

Migration Software for I18N (Internationalization)

December, 2007

Kokusaika JP, Inc.

<http://www.kokusaika.jp/>

Introduction -- Kokusaika JP, Inc.



Kokusaika JP, Inc. was spun off from **Business Search Technologies Corporation** (<http://www.bsearchtech.com/>) in June 2006 to focus on **software internationalization**.

“**Kokusaika**” is a Japanese word meaning “**internationalization**”. “JP” comes from the ISO country code for Japan.

Kokusaika JP’s mission is to help customers conduct their global business efficiently and effectively with internationalized software.

Introduction -- Yoichi Suehiro's Profile

about 20 years I18N experience

- Joined DEC Japan R&D Center in 1986. Worked on Internationalization and Japanese localization of UNIX Operating System throughout **DEC, Compaq and HP**.
- As the leader of Japanese Tru64 UNIX OS project, worked with **international teams** from the US, Hong Kong, France and Singapore for more that 10 years. From 2003 to 2004, managed all of the Tru64 UNIX I18N components.
- **Standards Activities** as one of the representatives of company or national body:
X/Open I18N WG, ISO C and ISO POSIX committee, JIS C and JIS POSIX WG.
- Wrote a book about Software Internationalization in 1998.
(Co-editor/Co-author with Yoshi Kiyokane,
CTO of Business Search Technologies Corporation)
Kyoritsu-Syuppan ISBN4-320-02904-6



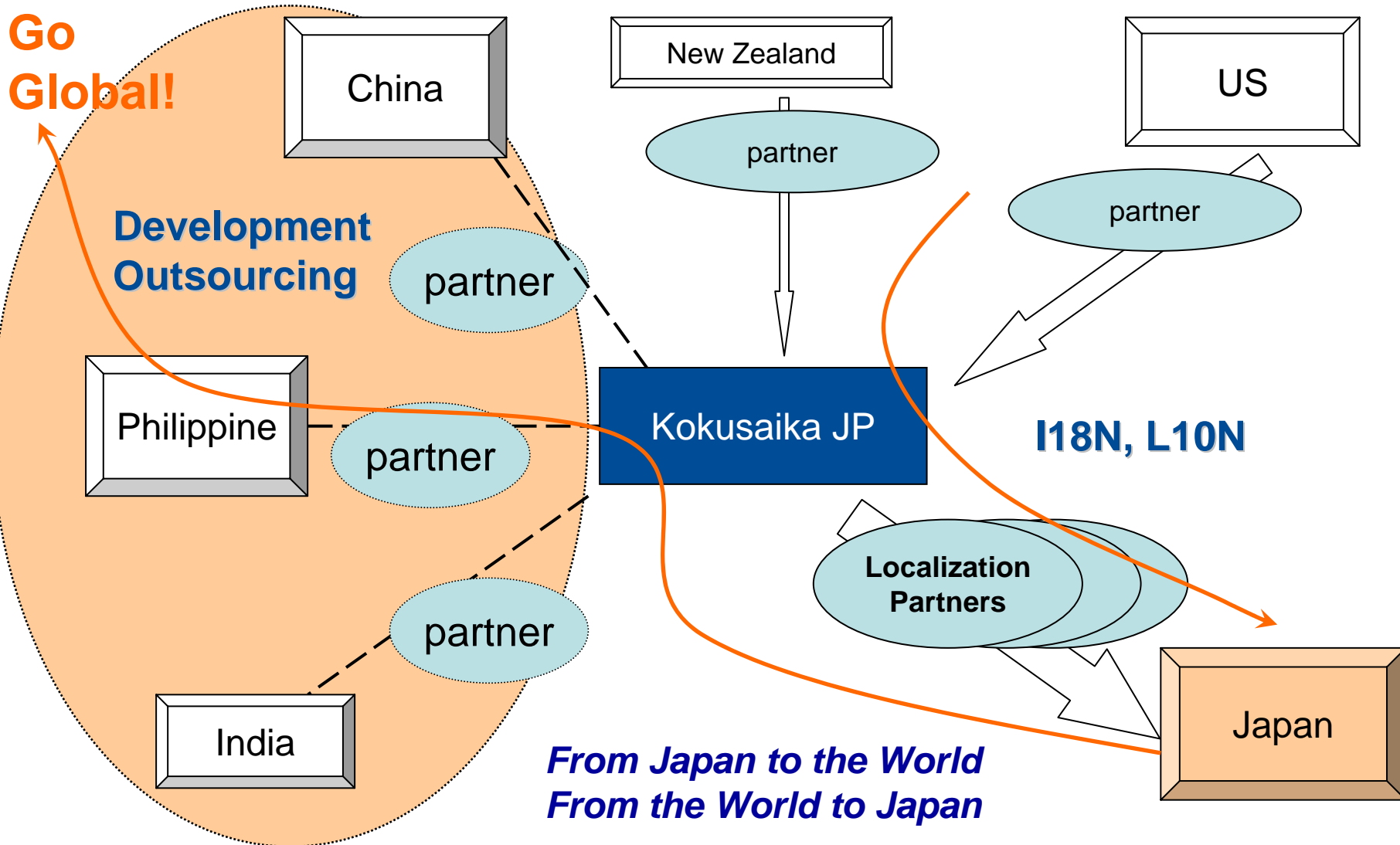
Introduction -- Yoichi Suehiro's Profile

- One of the founding members of LI18NUX (later Free Standards Group/OpenI18N), which was established to work on **internationalization of Linux**. As the leader of I18N system architecture subgroup, completed and issued LI18NUX2000 Globalization Specification in 2001.
- Left HP in December 2003 and established **Business Search Technologies Corporation** with other six members in February 2004. As a director, managed **Software Internationalization business** and **OSS business**.
 - **OSS desktop trial program for schools** in Japan by METI (CY2004-2006)
 - Project leader for Tsukuba region (CY2004)
 - Worked on opening an office in JETRO incubation center in San Jose
 - Developed a software internationalization tool, World Wide Navi. (patent pending)
 - Exhibited wwnavi at the Unicode Conference in San Francisco in March 2006
- **Established Kokusaika JP, Inc. in June 2006.**

Kokusaika JP's business overview

- One-stop solution provider for I18N/L10N and global distributed development
- I18N/L10N Products
 - Develop and sell I18N tool (World Wide Navi)
 - Sell L10N tool (Sisulizer, Finnish product)
- I18N/L10N services
 - I18N/L10N consultation including estimation, education, seminar
 - I18N/L10N software development
 - option: Offshore development
 - Test outsourcing (Kokusaika JP + partners)
 - Localization (Kokusaika JP + partners)
 - GUI localization, Manual translation, Web translation

Kokusaika JP's I18N/L10N business flow



Kokusaika JP's business overview

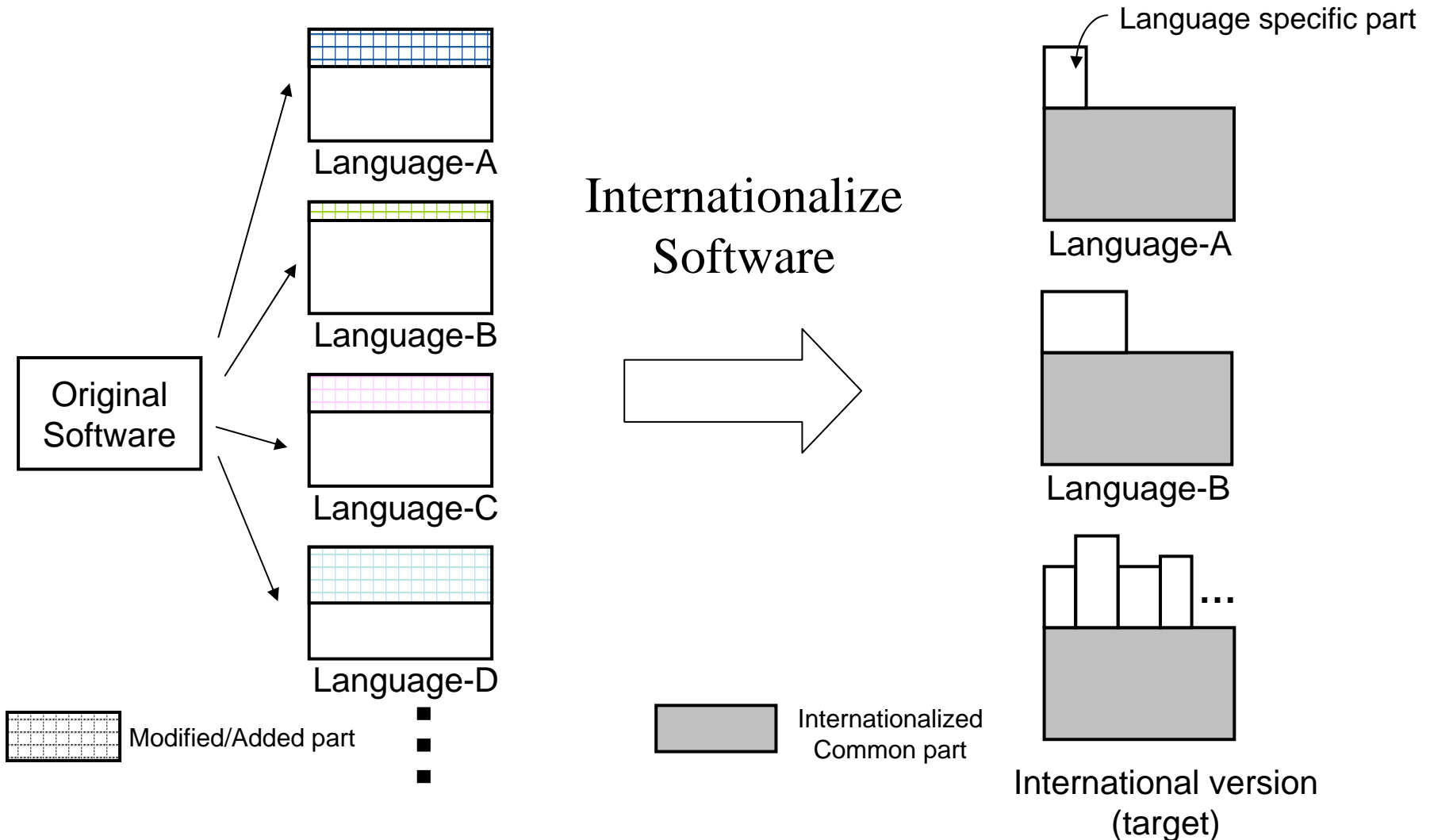
- OSS projects

- The leader of 2006 Open School Platform project joined Kokusaika JP in May 2007.
- Continued support for OSS related activities
- Working on the OSS office-application catalog project (One of the IPA's OSS investigation projects for 2007 2nd half)
 - Provide information on OSS applications which office-workers can utilize.
 - Investigation of their I18N/L10N level is planned.

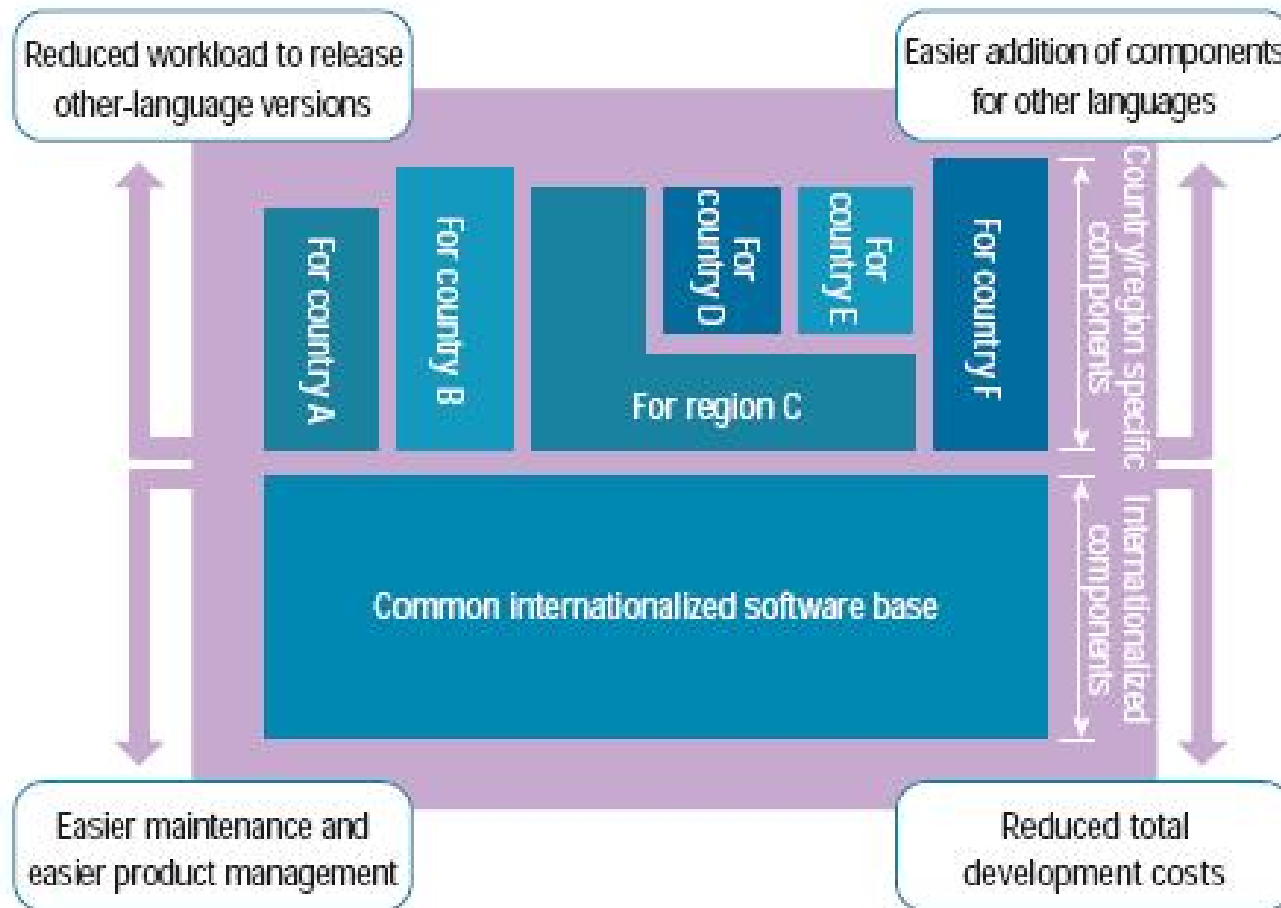
What is I18N? (concept)

- I18N = (Software) **Internationalization**
[18 characters between 'I' and 'N']
 - > the process of planning and implementing products and services so that they can easily be adapted to specific local languages and cultures, a process called **localization**.
 - **localization** => L10N
- Once I18N is done, main task of L10N become translation.

What is I18N? (concept)

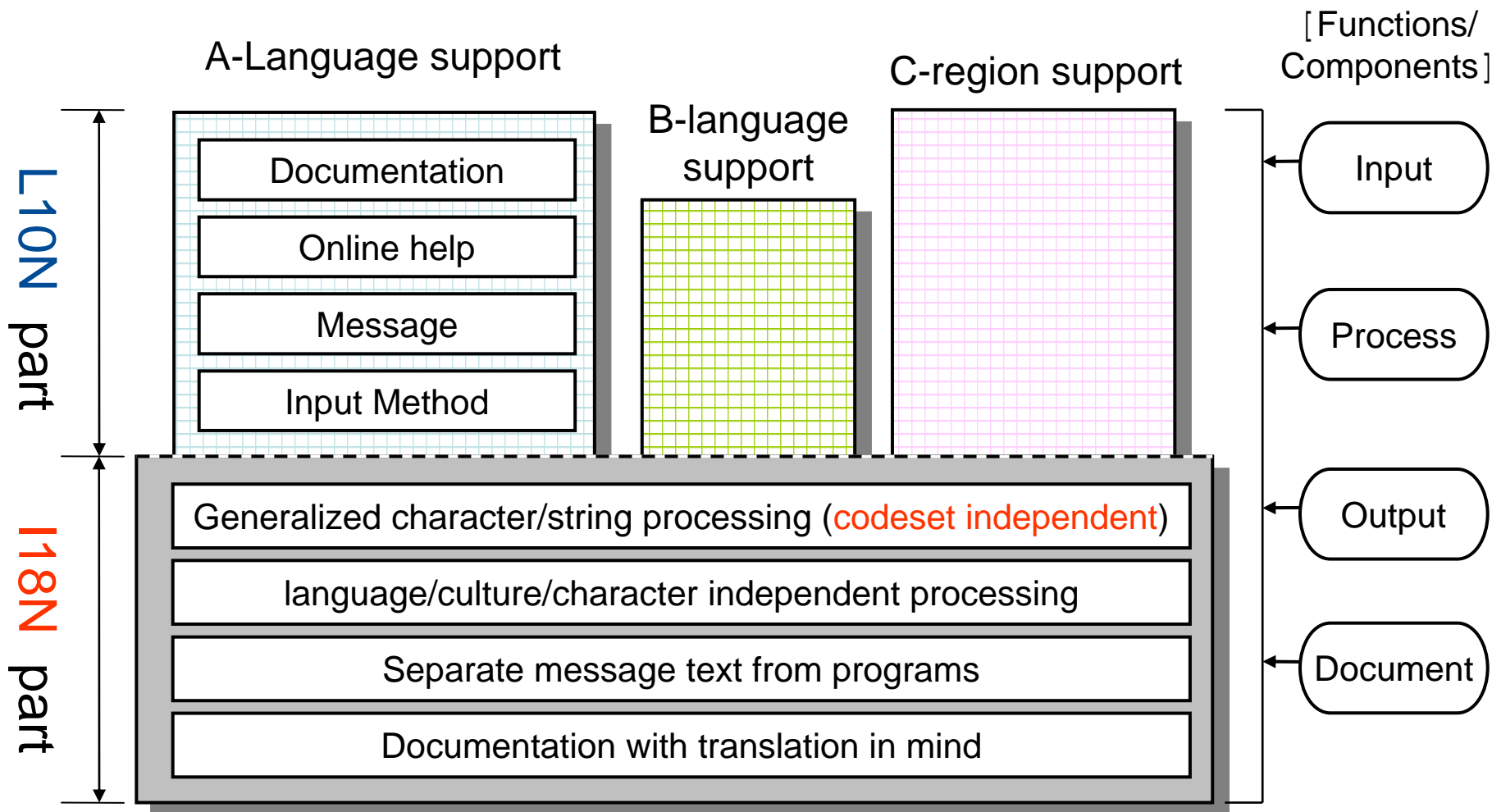


What is I18N? (concept)

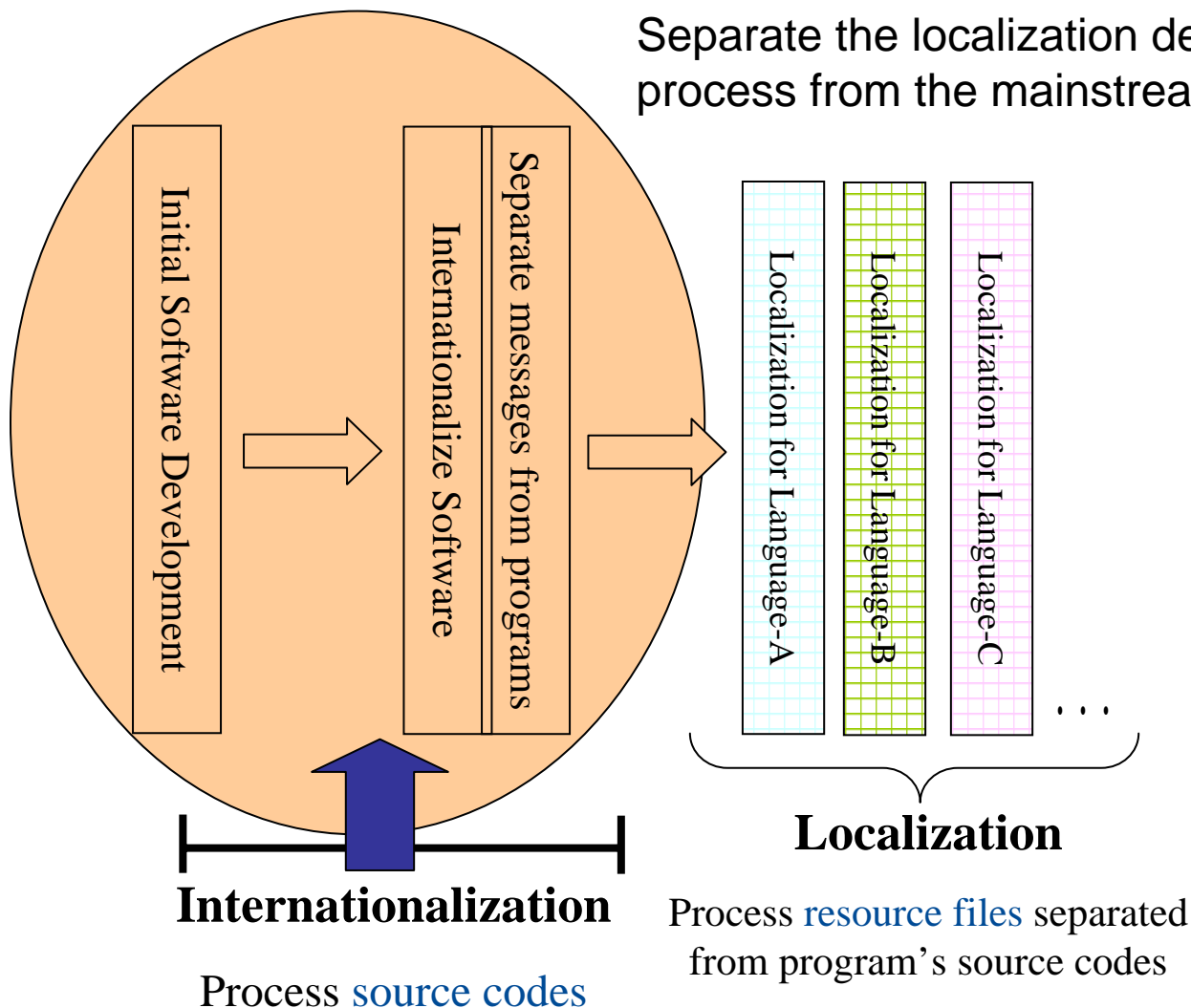


➔ Big advantages for global business

What is I18N? (concept)



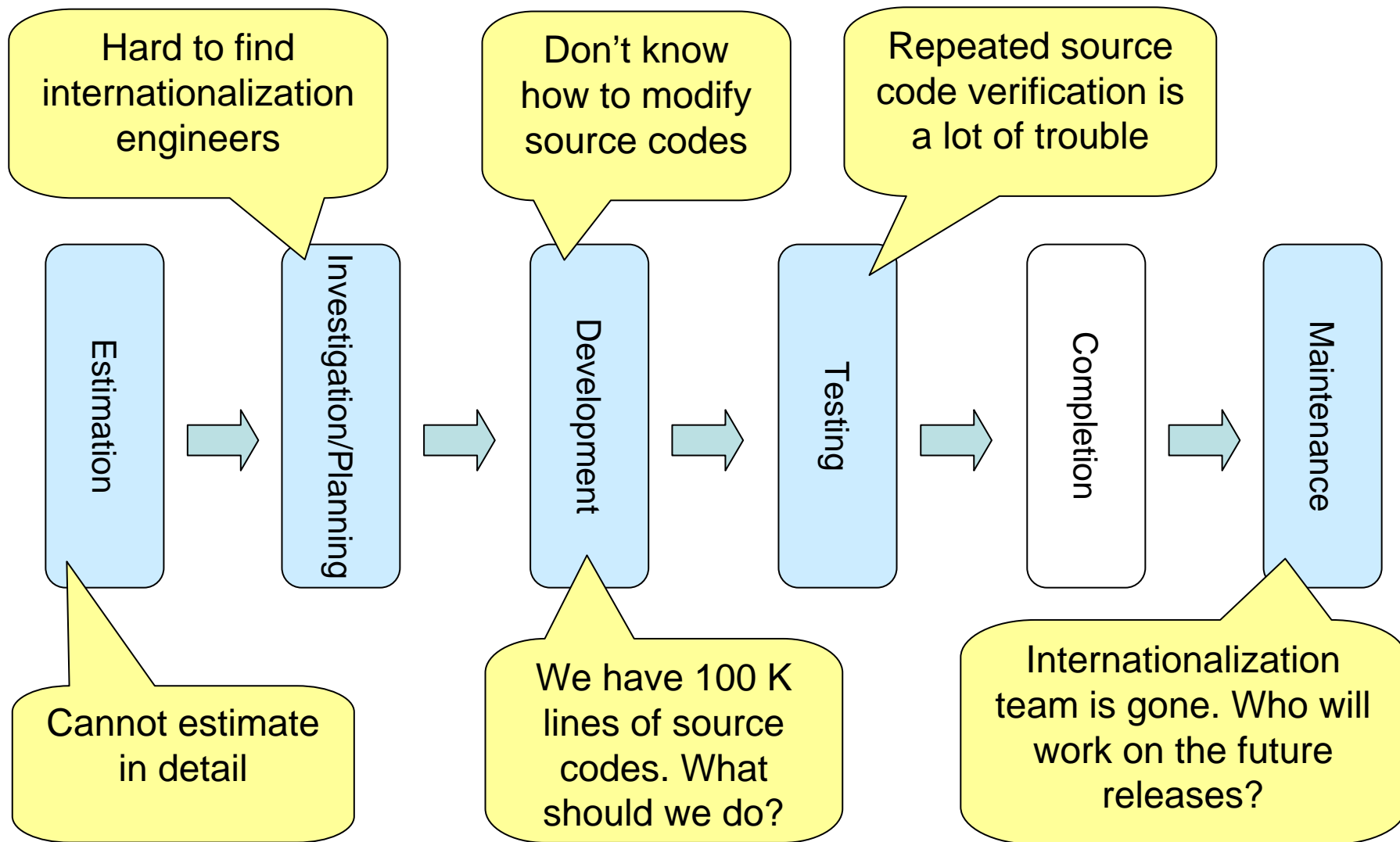
What is I18N? (concept)



I18N development:

- What: source codes
- Who: Programmers
- Part of mainstream development
- Mostly done internally because of IP protection
- Hard to find experienced engineers in this area
- Not only technical but management skills are required

Problems in Software Internationalization work

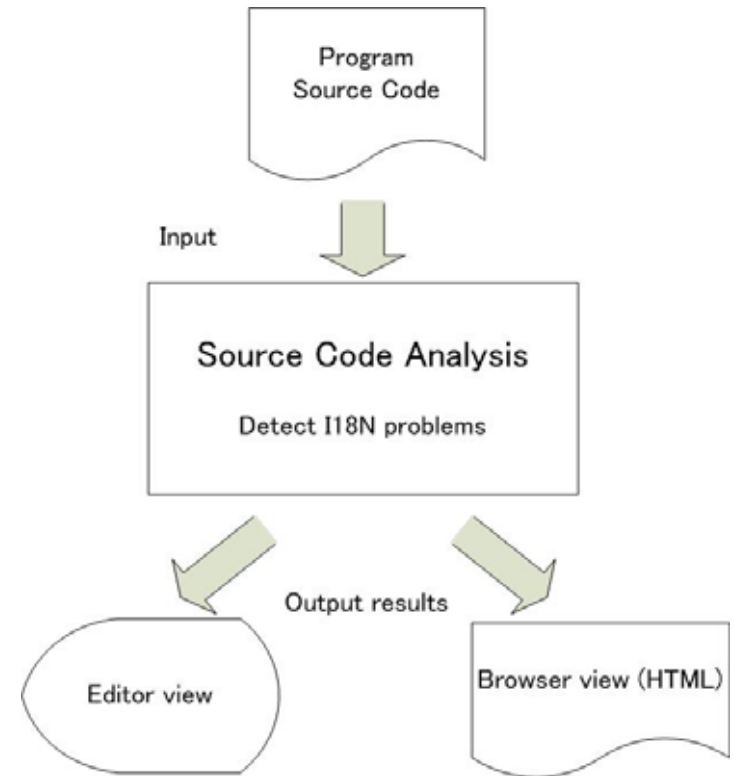


Migration for I18N

- What to do
 - Find problems and modify source codes
 - Needs to scan all of the source codes
- There is a good means to ease your I18N work
 - Please use [World Wide Navi](#)
 - Speed, Quality, Knowledge
 - No food, no drink, no sleep
 - Automatic migration for some specific needs

Software Internationalization Tool World Wide Navi (a.k.a. wwnavi)

- Analyzes program source codes and indicates how to modify them in order to make them internationalized.
- Supports C/C++/Java
- By using wwnavi, developers acquire the know-how for international programming.
- Internationalized.
English UI and Japanese UI
- Free trial download available from <http://www.kokusaika.jp/>

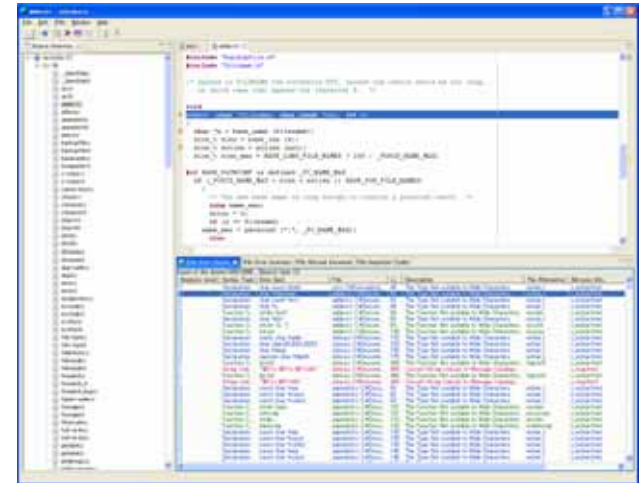


Features (1)

- Intelligent analysis function
 - Rather than through exact string matching, World Wide Navi analyzes programs after a syntax analysis appropriate to the respective programming language.
 - It also has a function to exclude a sequence of source codes from the analysis.
- Preset diagnostics rules
 - Standard diagnostic rules are available upon installation and can be used immediately.
- Customizable analysis rules
 - The analysis rules can be easily added or changed to suit the target programs by using the GUI.
 - A set of rules can be defined for each project or customer and enforce standardized coding convention.

Features (2)

- Various modes of usage
 - A batch command
 - A GUI application
 - An Eclipse plug-in
- Various output formats
 - Displayed on screen
 - Written to files in three different formats (HTML, CSV, TEXT)



World Wide Navi GUI

 A screenshot of the 'World Wide Navi' GUI application showing a detailed report in HTML format. The report is titled 'Life Size Details' and displays a table with columns for Name, Description, and Price. The table contains multiple rows of data, including items like 'Life Size Details', 'Life Size Details', 'Life Size Details', etc.

Report in HTML

Features (3)

- Multiplatform support
 - Runs on Linux and Windows platform.
 - World Wide Navi is a Java application.
- Multiple programming language support
 - Supports C, C++ and Java.
- Internationalization of World Wide Navi itself
 - The World Wide Navi software itself has been internationalized.
 - GUI is available both in English and Japanese.

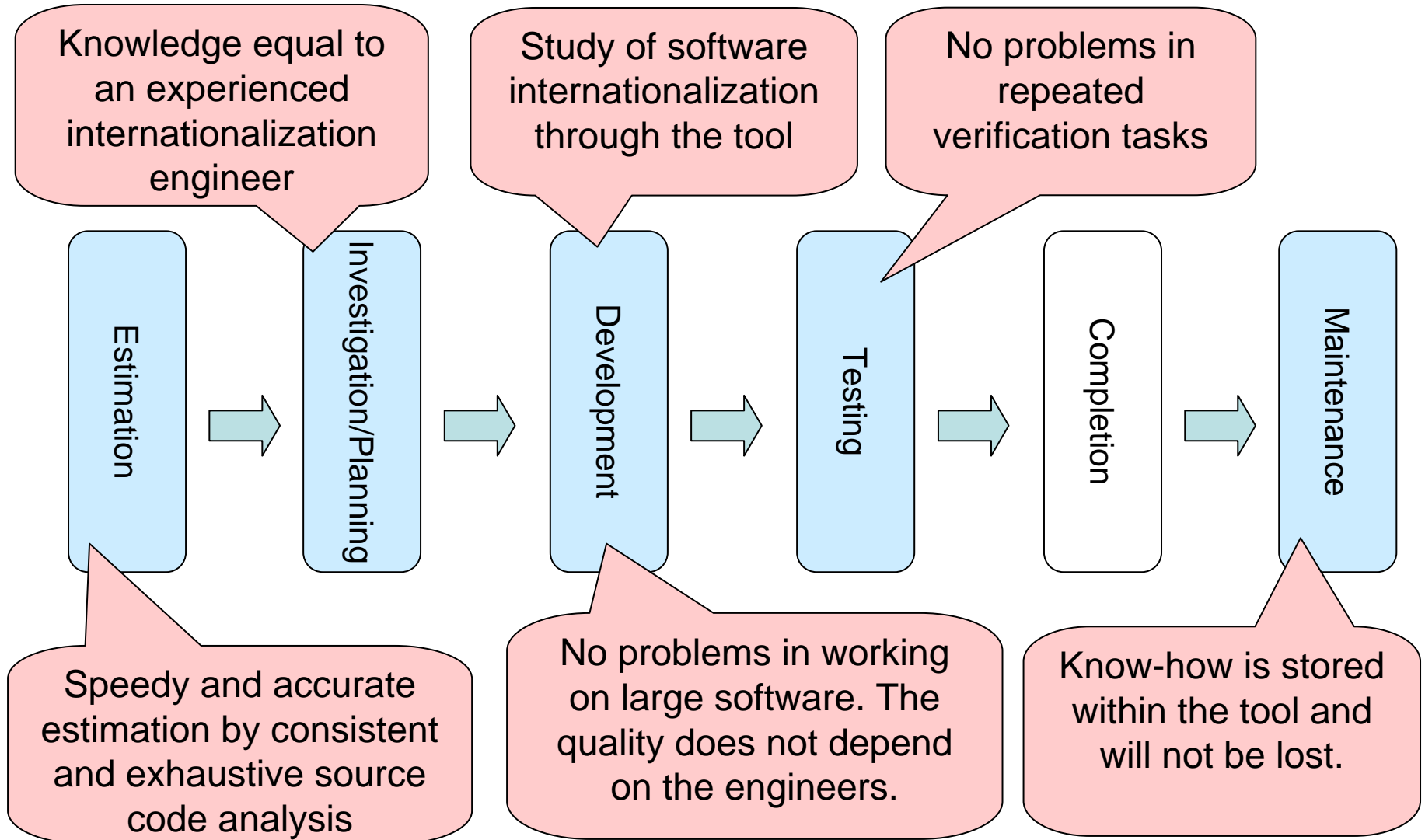
Features (4)

- Automatic source code modification (V1.2 or later)
 - Automatic message text externalization

Embedded text messages in source codes are moved to an external file and the source codes are modified accordingly.

No human errors. Flexible settings for your needs.
 - Java support in V1.2
 - C/C++ support in V1.3
 - More programming languages support in the future versions

World Wide Navi solves the problems in Software Internationalization work



I18N is the key to success in the global market.
Kokusaika JP will be your honest partner.

Kokusaika JP, Inc.

<http://www.kokusaika.jp/>

Venture Kanda 407
1-1-5 Uchikanda, Chiyoda-ku,
Tokyo 101-0047 Japan

Email: kjp-sales@kokusaika.jp

TEL: +81-3-5283-9925

FAX: +81-3-5283-9952