

Translation Knowledge Management

Translation Studies



Translation
Methods

History of
Translation

Cultural
Issues

Translation
Education

Translation
Criticism

Translation
Tools

Collaborative
Translation

Knowledge



Students



Knowledge
Management



Professional Translators

But how?

Outline

1. Translation Knowledge Management:
Significance and Key Issues
2. Tools for Translation Knowledge
Management
3. Demonstration: Development of a Simple
Translation Knowledge Database

Introduction

Significance of Translation Knowledge Management



Significance

Professional Translators: Making Informed Translation Decisions

Complex
Translation
Problems

Ever-changing
World

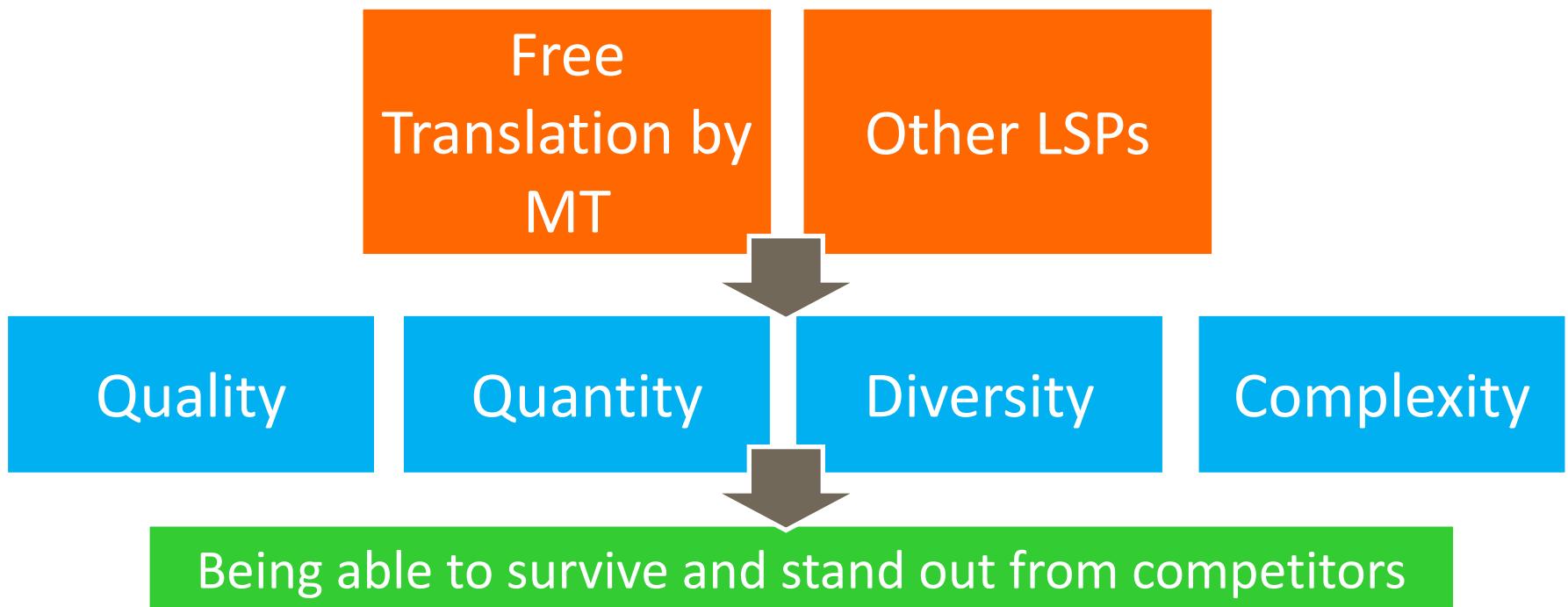
Information
Explosion



Knowledge

Significance

Language Service Providers (LSPs): Enhancing competitiveness



Significance

Non-professional Translators: Getting more support

Freelance
Translators

In-house
Translators

Non-
professional
Translators

Example 1:
Administrative
Staff

Example 2:
Relatives of
Patients

Significance

Translation Studies and Translation Industry:
Establishing and promoting best practices

Dissemination
and Exchange

Creation

Promotion

Inheritance

What have we done so far?



What have we done so far?

Translation Technology offers help to translators

Automatic
Translation

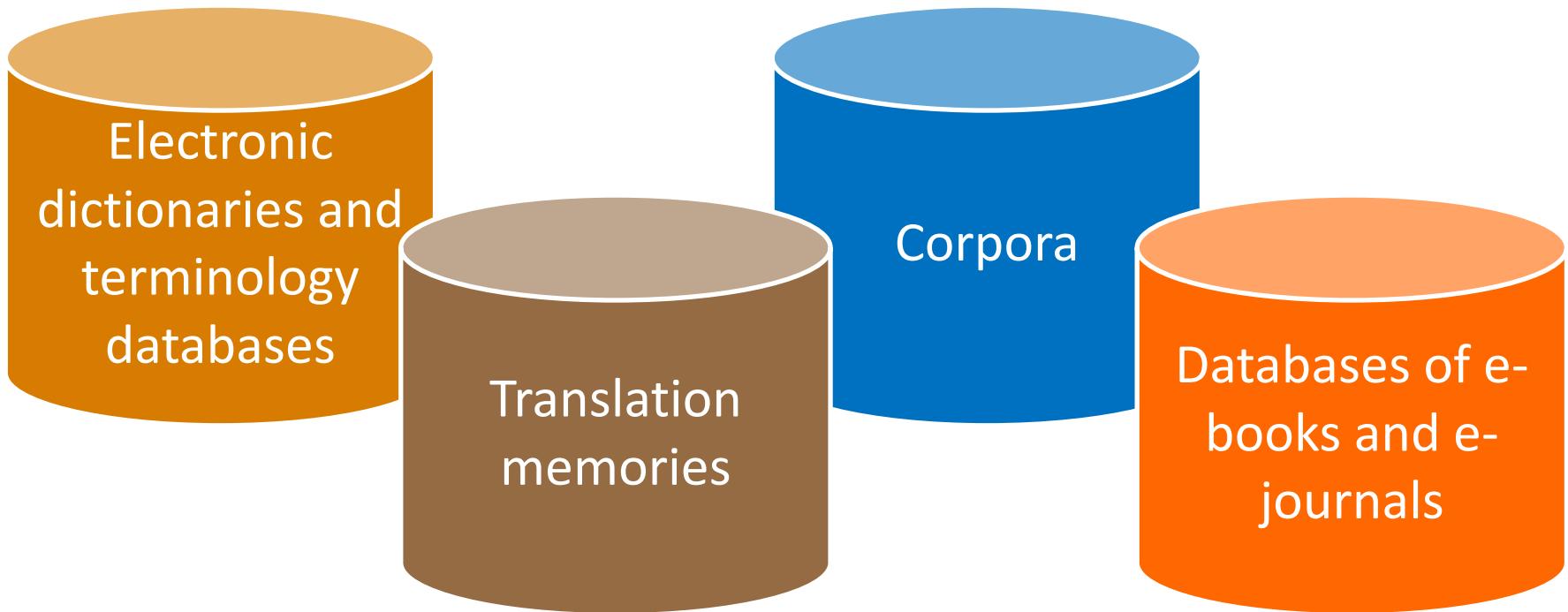
Translation
Suggestions

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

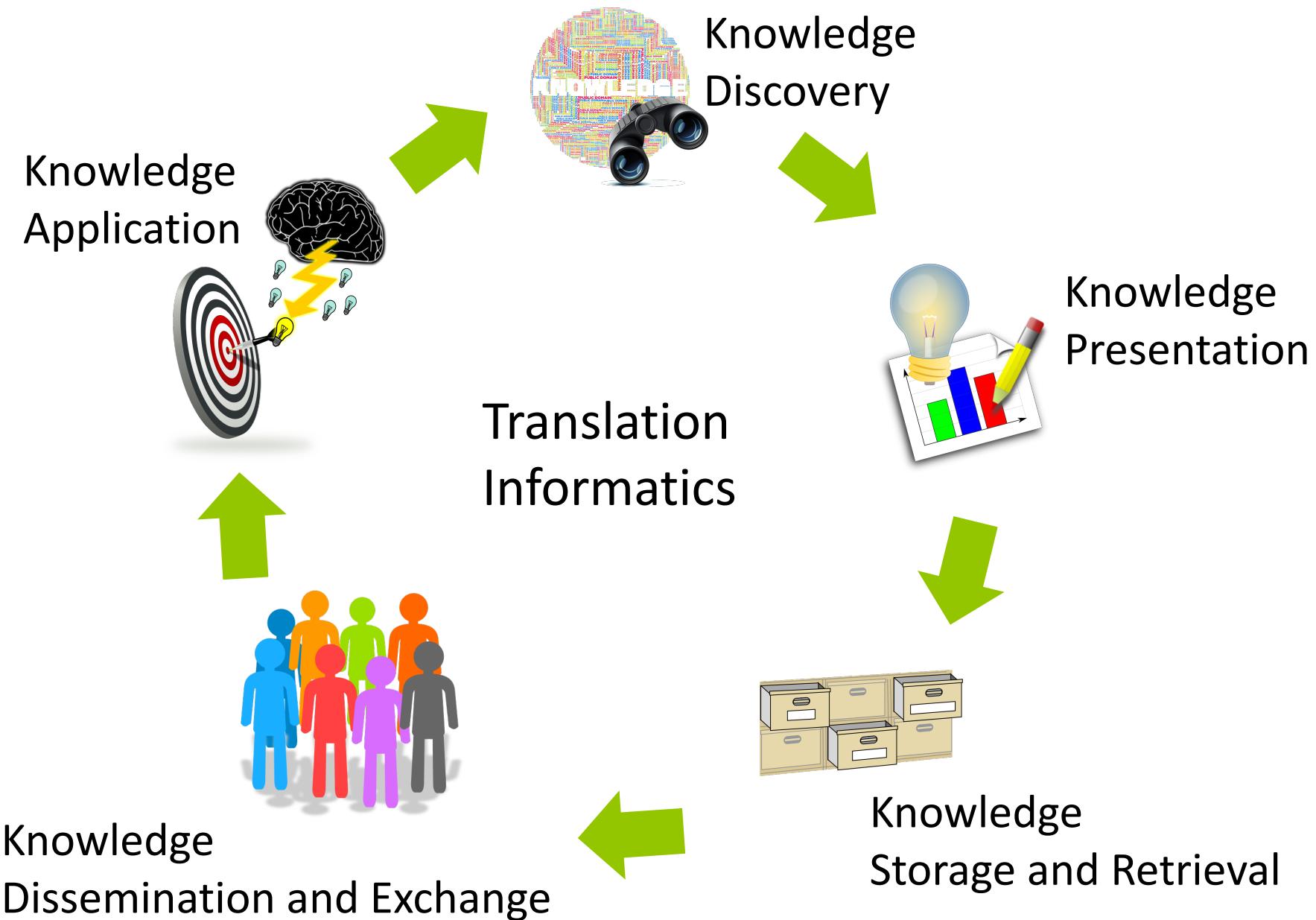
Right time

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 identify some areas that may help us improve translation knowledge management.

Knowledge Discovery

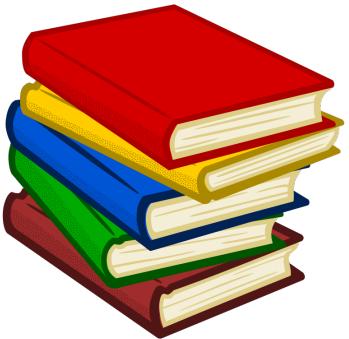
We should consider how we acquire knowledge relevant to translation, interpreting and multilingual communication.

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)



Lecture notes, reviews, prefaces and letters

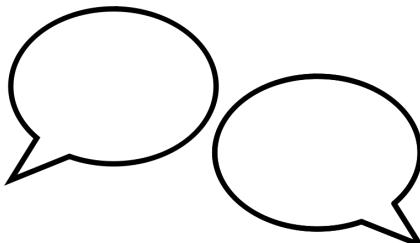


Journal articles and conference papers

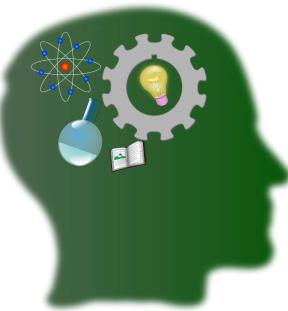


News articles

Knowledge Sources



Discussion forums, blogs and social media posts



Tacit knowledge

Knowledge Presentation

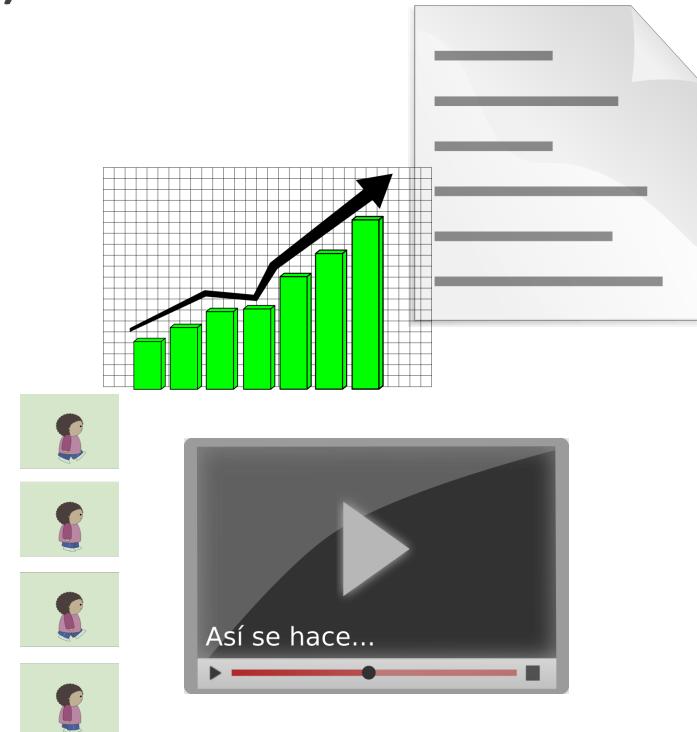
We should consider issues in knowledge codification.

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

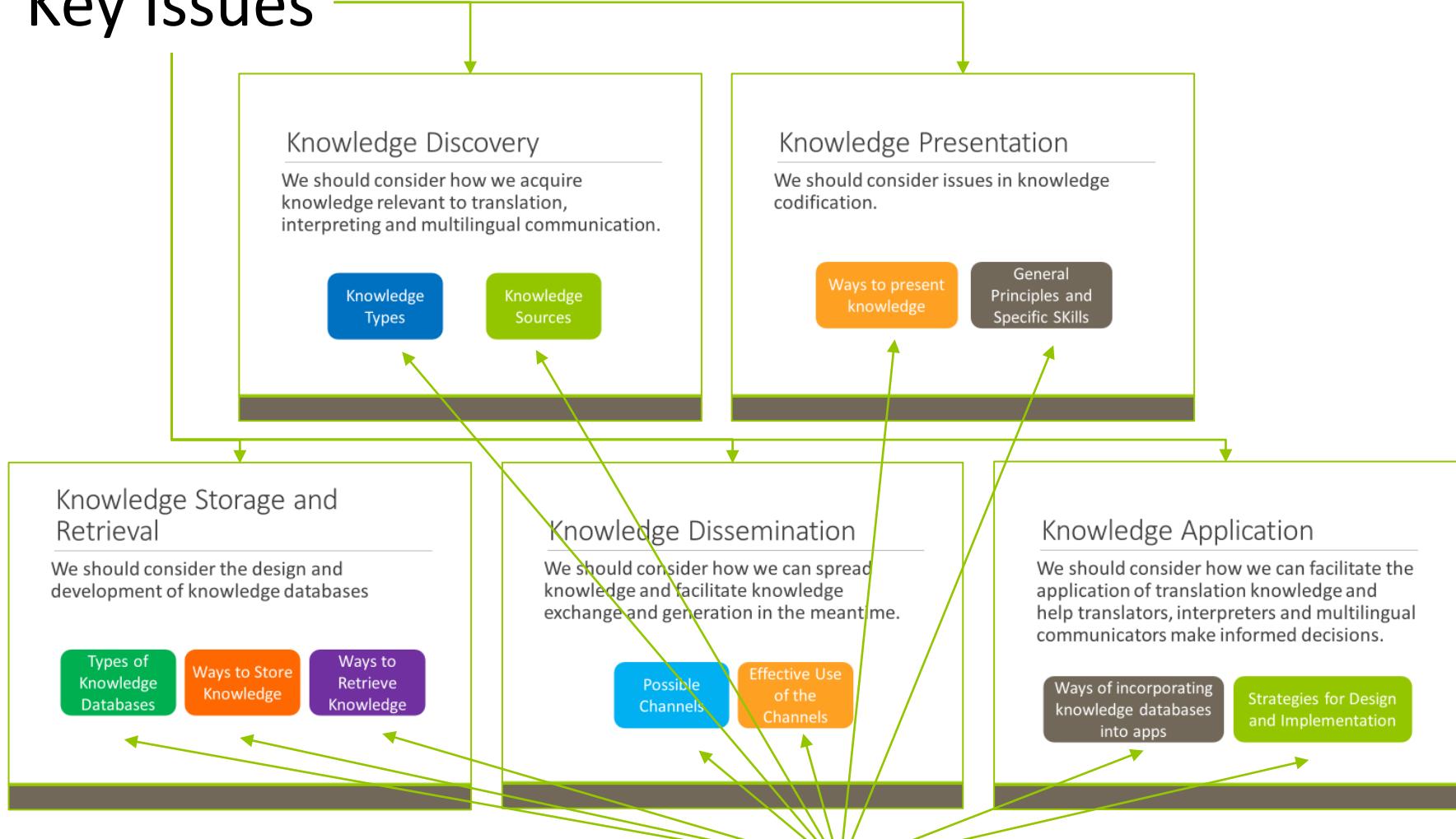
Possible apps

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
3. Demonstration: Development of a Simple
Translation Knowledge Database

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>)

Tools for Knowledge Presentation

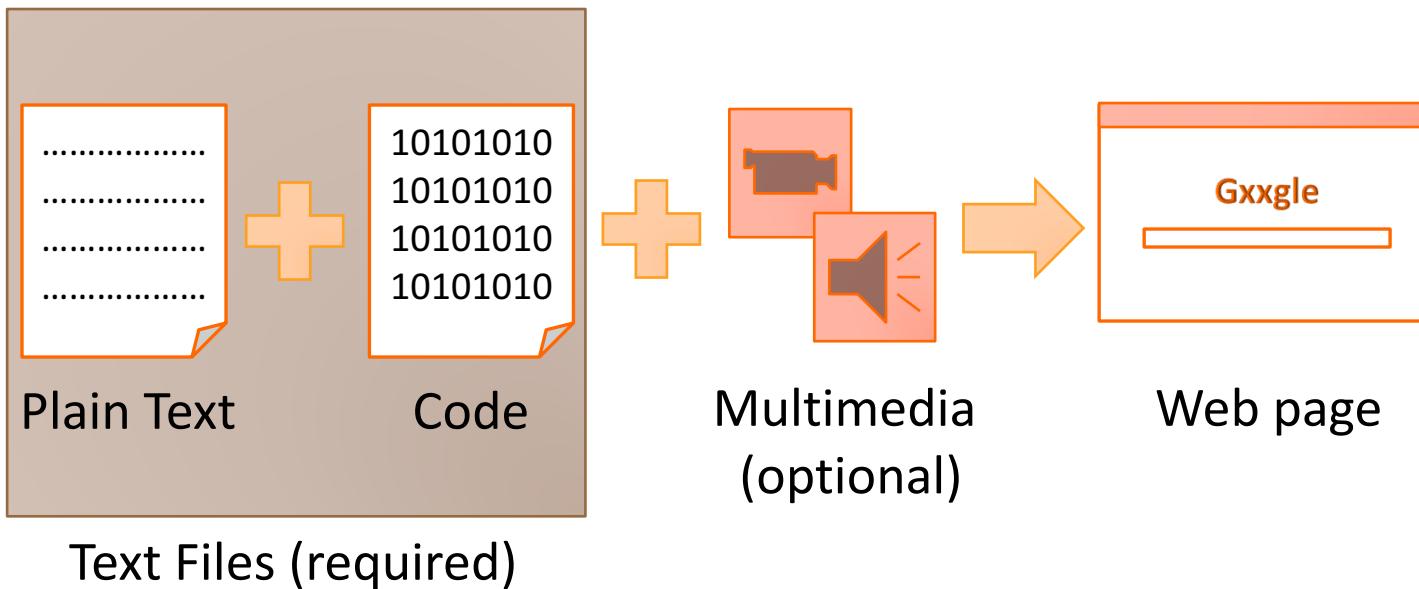
Examples

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.

1. Typing your web address

 mydic.weebly.com

Web Browser
(Client)

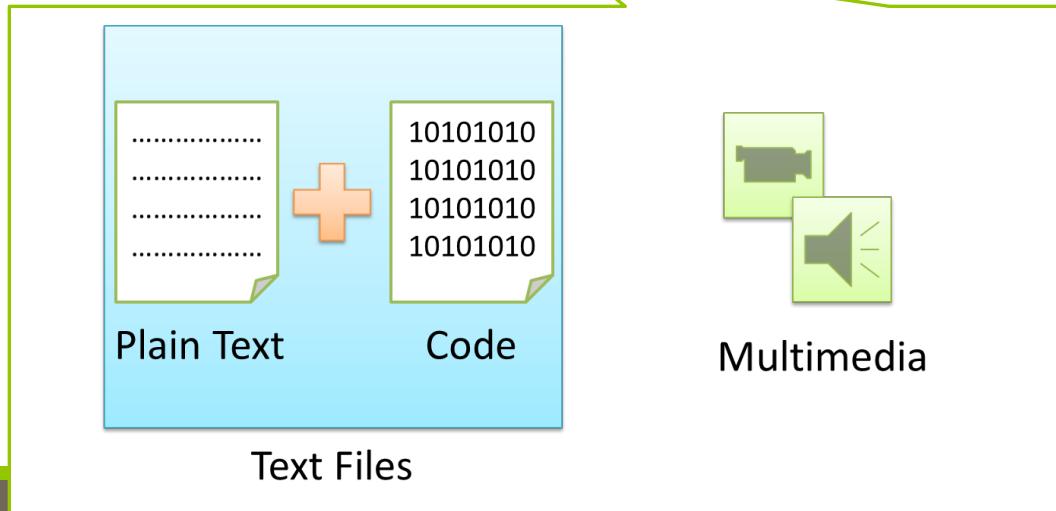
2. Requesting the content

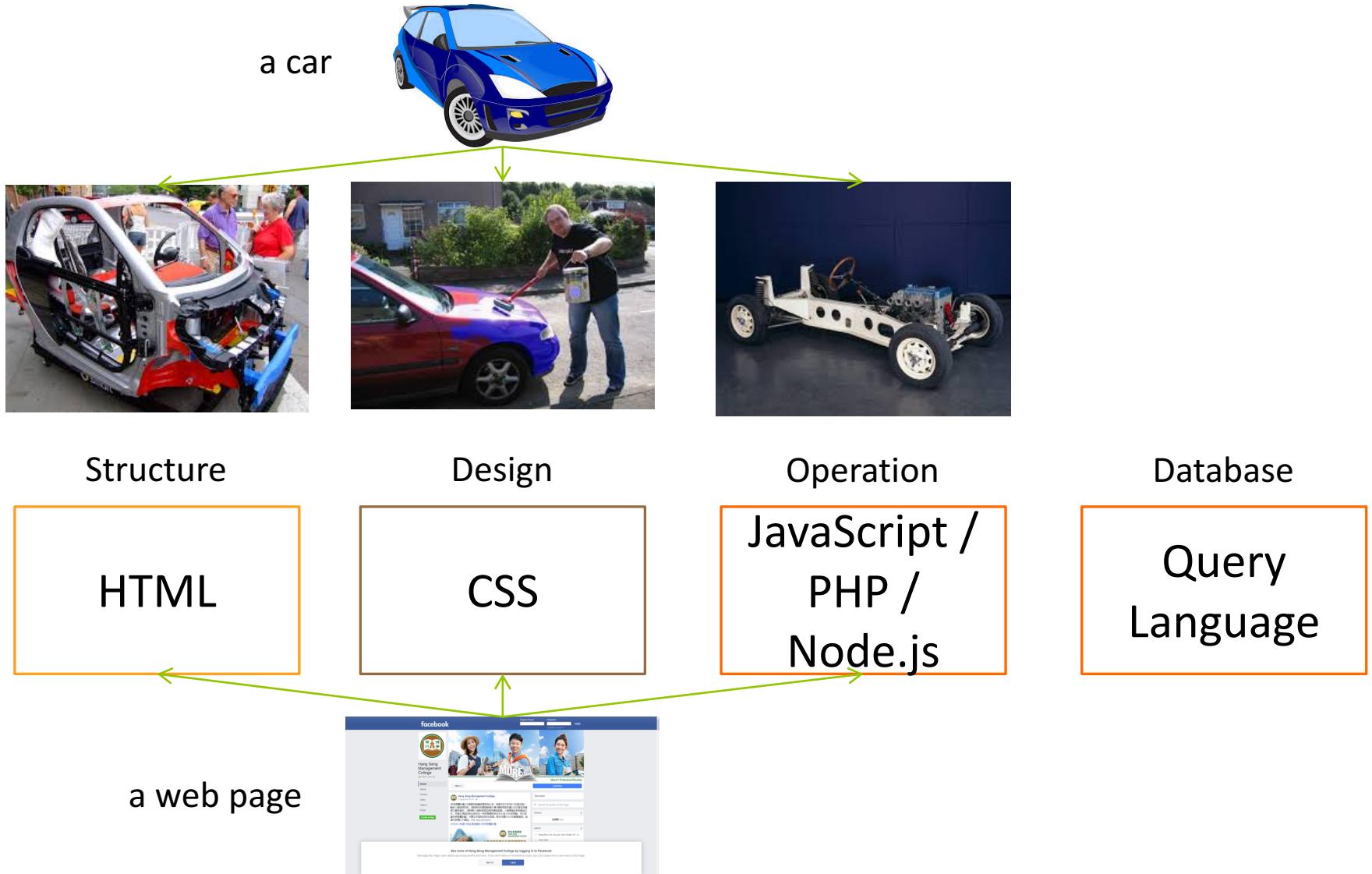
Web Server



4. Showing the web page

3. Sending the content





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

Outline

1. Translation Knowledge Management:
Significance and Key Issues
2. Tools for Translation Knowledge
Management
3. Demonstration: Development of a Simple
Translation Knowledge Database

Structure

HTML

Design

CSS

Operation

JavaScript /
PHP /
Node.js

Database

Query
Language

Tools we need

1. Weebly, which helps you to design your web pages without HTML and CSS programming;
2. ToolBuilder (<http://toolbuilder.weebly.com>), which helps you add interactivity without writing your own JavaScript; and
3. Google Charts and Google Sheets, which help you to manage your database without SQL programming.

Step 1: Build a spreadsheet database with Google Sheets

Create a spreadsheet with Google Sheets /
Create a spreadsheet with Excel and upload
it to your Google Drive

	A	B
1	3RS	三跑道系統
2	a number of	多項
3	activities	活動
4	affected	影響
5	again	再次
6	ageing population	人口老化
7	agreement	協議
8	allocate	投放
9	also	亦
10	and	和
11	and investment	和投資
12	announced	宣布
13	around the world	世界各地
14	arts	藝術
15	as	作為
16	as a whole	全年
17	ASEAN	東盟
18	asset	資產
19	asset management	資產管理
20	Authority	管理局
21	average	平均
22	aviation	航空
23	benefits	效益
24	bickering	爭拗
25	bill	草案
26	broaden	擴闊
27	Budget	財政預算案
28	Budget	預算案
29	burden	負擔
30	capital works	基本工程

Step 1: Build a spreadsheet database with Google Sheets

Click “Share”. In “Share with others”, click “Advanced”.

Step 1: Build a spreadsheet database with Google Sheets

In “Sharing settings”, click “Advanced” and select “On – Public on the web”. Click “Save”. Click “Done”.

Step 1: Build a spreadsheet database with Google Sheets

Go to “File”. Click “Publish to the web”. Click “Publish”.

Step 1: Build a spreadsheet database with Google Sheets

Get the key of your spreadsheet (the string between “/d/” and “pubhtml”).

Step 2: Create a search page with Weebly

Go to Weebly (<http://www.weebly.com/>). Create a free account.

Step 2: Create a search page with Weebly

Select the theme of the user-interface of your online dictionary. You can always change your theme later.

Step 2: Create a search page with Weebly

Modify your “HOME” page (e.g., changing the title of your webpage).

Step 2: Create a search page with Weebly

Modify the other pages (e.g., “ABOUT” and “CONTACT”).

Step 2: Create a search page with Weebly

(Optional) Click “Pages” on the menu bar to add pages. Click “Design” to modify your theme.

Step 2: Create a search page with Weebly

Click “PUBLISH” to publish your work.

Step 3: Build your search tool with ToolBuilder

Go to ToolBuilder
[\(http://toolbuilder.weebly.com/\)](http://toolbuilder.weebly.com/).

toolbuilder.weebly.com

TOOLBUILDER

HOME CONTACT NEW TOOLBUILDER (BETA)

Step 1. Specify your parameters

Settings Content Style

ID		Columns	English,中文
Output Mode	Default	Search Mode	Exact Search
Should case sensitivity be enabled?	True	Should instant search be enabled?	False
Should the search button be shown?	True	Should the clear button be shown?	True
Should the status bar be shown?	True	Should the button theme be enabled?	True

Step 2. Preview your search interface

Type and search here (Chinese or English)
請在此輸入要搜尋的文字 (中文或英文)

Search

SEARCH 搜尋 CLEAR 清除

Status: Ready
狀態：準備就緒

Step 3: Build your search tool with ToolBuilder

Configure your search settings: Go to the Settings tab.

toolbuilder.weebly.com

HOME CONTACT NEW TOOLBUILDER (BETA)

Step 1. Specify your parameters

Settings Content Style

ID		Columns	English,中文
Output Mode	Default	Search Mode	Exact Search
Should case sensitivity be enabled?	True	Should instant search be enabled?	False
Should the search button be shown?	True	Should the clear button be shown?	True
Should the status bar be shown?	True	Should the button theme be enabled?	True

Step 2. Preview your search interface

Type and search here (Chinese or English)
請在此輸入要搜尋的文字 (中文或英文)

Search

SEARCH 搜尋

CLEAR 清除

Status: Ready
狀態：準備就緒

Step 3: Build your search tool with ToolBuilder

Type the ID of your spreadsheet in the ID field.

Step 1. Specify your parameters

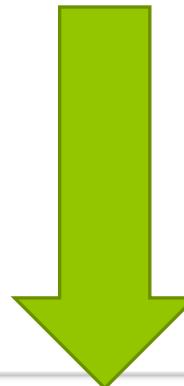
Settings Content Style

ID			
	Columns English,中文		
Output Mode	Default	Search Mode	Exact Search
Should case sensitivity be enabled?	True	Should instant search be enabled?	False
Should the search button be shown?	True	Should the clear button be shown?	True
Should the status bar be shown?	True	Should the button theme be enabled?	True

<https://docs.google.com/spreadsheets/d/1iBnTlkidVTz6alpUuples36sbdoYoCqtz7ap0FVMWbeE/pubhtml>

Step 1. Specify your parameters

Settings	Content	Style
ID	1iBnTlkidVTz6alpUuples36sbdoYoCqtz7ap0F	
Output Mode	Default	
Should case sensitivity be enabled?	True	
Should the search button be shown?	True	
Should the status bar be shown?	True	



Step 3: Build your search tool with ToolBuilder

Name your columns. Type your column names in the Columns field. The column names should be separated by commas without extra spacing.

	A	B
1	3RS	三跑道系統
2	a number of	多項
3	activities	活動
4	affected	影響
5	again	再次
6	ageing population	人口老化
7	agreement	協議
8	allocate	投放
9	also	亦
10	and	和
11	and investment	和投資
12	announced	宣布
13	around the world	世界各地
14	arts	藝術
15	as	作為
16	as a whole	全年
17	ASEAN	東盟
18	asset	資產
19	asset management	資產管理
20	Authority	管理局
21	average	平均
22	aviation	航空
23	benefits	效益
24	bickering	爭拗
25	bill	草案
26	broaden	擴闊
27	Budget	財政預算案
28	Budget	預算案
29	burden	負擔
30	capital works	基本工程

Columns

English,中文

Search Mode

Exact Search

Should instant search be enabled?

False

Should the clear button be shown?

True

Should the button theme be enabled?

True

Step 3: Build your search tool with ToolBuilder

You can preview the search results by referring to “Preview your search interface”. Type a word (e.g. “average”) in the Preview area to see if the modified platform works.

Step 1. Specify your parameters

[Settings](#) [Content](#) [Style](#)

ID	1l8nTkidVTz6alpJunes36sbqOYcCotz7apOF	Columns	English,中文
Output Mode	Default	Search Mode	Exact Search
Should case sensitivity be enabled?	True	Should instant search be enabled?	False
Should the search button be shown?	True	Should the clear button be shown?	True
Should the status bar be shown?	True	Should the button theme be enabled?	True

Step 2. Preview your search interface

Type and search here (Chinese or English)
請在此輸入要搜尋的文字 (中文或英文)

SEARCH 搜尋CLEAR 清除

Status: Ready
狀態：準備就緒

Step 2. Preview your search interface

Type and search here (Chinese or English)
請在此輸入要搜尋的文字 (中文或英文)

average

SEARCH 搜尋 CLEAR 清除

Status: Ready
狀態：準備就緒

Step 2. Preview your search interface

Type and search here (Chinese or English)

請在此輸入要搜尋的文字（中文或英文）

average

SEARCH 搜尋CLEAR 清除

Status: Ready
狀態：準備就緒

English 中文1 average 平均

English	中文
1	average
平均	

Step 3: Build your search tool with ToolBuilder

1. You can modify the other parameters, such as Output mode and Search Mode.
2. For example, you can specify the way in which searches are conducted (e.g., you can ask the computer to search as you type).

Step 1. Specify your parameters

Settings Content Style

ID	<input type="text" value="1iBnTIkidVTz6alpUjupes36sbqOYqQatz7ap0F"/>
Output Mode	<input type="button" value="Default"/>
Should case sensitivity be enabled?	<input type="button" value="True"/>
Should the search button be shown?	<input type="button" value="True"/>
Should the status bar be shown?	<input type="button" value="True"/>

Columns	English,中文
Search Mode	Exact Search
Should instant search be enabled?	False
Should the clear button be shown?	True
Should the button theme be enabled?	True

Step 3: Build your search tool with ToolBuilder

Configure your user interface: Go to the Content tab.

Step 1. Specify your parameters

Settings

Content

Style

Instructions

Type and search here (Chinese or English)
 請在此輸入要搜尋的文字 (中文或英文)

Input Hint

Search

Search Button

Search 搜尋

Clear Button

Clear 清除

Status (Ready)

Status: Ready
 狀態：準備就緒

Status (Searching)

Status: Please wait...
 狀態：請稍候.....

Status (No Input)

Status: Please provide the expression(s) to be searched
 狀態：請提供要搜尋的字詞語句

Status (No results)

Status: Sorry! No results have been found. The following (if any) are the last search results for your reference.
 狀態：抱歉！查無資料。以下 (如有的話

Step 3: Build your search tool with ToolBuilder

1. For example, you can modify the Instructions field. Leave it blank if you want to remove the line.
2. You can also modify the other messages (e.g. the content of the status section).
3. You can preview the user interface instantly.

Step 1. Specify your parameters

Settings Content Style

Instructions	請在此輸入要搜尋的文字（中文或英文）	
Input Hint	Search	
Search Button	搜尋	Clear Button 清除
Status (Ready)	狀態：準備就緒	
Status (Searching)	狀態：請稍候.....	
Status (No Input)	狀態：請提供要搜尋的字詞語句	
Status (No results)	狀態：抱歉！查無資料。以下（如有的話）是上次的搜尋結果，以供參考。	

Step 2. Preview your search interface

請在此輸入要搜尋的文字（中文或英文）

Search

搜尋 清除

狀態：準備就緒

Step 3: Build your search tool with ToolBuilder

Make more changes to the search platform by changing some of the parameters in the Style tab: For example, you can modify the design of your user interface (e.g. the font colour of your user interface).

Step 1. Specify your parameters

Settings	Content	Style
Alignment		
Instructions		
Input		
Message		
Buttons		
Output		
<input type="button" value="Next Step"/>		

Style

Alignment: Center

Instructions

Input

Message

Buttons

Output

Step 3: Build your search tool with ToolBuilder

1. Get the code for your customised user interface: Scroll down the page, and you can see Step 3. Click and get your code. Click the GET CODE! button.
2. You can see an HTML code snippet generated by the system.

The screenshot shows a web browser window with the URL toolbuilder.weebly.com. The page has a header with the site name "TOOLBUILDER" and navigation links for "HOME", "CONTACT", and "NEW TOOLBUILDER (BETA)". Below the header, there is a search interface with a search bar, a green "SEARCH 搜尋" button, and a green "CLEAR 消除" button. A status message "Status: Ready 狀態：準備就緒" is displayed. A red box highlights a section titled "Step 3. Click and get your code" which contains a "GET CODE!" button and a large empty text area. At the bottom, there is a dark footer bar with a "CREATE A FREE WEBSITE" button and a "POWERED BY weebly" logo.

TOOLBUILDER

HOME CONTACT NEW TOOLBUILDER (BETA)

Type and search here (Chinese or English)
請在此輸入要搜尋的文字 (中文或英文)

Search

SEARCH 搜尋

CLEAR 消除

Status: Ready
狀態：準備就緒

Step 3. Click and get your code

GET CODE!

CREATE A FREE WEBSITE

POWERED BY **weebly**

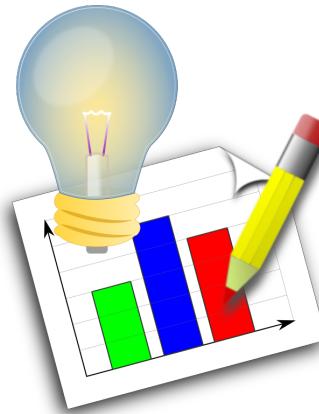
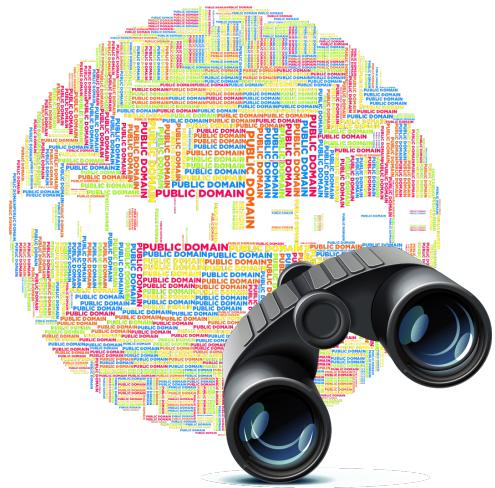
Step 3. Click and get your code

GET CODE!

```
<div data-tranxid="main"></div><script type="text/javascript" src="https://www.google.com/jsapi?autoload={'modules':[{'name':'visualization','version':'1.1','packages':['table']}]}></script><script type="text/javascript" src="http://www.tranxlab.com/toolbuilder2.js"></script>
<script>f({source:"1iBnTlkidVTz6alpUupes36sb0YoCqtz7ap0FVMWbeE",align:"center",columns:["English","中文"],output_mode:"1",search_mode:"exact",casesensitive:"true",instantsearch:"false",instructions:"Type and search here (Chinese or English) <br/> 請在此輸入要搜尋的文字 (中文或英文)",instructions_style:"",input_hint:"Search",input_style:"",buttons_theme:"true",buttons_style:"",searchbutton:"Search 搜尋",clearbutton:"Clear 清空"});</script>
```

Step 4: Add your code to your webpage

Copy and paste the code generated by ToolBuilder to the “Click to set custom HTML” box.



Thank you!

