

OSS and I18N (Internationalization)
will lead you to the global market

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Kokusaika JP, Inc.

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

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Agenda

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2. What is I18N? (Concept and History)
3. How to deploy I18N in OSS?
4. Kokusaika JP's I18N business
5. Software Internationalization Tool,
World Wide Navi
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1. Introduction

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.

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.**

- Globalization/Internationalization everywhere
 - Foods, Cars, Computers, Workers, TV programs, Music, Spam mail, etc.
- Software everywhere
 - Trains, Cars, HDD recorders, Game players, Mobile phones, IC card, RFID, etc.
- Internet open the door
 - Search engines, SNS, flickr, YouTube, etc.
 - Anyone in the world can access the services on the Web ... you don't know where the machines are.

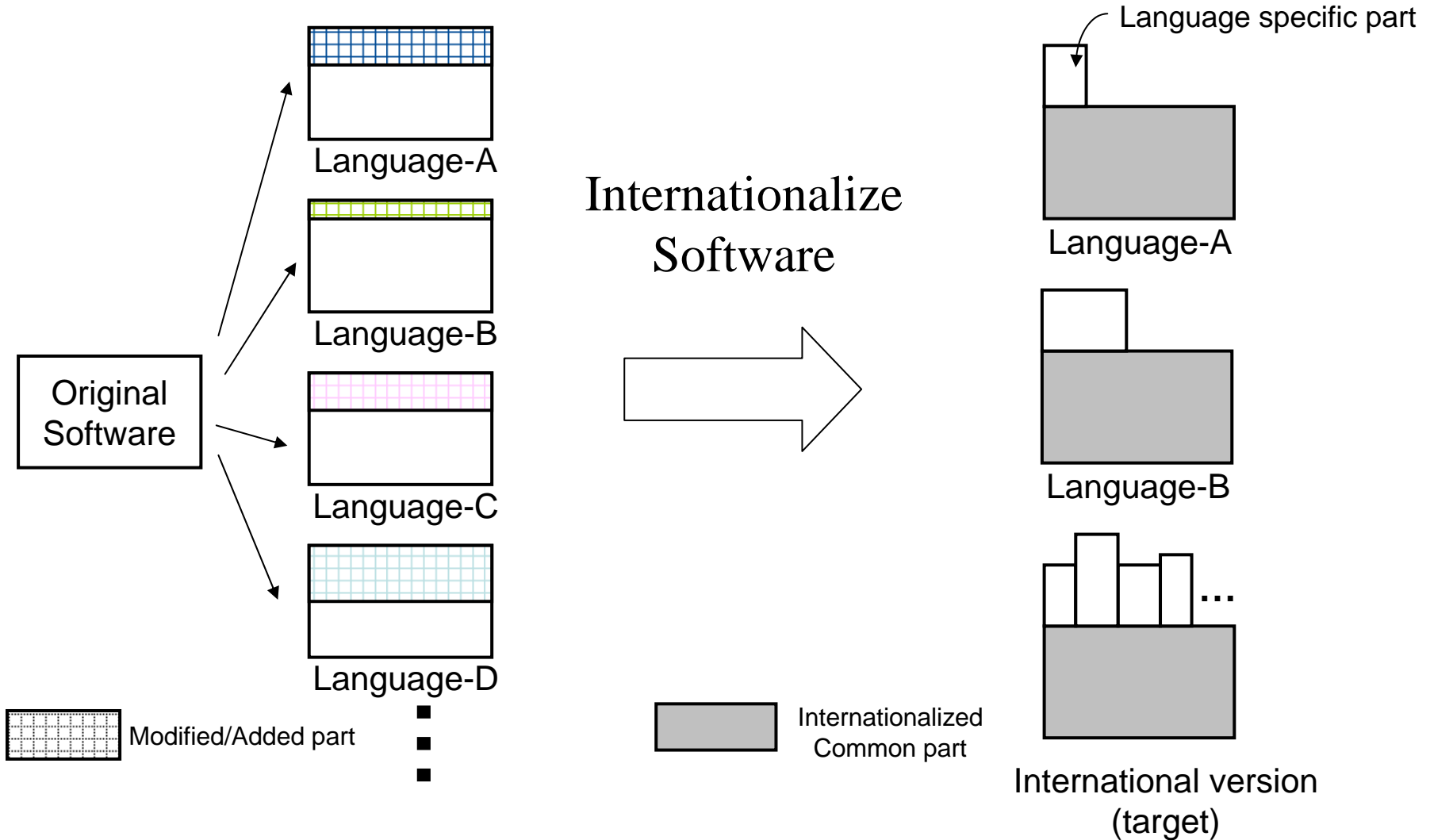
Still the language barrier exists...

2. What is I18N? (Concept and History)

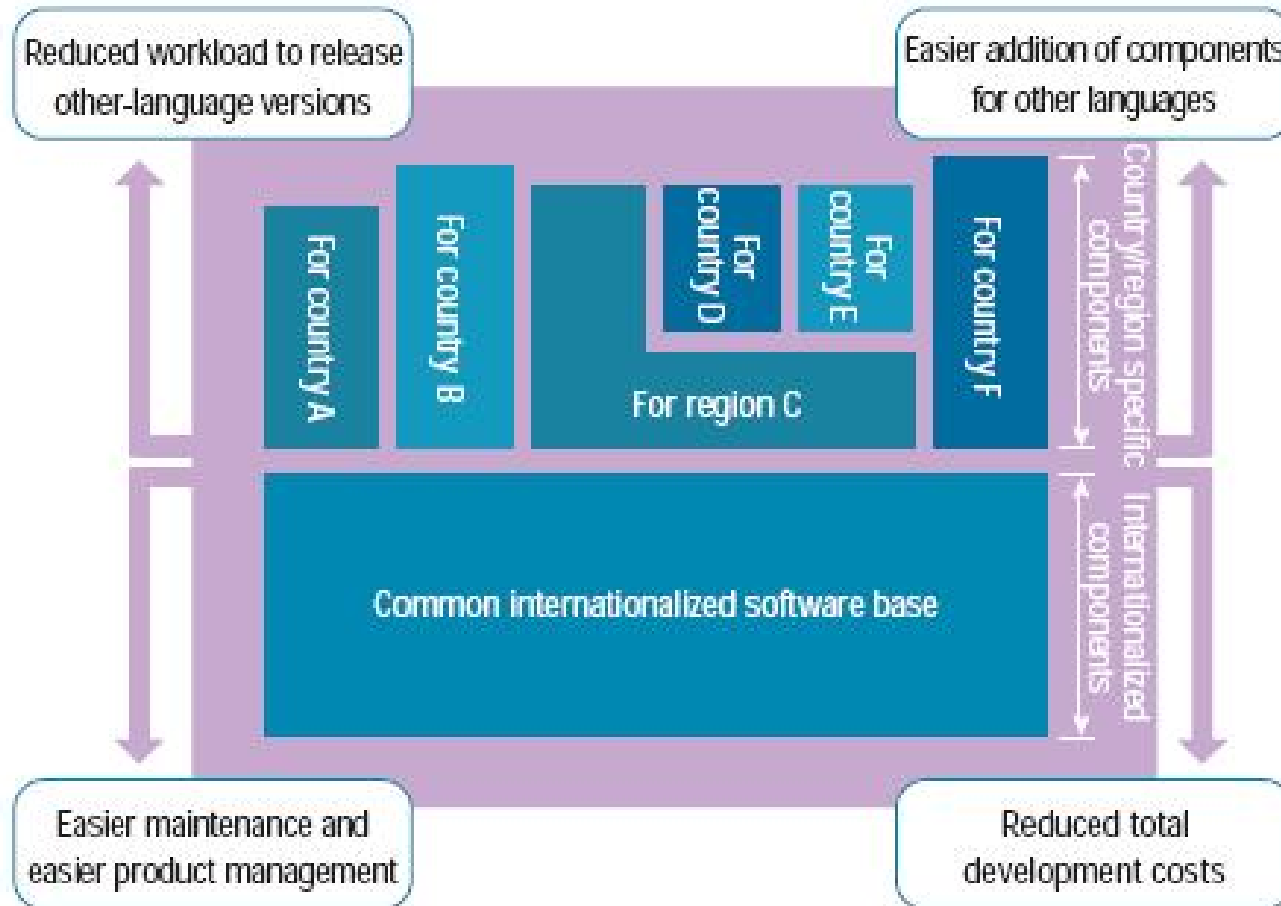
What is I18N? (concept)

- 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)

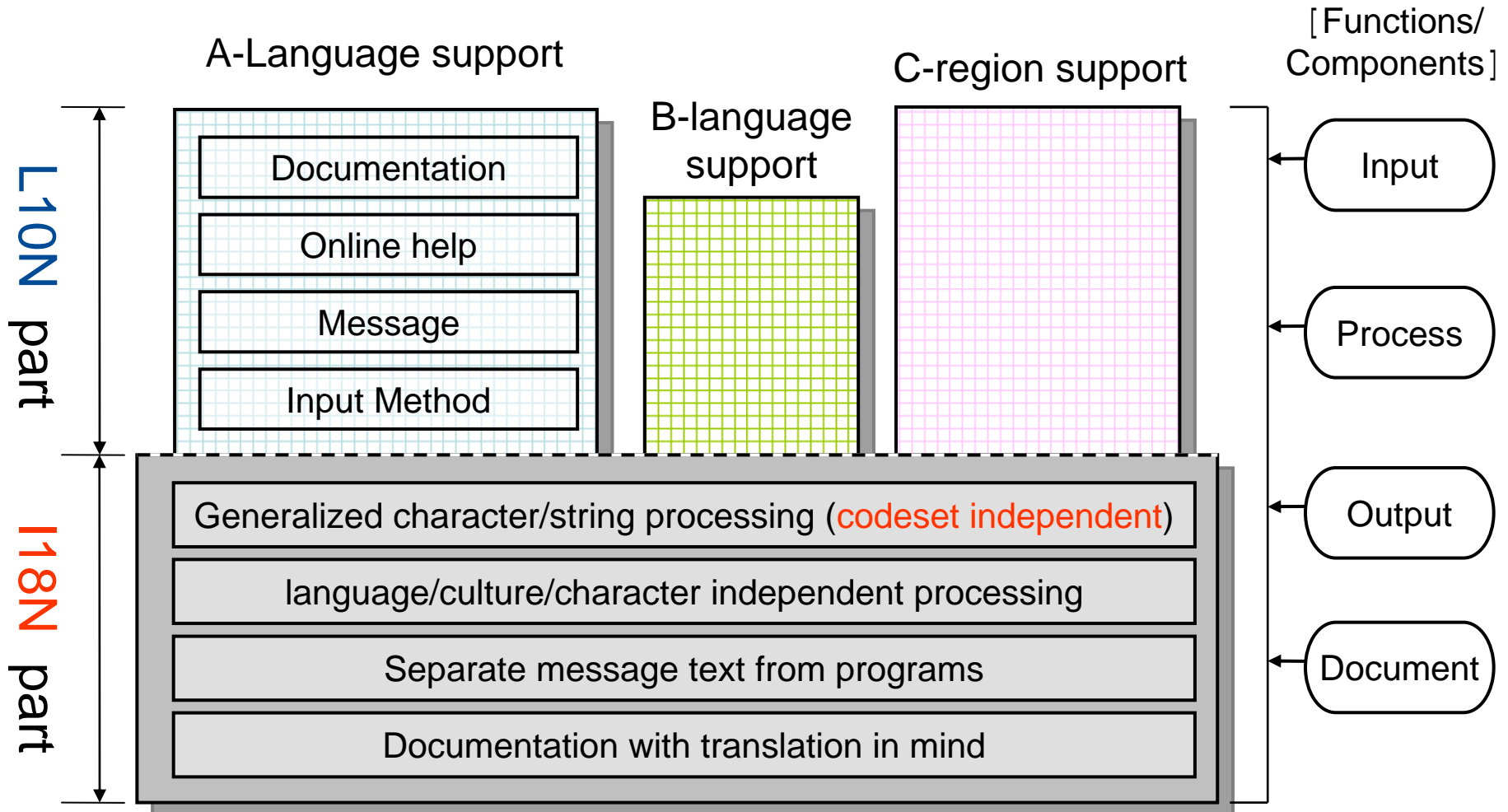


What is I18N? (concept)

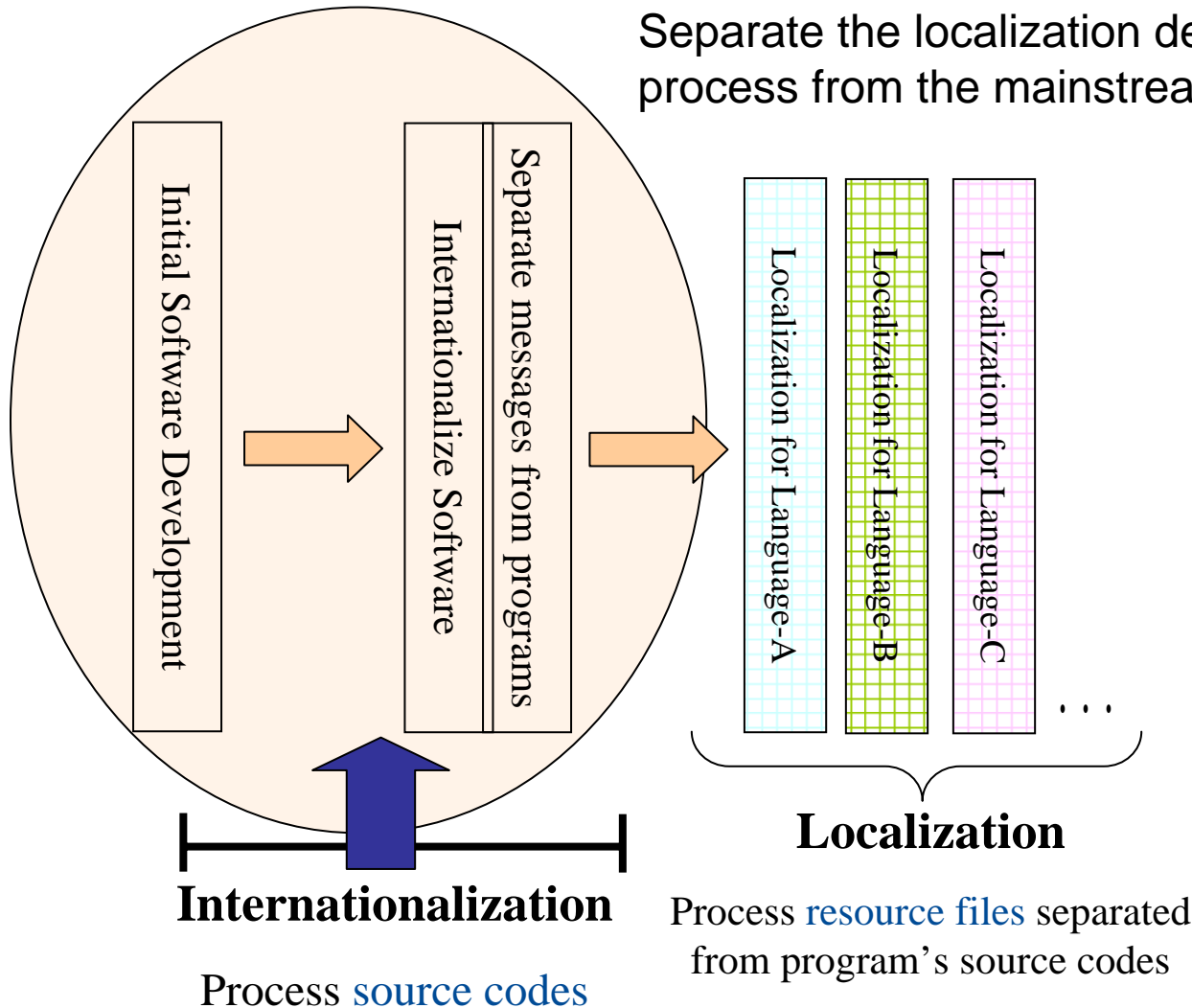


→ Big advantages for global business

What is I18N? (concept)



What is I18N? (concept)



I18N development:

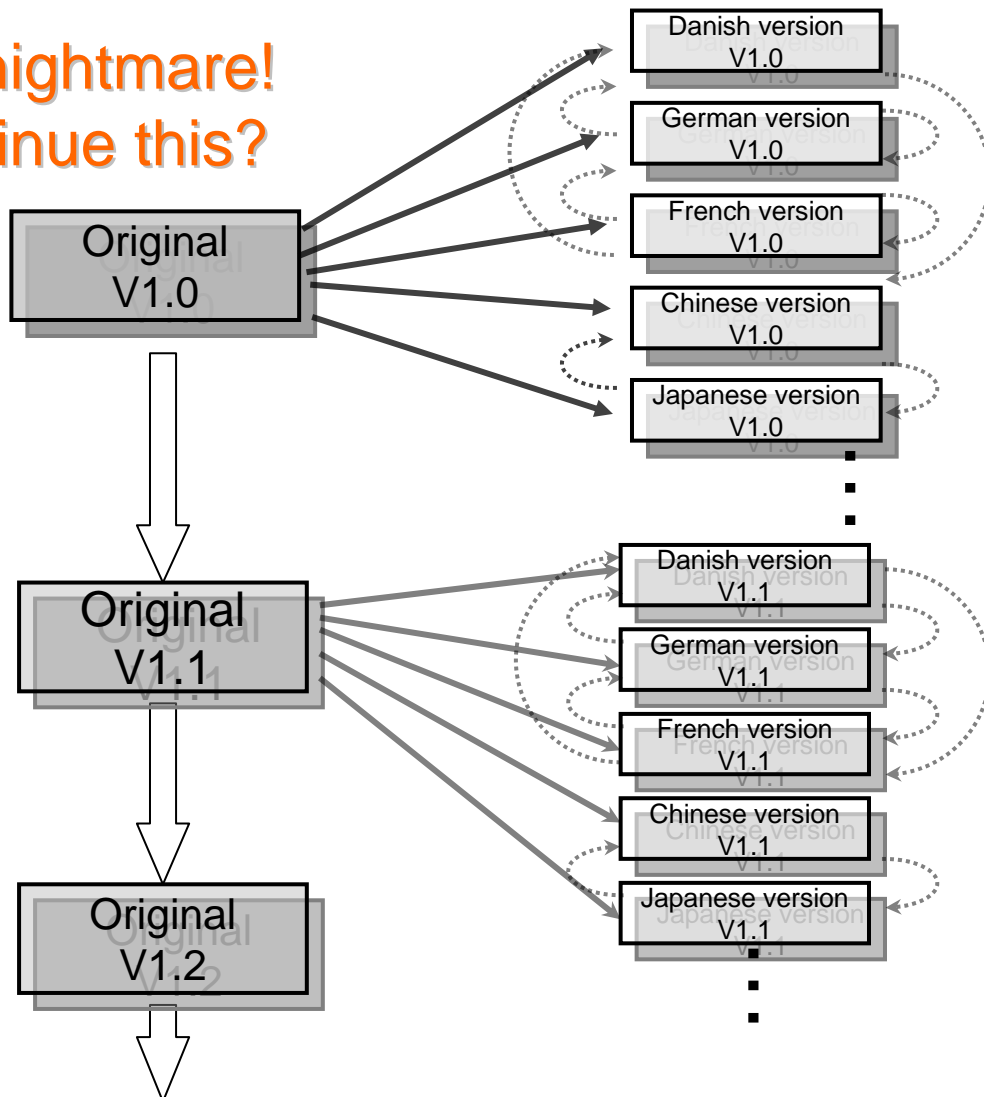
- What: source codes
- Who: Programmers
- Part of mainstream development
- Mostly done internally because of IP protection
- Hard to find experienced engineers in this area
- Not only technical but management skills are required

What is I18N? (history)

Version upgrade is nightmare!
Do you want to continue this?

New Language support

was added, added, and added. No control. Much duplicated effort.



What is I18N? (history)

Character code processing scheme

- ASCII – 7bit character codes (English only)
- ISO8859 family – 8bit character codes (Europe)
 - 8bit clean (Don't assume that number of characters are less than 64. Don't use MSB for any flag.)
- Multi-byte character codes (Asia)
 - The World moved to general character handling. Didn't go to 16bit. General character handling data type and APIs. **“Codeset Independent”**
- Universal character codes (Global)
 - Capable of process any characters in the world.

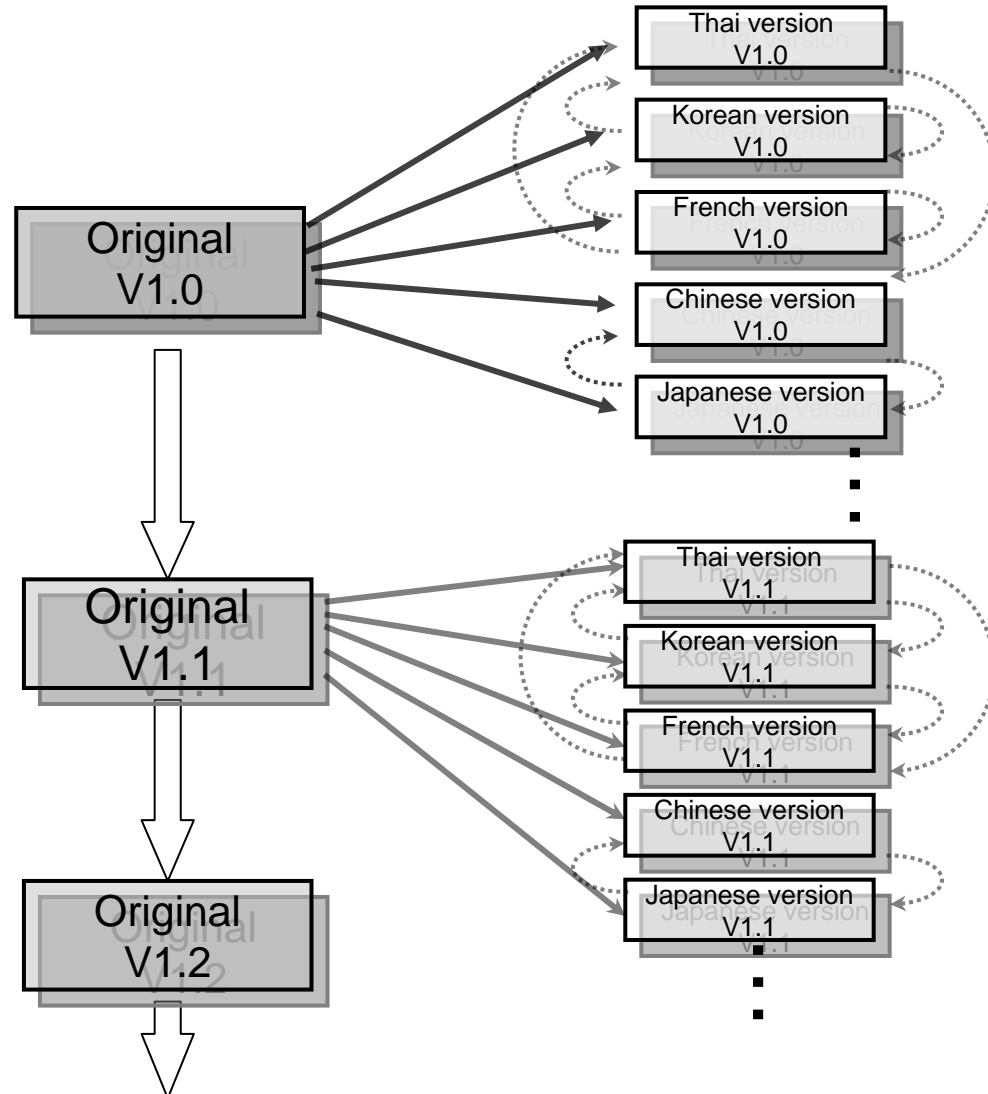


Concept
Gap

3. How to deploy I18N in OSS?

How to deploy I18N in OSS?

- You don't need to trace the I18N history back to 1990.
 - Easily jump into **local specific modifications**. Please wait and think twice.
 - Fact:** Around 2000, There were a lot of OSS programmers who had been writing their codes without having I18N in mind. There were a lot of local patch programs.
 - Only global IT companies had the I18N know-how.



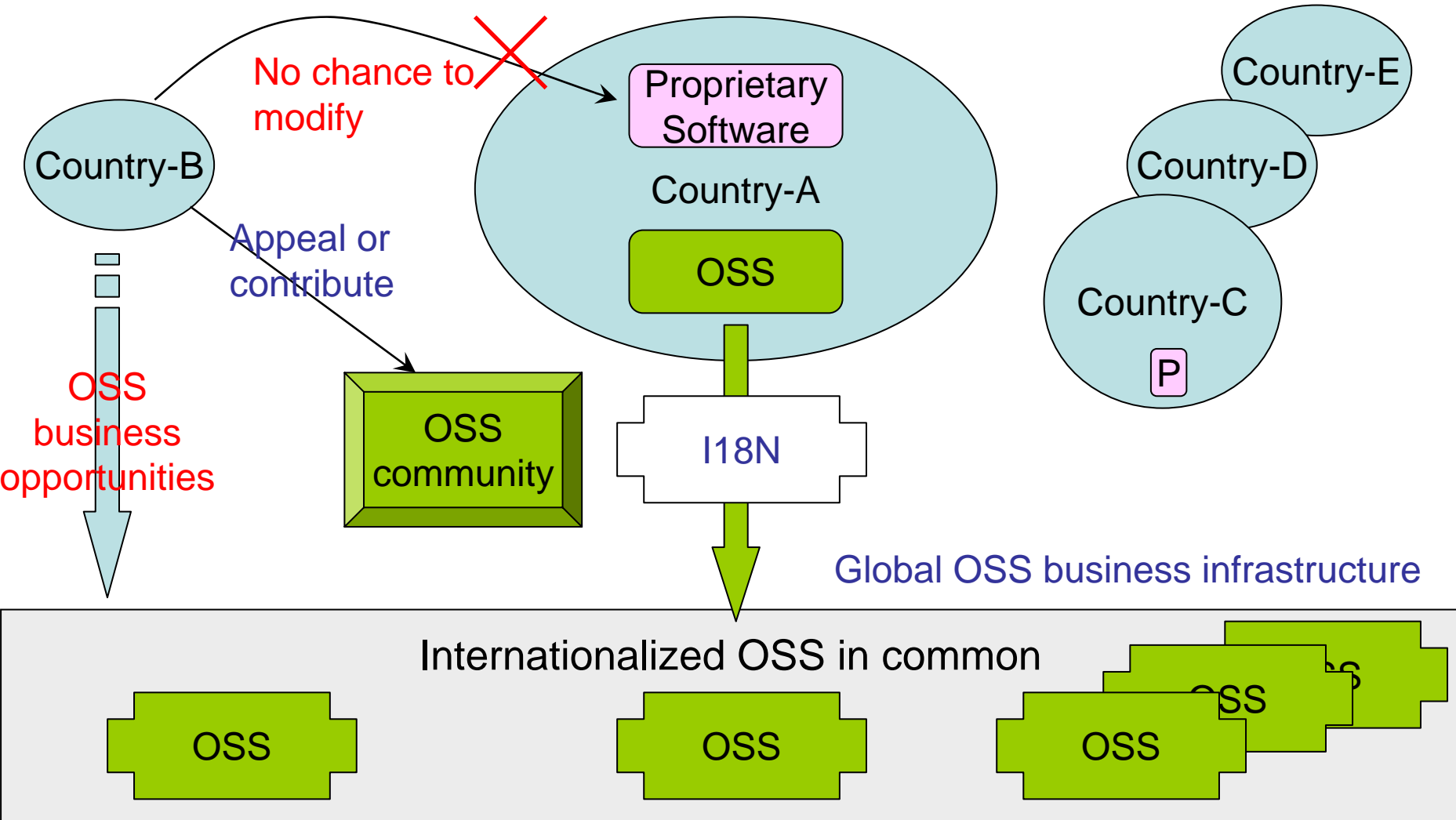
How to deploy I18N in OSS?

- Problem:
A lot of new developers are joining OSS projects. We don't have a good system to transmit the I18N knowledge, experience and know-how to the newcomers yet.
 - Global IT companies have had a team dedicated for I18N or I18N training programs.
 - Something similar will be necessary for OSS developers.

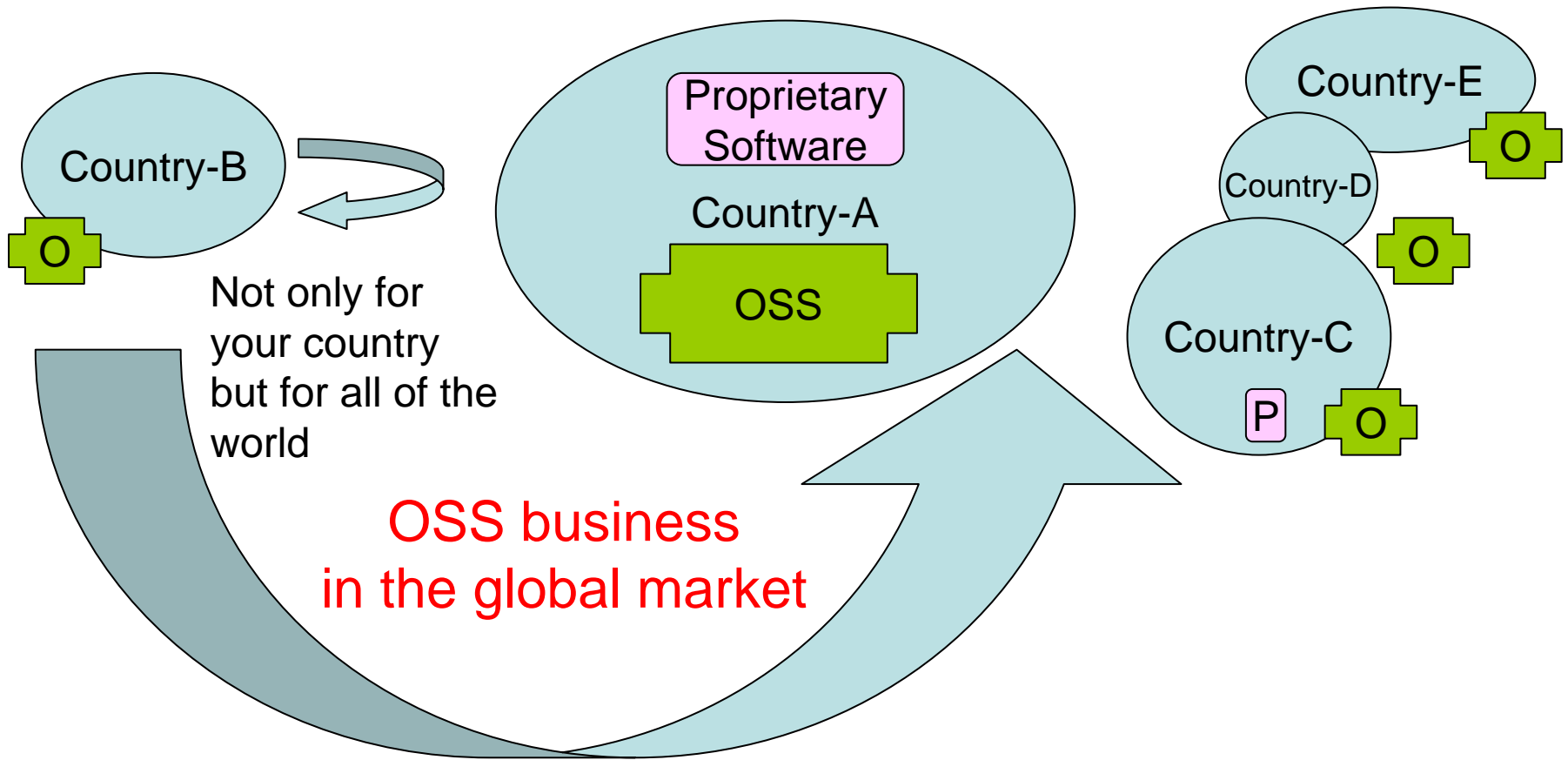
How to deploy I18N in OSS?

- The advantage of OSS:
Anyone in the world can get software with its source codes. You don't need to write software from scratch.
 - Engineers tend to write software which they need or they want. Good starting point, but...
 - How about writing software for the world?
 - How about modifying codes for everybody?
 - You don't need to write your software nor conduct your business for your country only.
- You can jumpstart with OSS and go global with I18N.

How to deploy I18N in OSS?



How to deploy I18N in OSS?



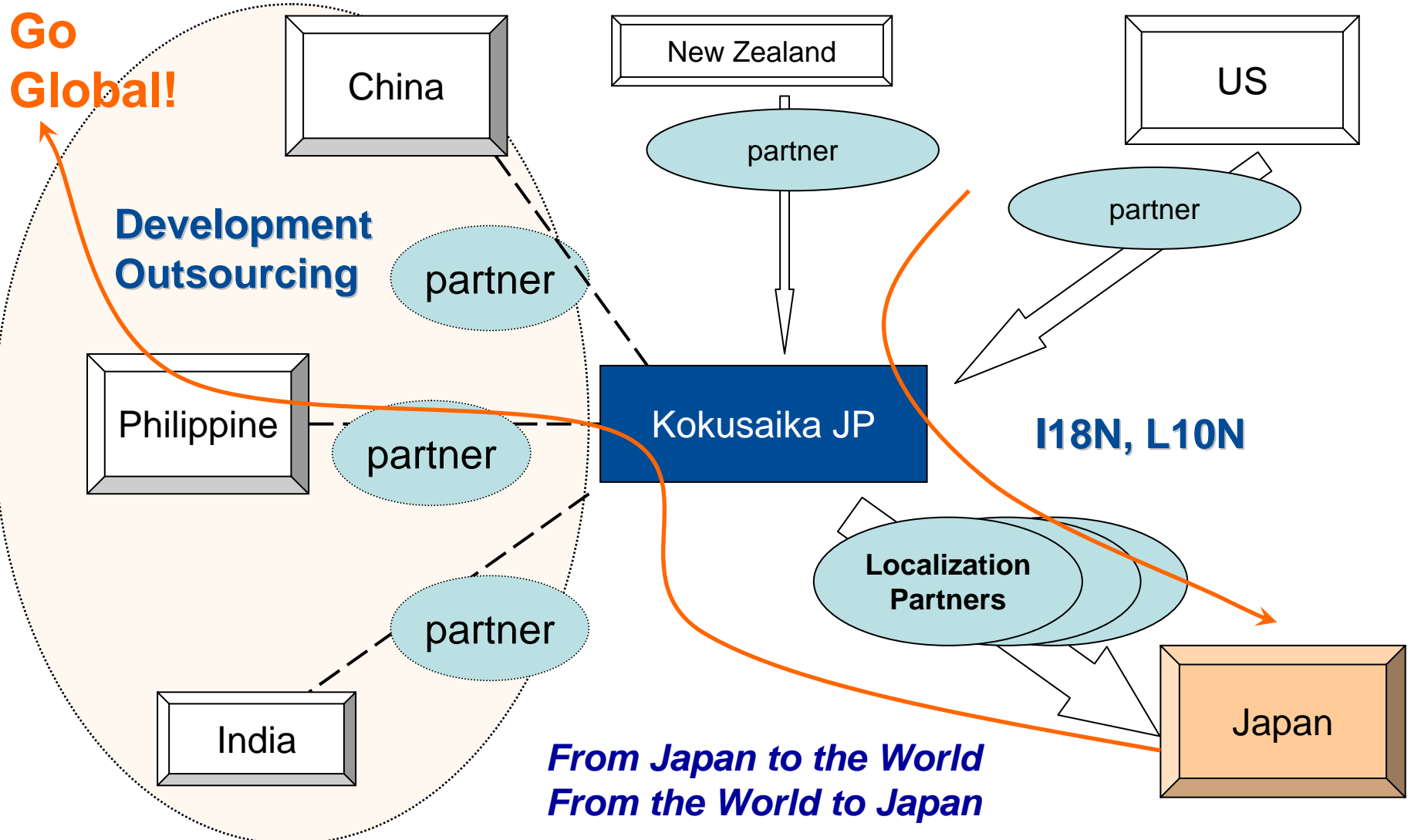
I18N makes everybody happy

4. Kokusaika JP's I18N/OSS business

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

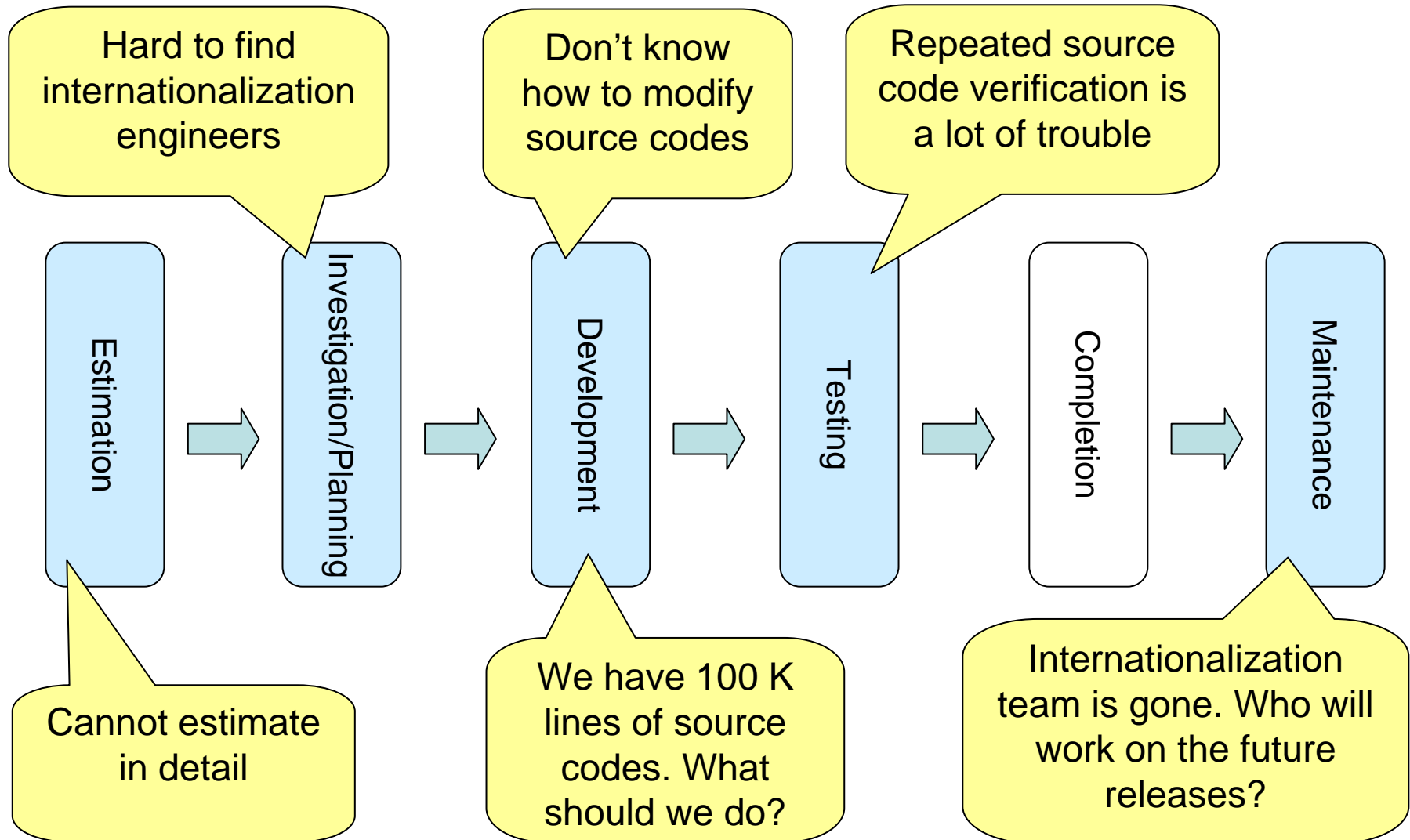
Kokusaika JP's I18N/L10N business flow



- 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.

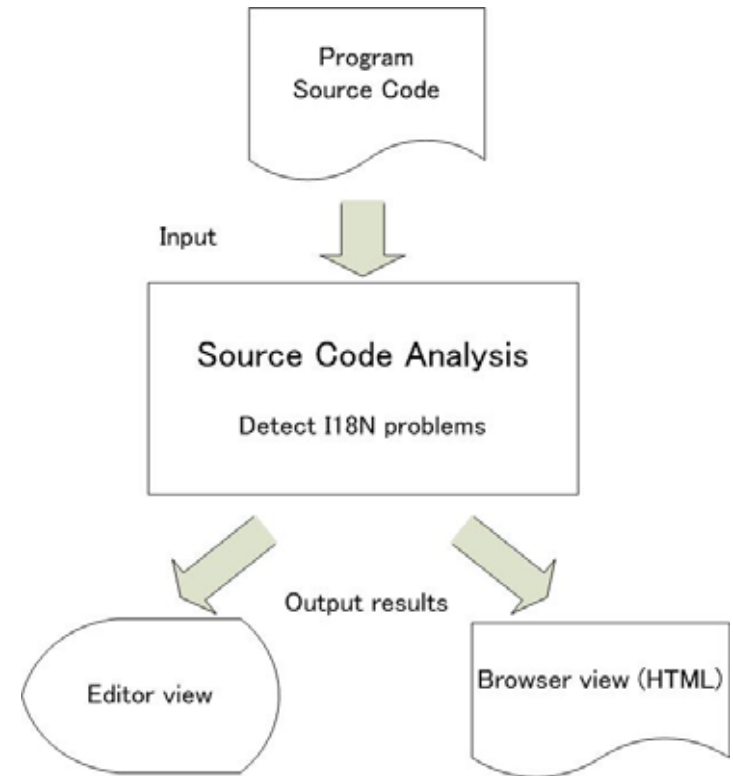
5. Software Internationalization Tool, *World Wide Navi*

Problems in Software Internationalization work

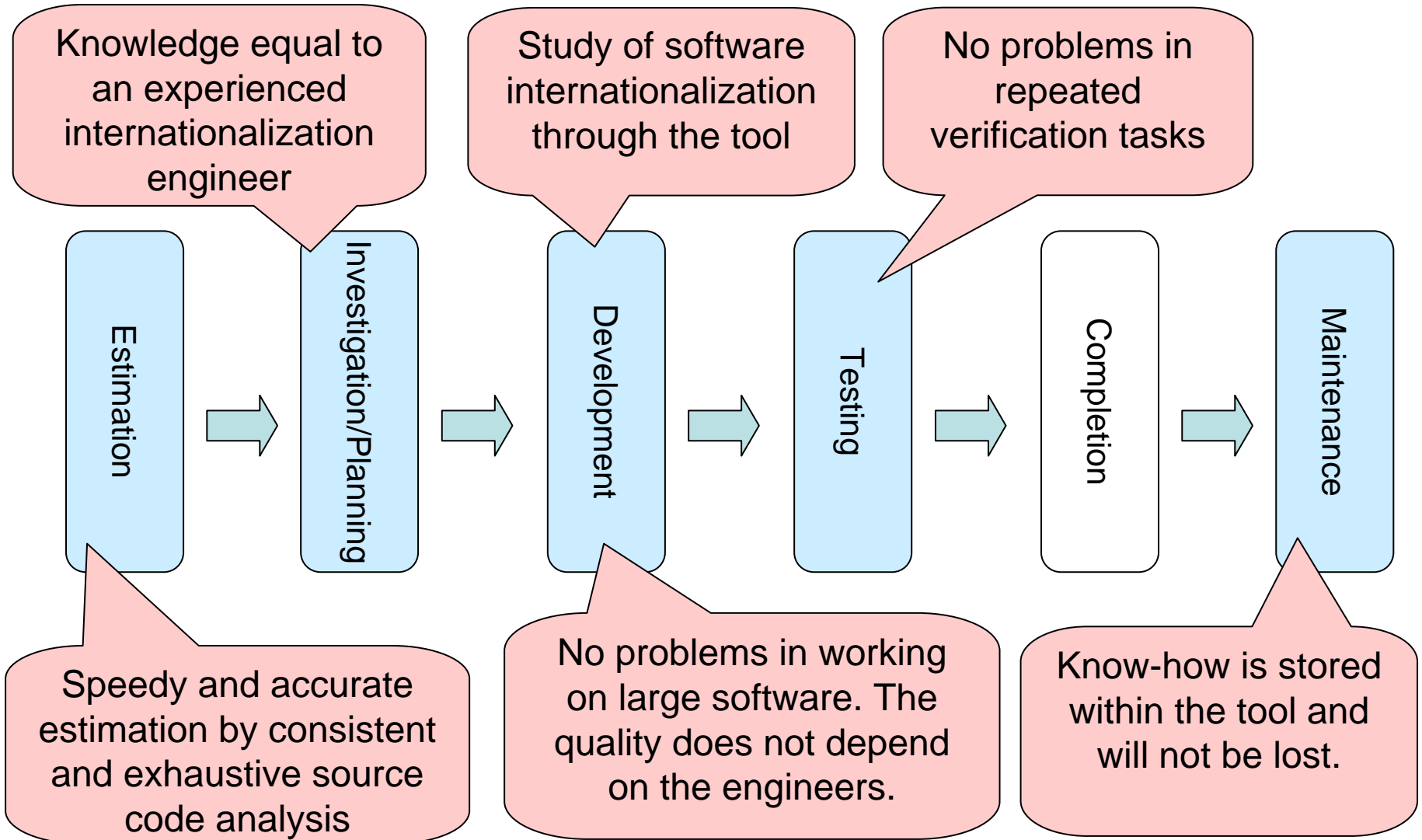


Software Internationalization Tool World Wide Navi (a.k.a. wwnavi)

- 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/>



World Wide Navi solves the problems in Software Internationalization work



6. Summary

Summary

- I18N is prerequisite for global software business.
- Every country in the world has a chance to start OSS business.
- OSS+I18N can build global OSS business infrastructure.
- Kokusaika JP supports the OSS+I18N movement by software products and services.

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

Kokusaika JP, Inc.

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