

Use of Information Technology in the Development of IT Human Resources

- Establishment of an Occupational Database
and International

Collaboration - September 20, 2002

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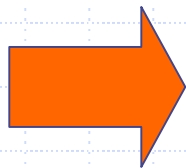
Institute for International Socio-Economic Studies

◆ Plan of Presentation ◆

1. Objective
2. The broadband age in Japan
3. The Situation of the Japanese Labor Market
4. Need for an Occupational Database
5. International Collaboration in the Development of an Occupational Database
6. Conclusion

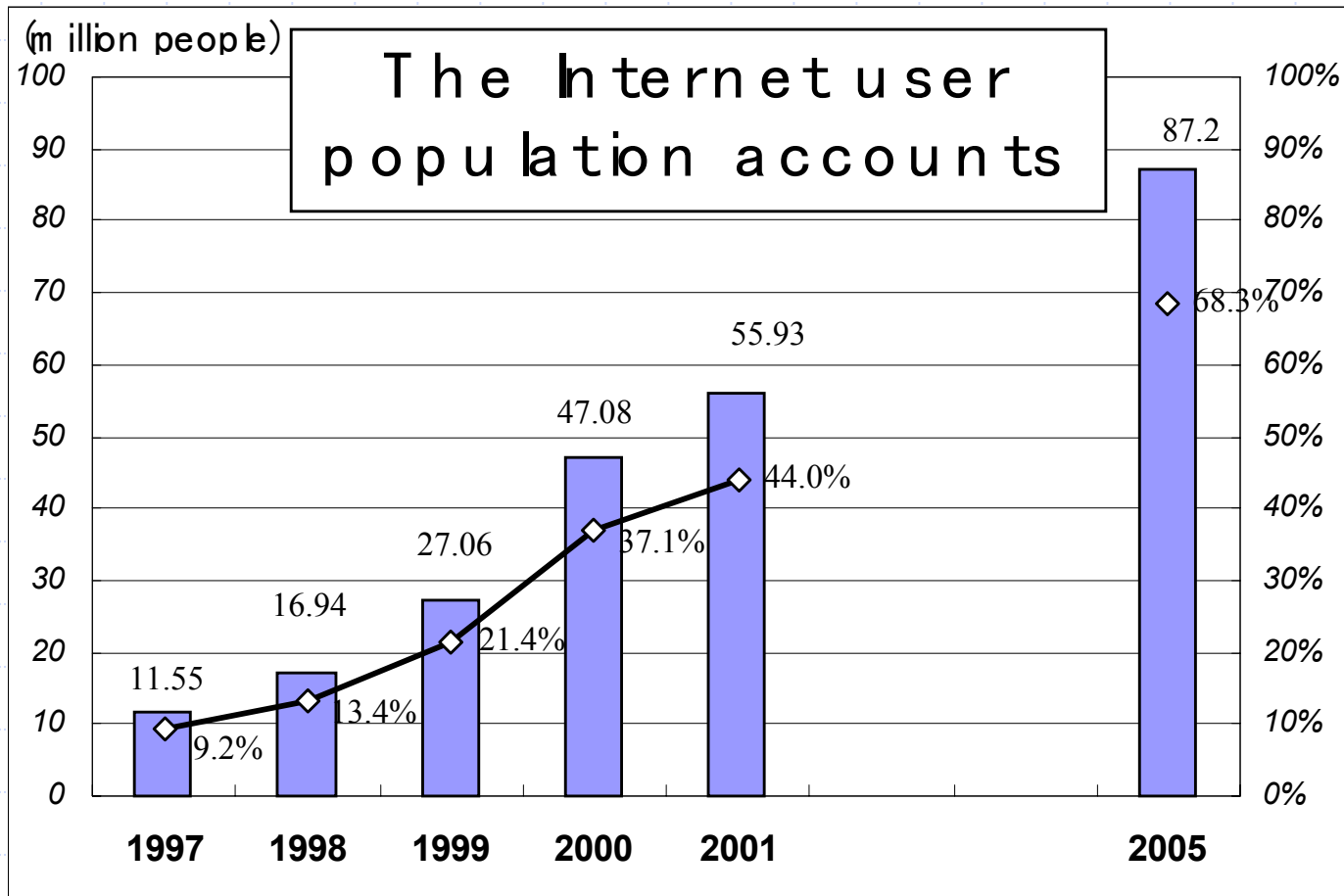
1 . Objectives

- ◆ How to develop IT human resources for Japan's ascendancy to be the leader in the world ?
- ◆ How to use of Information Technology in the Development of IT Human Resources ?



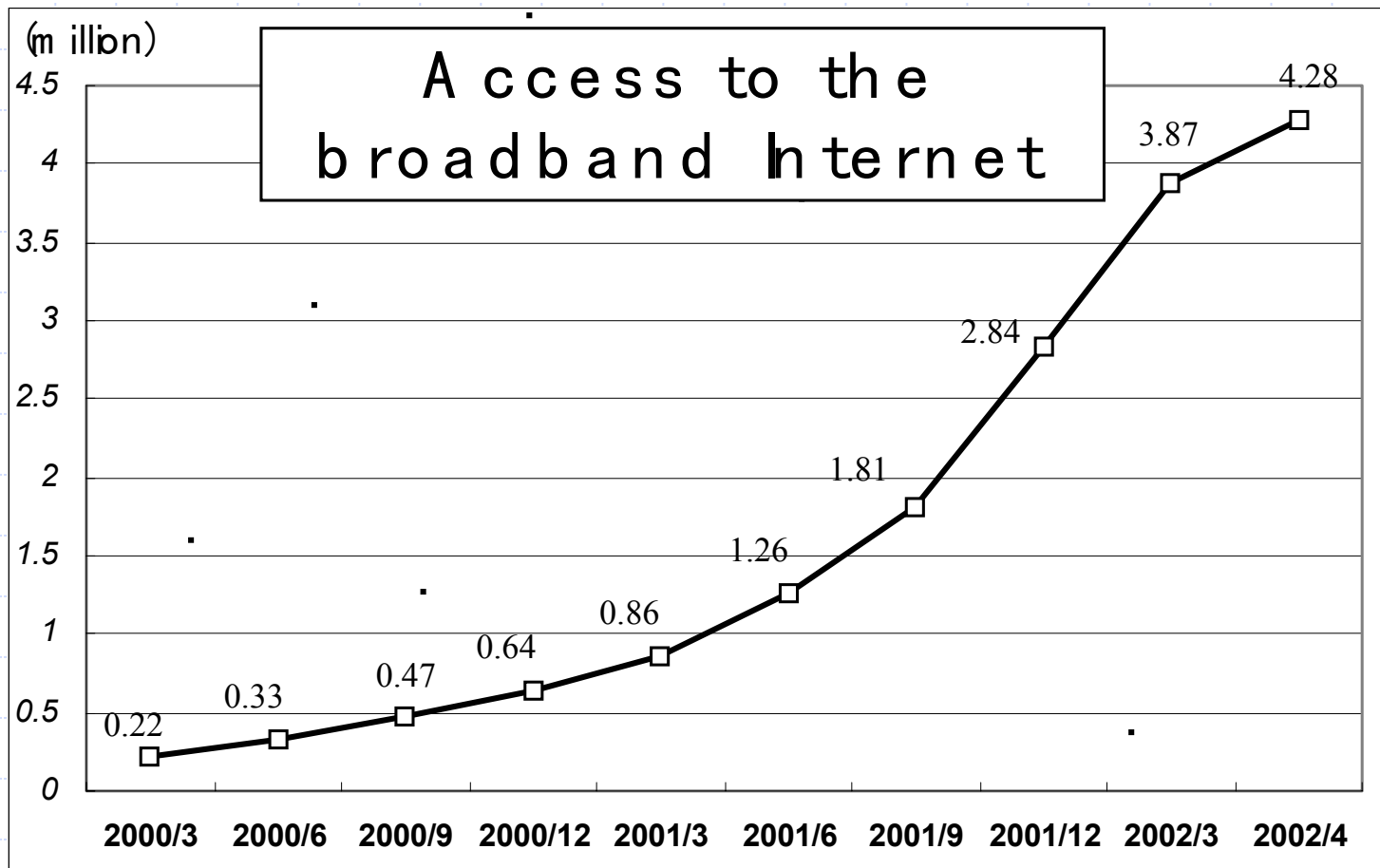
Development of IT human resources on an Occupational Database

2. The broadband age in Japan



The Ministry of Public Management, Home Affairs, Posts and Telecommunications, 2002 White Paper - Information and Communications in Japan

2. The broadband age in Japan



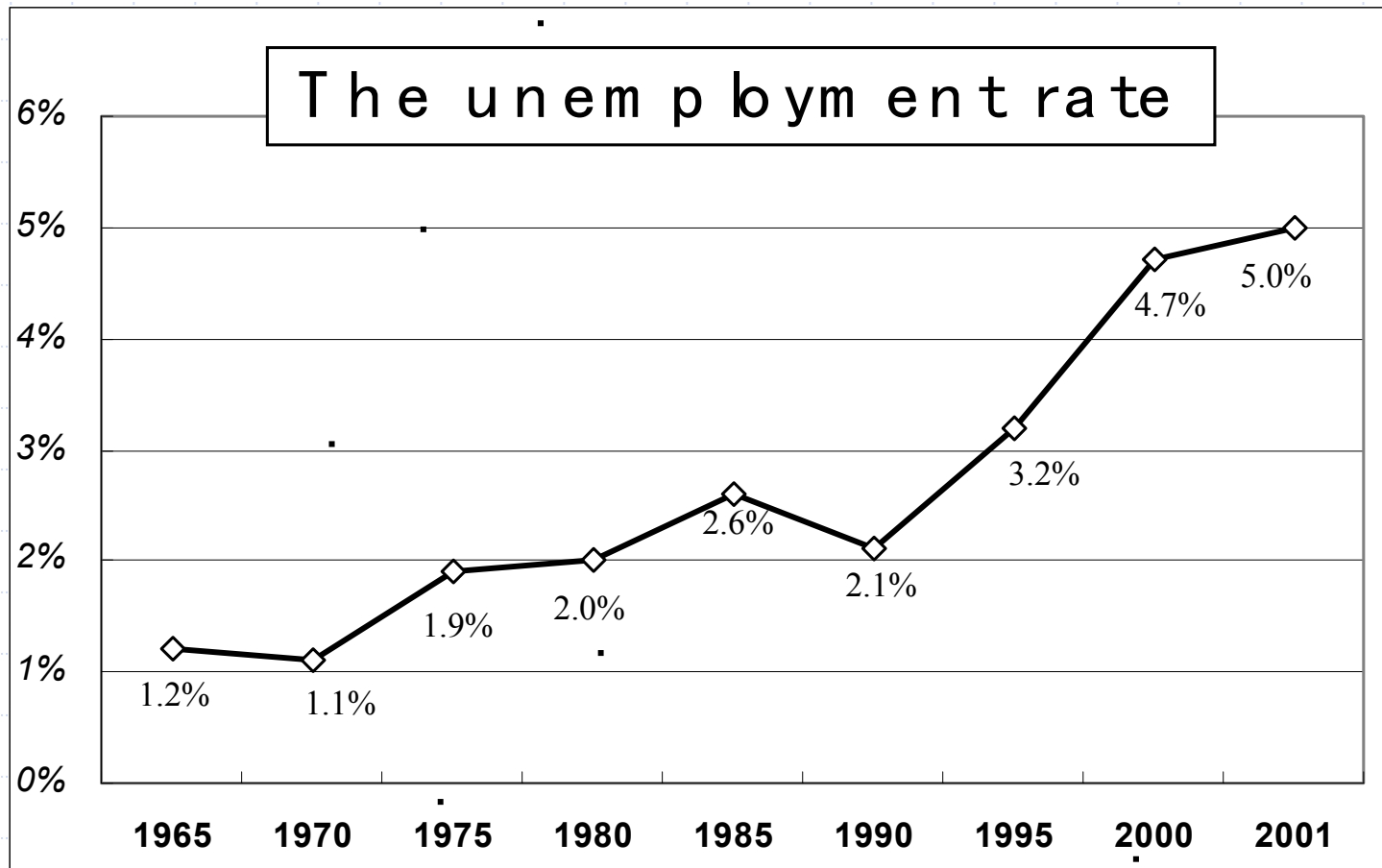
The Ministry of Public Management, Home Affairs, Posts and Telecommunications, 2002 White Paper - Information and Communications in Japan

2. The broadband age in Japan

E-Japan Priority Policy Program-2002

- ◆ Ensuring of security and reliability on advanced information&telecom networks
- ◆ Digitization of administration and application of IT in other public areas
- ◆ Facilitation of e-commerce
- ◆ Promotion of education and development of human resources
- ◆ Formation of the world's most advanced information & telecom networks

3. The Situation of the Japanese Labor Market



The Ministry of Public Management, Home Affairs, Posts and Telecommunications, Labor force survey

3. The Situation of the Japanese Labor Market

職種	需要 (求人) ニーズ	供給 (求職) ニーズ	需給ギャップ (供給－需要)	求人倍率
021 営業 (法人新規)	99,535	10,000	▲89,535	9.95
022 営業 (法人固定)	45,037	6,000	▲39,037	7.51
004 管理職 (営業系)	14,189	2,000	▲12,189	7.09
024 営業 (個人固定)	11,252	2,000	▲9,252	5.63
023 営業 (個人新規)	58,362	11,000	▲47,362	5.31
025 セールスエンジニア	28,522	6,000	▲22,522	4.75
013 業務	6,290	2,000	▲4,290	3.15
031 電気回路設計	6,073	2,000	▲4,073	3.04
032 機械設計	14,382	5,000	▲9,382	2.88
044 CAD 設計	13,244	7,000	▲6,244	1.89
034 電気通信技術者	5,647	2,000	▲3,647	1.82
054 画像処理	5,493	2,000	▲3,493	1.75
039 建築設計	28,996	17,000	▲11,996	1.70
040 土木設計	7,941	5,000	▲2,941	1.59
049 制御系 SE	7,734	5,000	▲2,734	1.54
046 コンサルティング SE	10,812	7,000	▲3,812	1.14
017 販売促進	19,333	17,000	▲2,333	1.08
050 ネットワーク系 SE	12,965	12,000	▲965	1.08

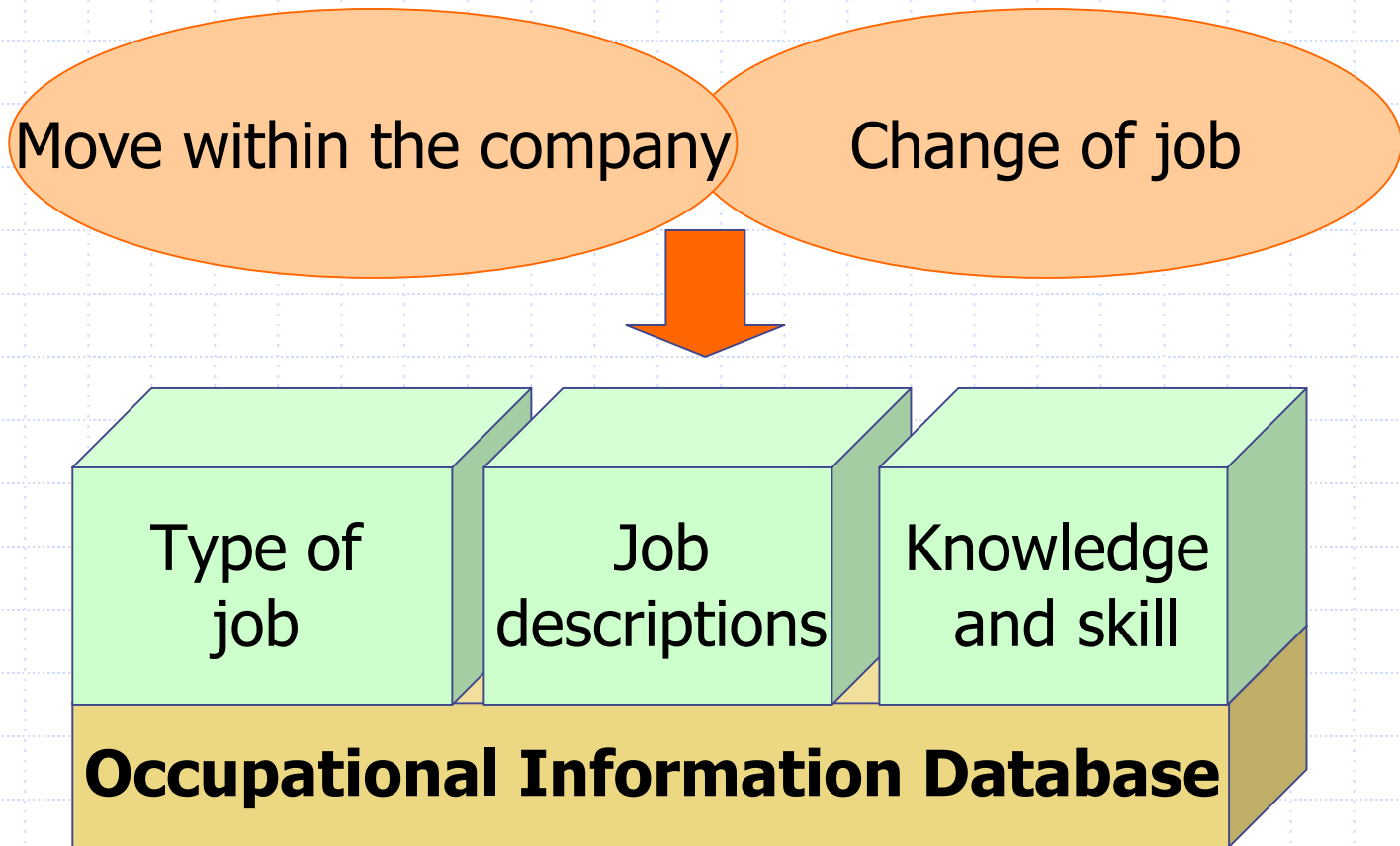
Employment mismatch!

4. Need for an Occupational Database

Occupational skills in Japan

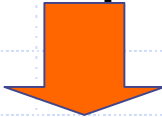
- ◆ Cases of career-seeking based on the type of job are still in the minority.
- ◆ There is no clear job description based on a Job Skill and Qualification System.
- ◆ The practice of defining the scope of job description and the occupational skills of the individual in clear-cut terms has not taken root.

4. Need for an Occupational Database



5. International Collaboration in the Development of an Occupational Database

Occupational Information in Japan

- ◆ the Occupational Classification by the Ministry Of Labor
 - ◆ CD-ROM as the Occupational Handbook
- 
- ◆ An organization has been created in the form of the Public and Private Sector Occupation Information Investigation Committee.
 - ◆ The occupational information database are being made to establish

5. International Collaboration in the Development of an Occupational Database

Occupational Information in U.S.

- ◆ Dictionary of Occupational Titles (DOT)
- ◆ O*NET (Occupational Information Network)
 - The general portal site "America's Career Kit"
 - ◆ O*NET
 - ◆ America's Job Bank
 - ◆ Career InfoNet
 - ◆ America's Learning exchange
 - ◆ Service Locator

5. International Collaboration in the Development of an Occupational Database

Occupational Information in China

- ◆ the Occupational Ability Test System
- ◆ The Database of National Test Questions for Occupational Ability Tests
 - At the present stage, as many as 50 job types that are in common social demand are recorded on the database.
 - This is amplified by including IT-related occupational titles in the near future.

5. International Collaboration in the Development of an Occupational Database

IT field

- fast rate of technical innovation
- Job descriptions are globalizing.

Occupational data
can
easily be shared

International Collaboration in the
Development of an Occupational Database

5. International Collaboration in the Development of an Occupational Database

International Sharing
of the
occupational information

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graph TD; A[International Sharing of the occupational information] --> B[Sharing of the Qualification Tests]; A --> C[Sharing of the e-Learning contents];
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Sharing of the
Qualification
Tests

Ex. "Asia Common Skill
Standard Initiatives for IT
Engineers"

Sharing of the
e-Learning
contents

Ex. The idea of a "Virtual
University." in KOREA

6. Conclusion

- ◆ By developing an occupational information database in the IT field, it will be possible to build a basis for the development of human resources in the IT area.
- ◆ The ability to share occupational information internationally among the interested countries also opens up a potential for sharing information in the areas of Qualification Tests and e-Learning.
- ◆ This would promote the development of human resources in the IT areas and create a greater measure of international mobility in the IT field.



Thank you very much!!