翻譯的資訊化管理及知識點的設計（一）

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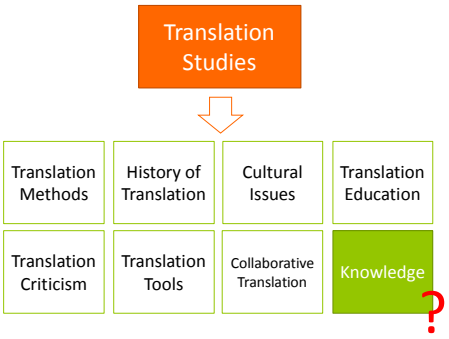
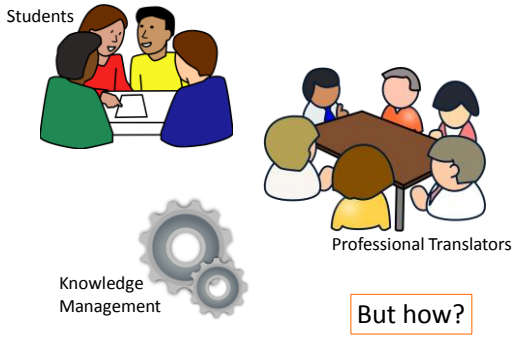




Outline (Part 1)

1. Translation Knowledge Management: Significance and Key Issues
2. Tools for Translation Knowledge Management

Outline (Part 2)

1. Demonstration: Development of a Simple Translation Knowledge Database
2. Translation Knowledge Management: Sample Systems / Prototypes
3. The Future of Translation Knowledge Management: Opportunities and Challenges

Outline (Part 1)

1. Translation Knowledge Management: Significance and Key Issues
2. Tools for Translation Knowledge Management

Introduction

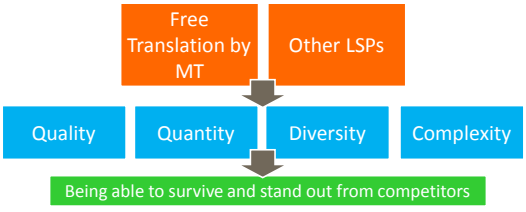
Significance of Translation Knowledge Management

Significance

Professional Translators: Making Informed Translation Decisions

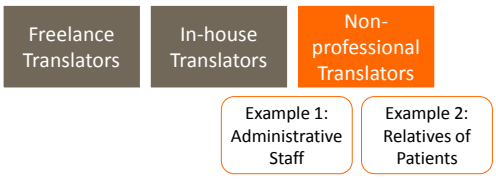
Significance

Language Service Providers (LSPs): Enhancing competitiveness



Significance

Non-professional Translators: Getting more support



Significance

Translation Studies and Translation Industry: Establishing and promoting best practices

- Dissemination and Exchange
- Creation
- Promotion
- Inheritance

What have we done so far?

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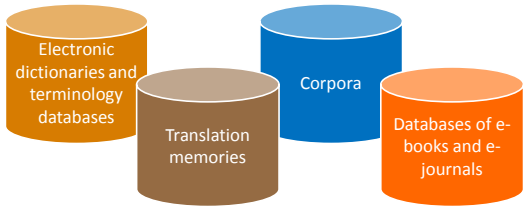
Translation Technology offers help to translators

- Automatic Translation
- Translation Suggestions
- Team Translation
- Basic Quality Check of TT

What have we done so far?

Useful databases have been developed.



But we can do more!

We can do more to enhance the following:

- Integration
- Interaction
- Breadth and Depth
- Popularisation

How?

We need a framework

- Providing a basis for discussion (e.g., defining the scope of study and the essential concepts)
- Helping us explore the world of translation knowledge management in a systematic manner

Translation Informatics

Translation Informatics: Definition

Translation informatics is the study of the design, development, adoption, and application of IT-based innovations with a view to facilitating effective uses of data, information, and knowledge for translation, interpreting and other multilingual activities.

Translation Informatics: More Details

Based on the definition, this framework helps us

- 1. Understand the situation
- 2. Set our goals
- 3. Identify key issues
- 4. Find specific areas for improvement

Q1. Understanding the situation: What should we manage?

We should manage the following:

- Data (e.g. corpora)
- Information (e.g. patterns)
- Knowledge (e.g. translation strategy)

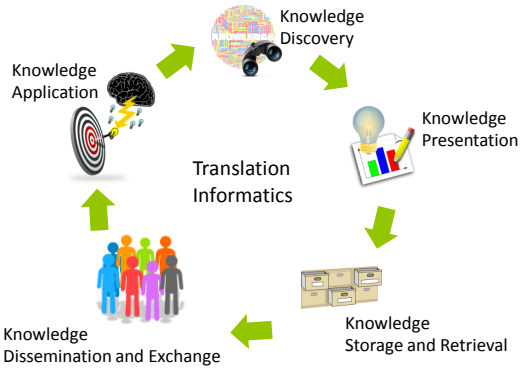
Q2. Setting our goals: What do we want to achieve?

We should provide information and knowledge in a proper way

- Right information / knowledge
- Right time
- Right people
- Right place

Q3. Identifying Key Issues: What do we need to consider?

We should consider the following components…



Q4. Finding ways to improve how we manage translation knowledge: Do we have any starting points?

For each of the components, the framework identifies some areas that may help us improve translation knowledge management.

Knowledge Discovery

We should consider how we acquire knowledge relevant to translation, interpreting and multilingual communication.

Knowledge Types

Knowledge Sources

Knowledge Types

1. Lexical information
2. Translation concepts and theories
3. Translation skills
4. Common errors
5. Translation examples
6. Domain-specific knowledge (e.g. technical terms)
7. Translation history
8. Translation industry

Books (monographs, textbooks, dictionaries and encyclopedias)

Journal articles and conference papers

News articles

Knowledge Sources

Lecture notes, reviews, prefaces and letters

Discussion forums, blogs and social media posts

Tacit knowledge

Knowledge Presentation

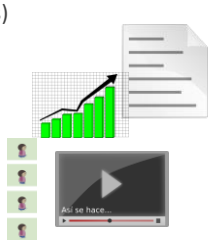
We should consider issues in knowledge codification.

Ways to present knowledge

General Principles and Specific Skills

Ways to present knowledge

1. Text (e.g. short articles)
2. Photos
3. Drawings
4. Audio
5. Videos
6. Charts
7. Infographics
8. Animation



Principles and Skills

1. Target users
2. Titles / headings
3. File size
4. Length
5. Clarity
6. Interconnectivity

Knowledge Storage and Retrieval

We should consider the design and development of knowledge databases

Types of Knowledge Databases

Ways to Store Knowledge

Ways to Retrieve Knowledge

Categorisation of Knowledge Databases

1. Knowledge types
2. Number of languages
3. Operation mode: online, offline or hybrid

Ways to Store Knowledge

1. Spreadsheets
2. Relational databases
3. Document databases

Ways to Retrieve Knowledge

1. Full-text Search
2. Hashtags (e.g., #TranslationSkills, #ComputerTranslation)

Knowledge Dissemination

We should consider how we can spread knowledge and facilitate knowledge exchange and generation in the meantime.

Possible Channels

Effective Use of the Channels

Possible Channels

1. Search Interface
2. e-Learning Platforms
3. Social Media

Effective Use of the Channels

1. User-friendliness
2. Cross-platform Support
3. Interactivity
4. Coverage
5. Content Marketing

Knowledge Application

We should consider how we can facilitate the application of translation knowledge and help translators, interpreters and multilingual communicators make informed decisions.

Ways of incorporating knowledge databases into apps

Strategies for Design and Implementation

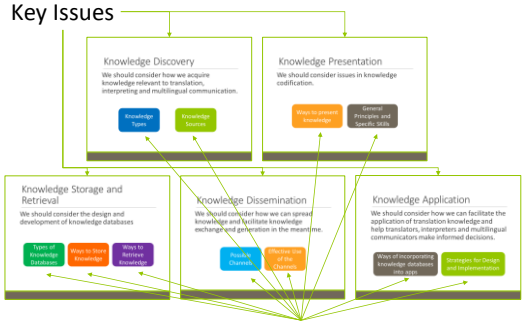
Possible apps

1. Computer-aided Translation and Interpretation Tools
2. Computer-aided Written Communication Tools
3. Computer-aided Verbal Communication Tools
4. Computer-aided Tools for Multilingual Communication for Specific Purposes

Design and Implementation

1. Algorithms
2. System Structure
3. Design Methodology
4. Development Principles

Key Issues



Possible Research Questions and Areas for Improvement

Outline (Part 1)

1. Translation Knowledge Management: Significance and Key Issues
2. Tools for Translation Knowledge Management

Tools for Knowledge Discovery

Examples

1. Memsource (https://www.memsource.com)
2. Sketch Engine (https://www.sketchengine.co.uk)
3. Text Analysis API (https://developer.aylien.com)

E-mail Alerts

Example 1: Google Scholar

Example 2: PubMed

Tools for Knowledge Presentation

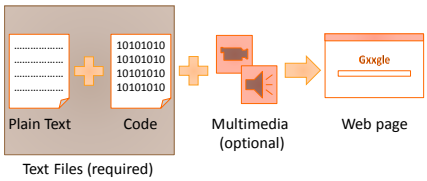
Examples

1. Draw.io (https://www.draw.io/)
2. Smartdraw (https://cloud.smartdraw.com)
3. Piktochart (https://piktochart.com)
4. Visme (https://www.visme.co)
5. Renderforest (https://www.renderforest.com/)

Tools for Knowledge Database Development

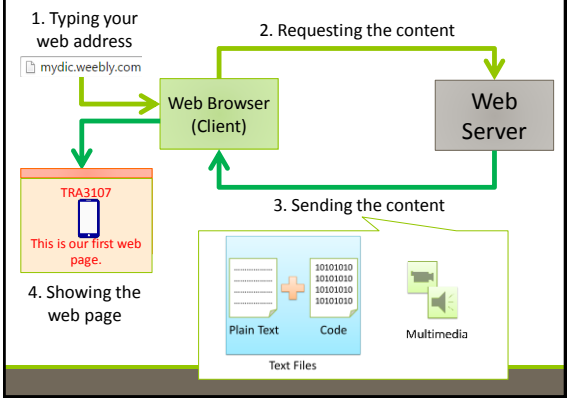
Web Pages

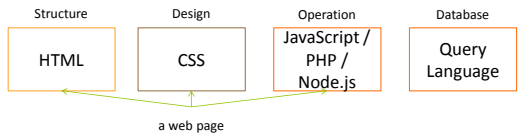
A **web page** comprises plain text and code, and it may also include multimedia elements.



Clients and Servers

1. The building blocks of a web page, including the plain text, code and multimedia elements are stored on a **server**.
2. You use a web browser (a **client**) to get the web content to form a web page.





Examples

1. WordPress + Plugin (https://zh-tw.wordpress.com)
2. Liveweave (http://liveweave.com)
3. Visual Studio Community (https://www.visualstudio.com/vs/community/)
4. ToolBuilder + Google Sheets

Thank you!