles) system development, which existed prior to O\*NET. We wanted to know what organizations have developed systems. We wanted to understand the conditions that existed and gave impetus to the O\*NET project. We investigated O\*NET’s current situation, and whether other systems have derived from O\*NET.

O\*NET is playing the role of information resource for AJB (America’s Job Bank) and ACInet (America’s Career InfoNet) which are web-based information systems provided by the U.S. Department of Labor. We collected data on these websites and analyzed their current situations.

The UK government’s WorkTrain is an information system containing recruitment, occupational, and job-training information. Although smaller than O\*NET, the system is concise and user-friendly. Its chief attribute is found in its interconnections between various types of information (recruitment, occupational, and job training information), which make good use of each individuals’ decisions and choices.

France's ROME has information that includes the distance between jobs. It is an effective tool for individuals considering a possible job change, or for organizations helping individuals to change jobs.

#### **4. Study for future system development**

From the above-mentioned survey results on current situations and needs, through the study of foreign information systems, and by testing a Japanese-version experimental model, we looked at the following items for developing an occupational information system: the system's purposes, its users, usage patterns, usage methods, information media, information content, liaison systems, interconnecting systems, notions of basic values as seen in O\*NET, data gathering methods, development schedule models, development workforce organization models, follow-ups on how each system is used, validation for viability, system assessment methods, and maintenance methods.