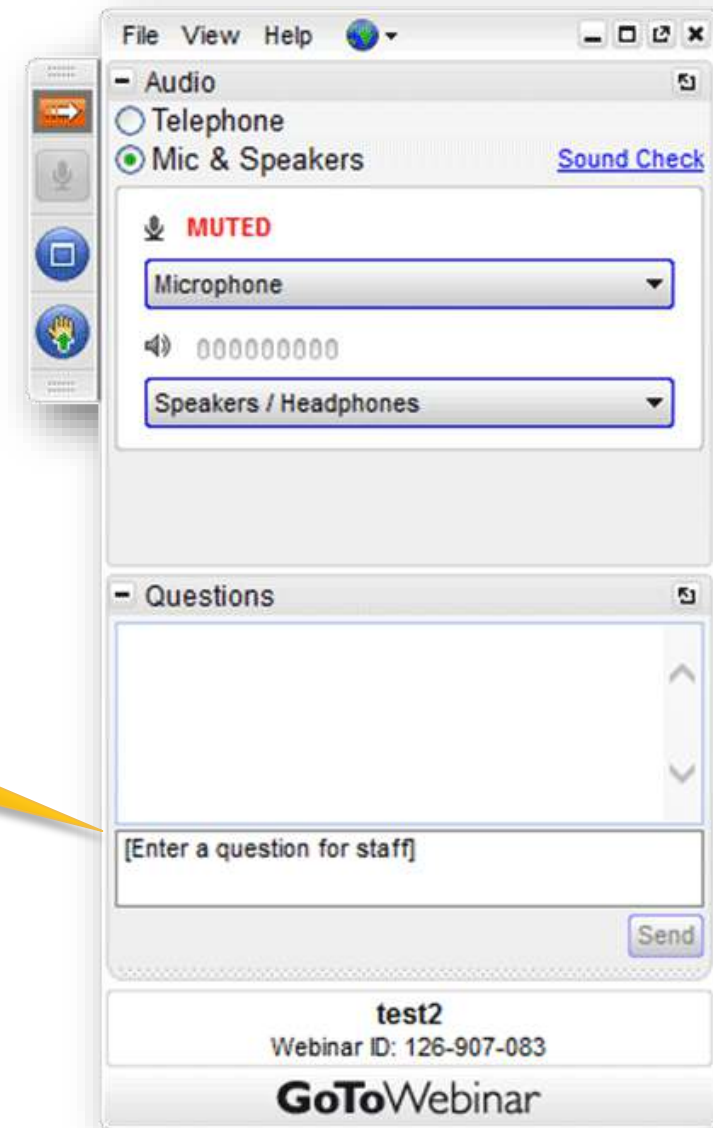


Welcome!

Translating test items. There's more to it than meets the eye!

To ask questions,
use the “Q&A” feature



Presenters today

Steve Dept

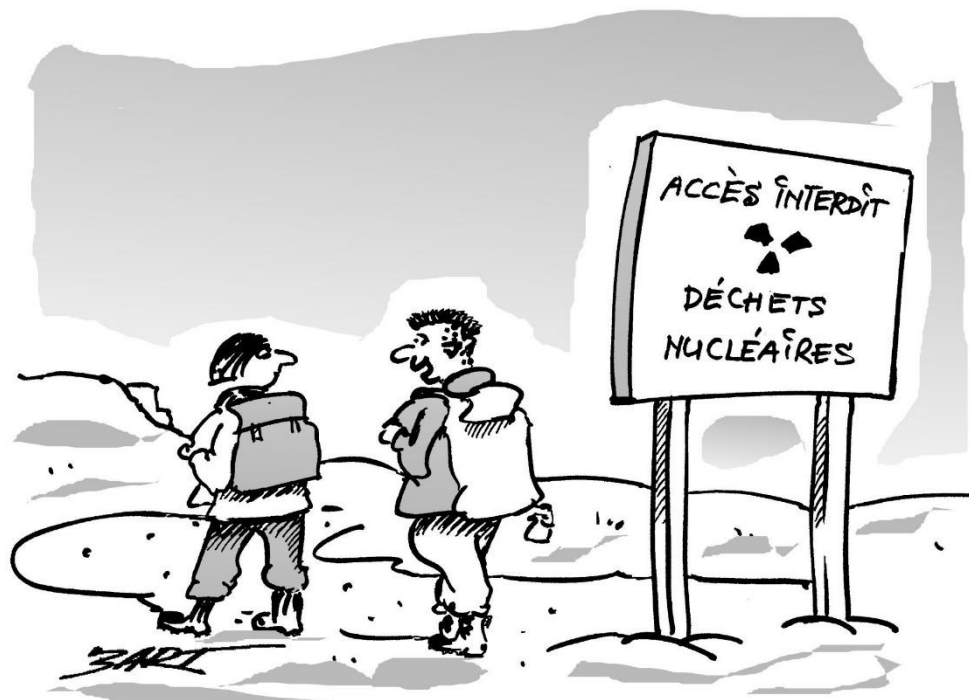
- ▶ CEO and Founder of cApStAn
- ▶ 25 years of experience in test adaptation and linguistic quality control



John Kleeman

- ▶ Executive Director and Founder of Questionmark
- ▶ 30 years of experience in the assessment industry





"I say to hell with it. If it can't be said in English, it ain't worth saying at all."

CartoonStock.com

- ▶ Straightforward translation of test items doesn't always work well.
- ▶ This webinar will help you understand good practice so that your tests measure the same thing in other languages and cultures

About Questionmark

Background

- Founded in 1988
- Assessment technologies and portal solutions that enable organisations to measure knowledge, skills, and attitudes securely for certification, regulatory compliance and improved learning outcomes
- ISO/IEC 27001 Certified (Learn more at www.questionmark.com/trust)

Customers

- Enterprise customers worldwide
- Business, Government; Higher Education; Certification Providers; Awarding Bodies



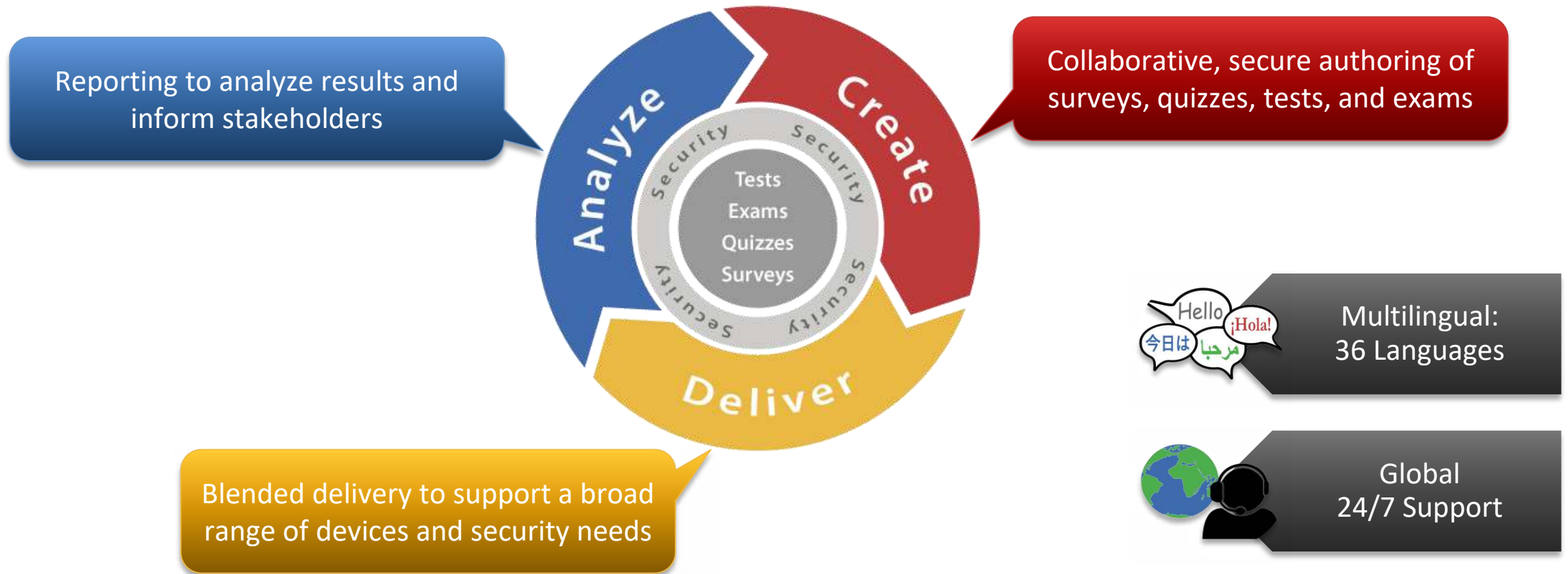
Microsoft Partner
Gold Independent Software Vendor (ISV)



Crown
Commercial
Service
Supplier



Questionmark Assessment Management System



About cApStAn

Background

- Founded in 2000
- Translation quality control and equivalence checks in international large scale assessments to maximise cross-language comparability in assessments measuring knowledge and skills
- Close cooperation with Academic world

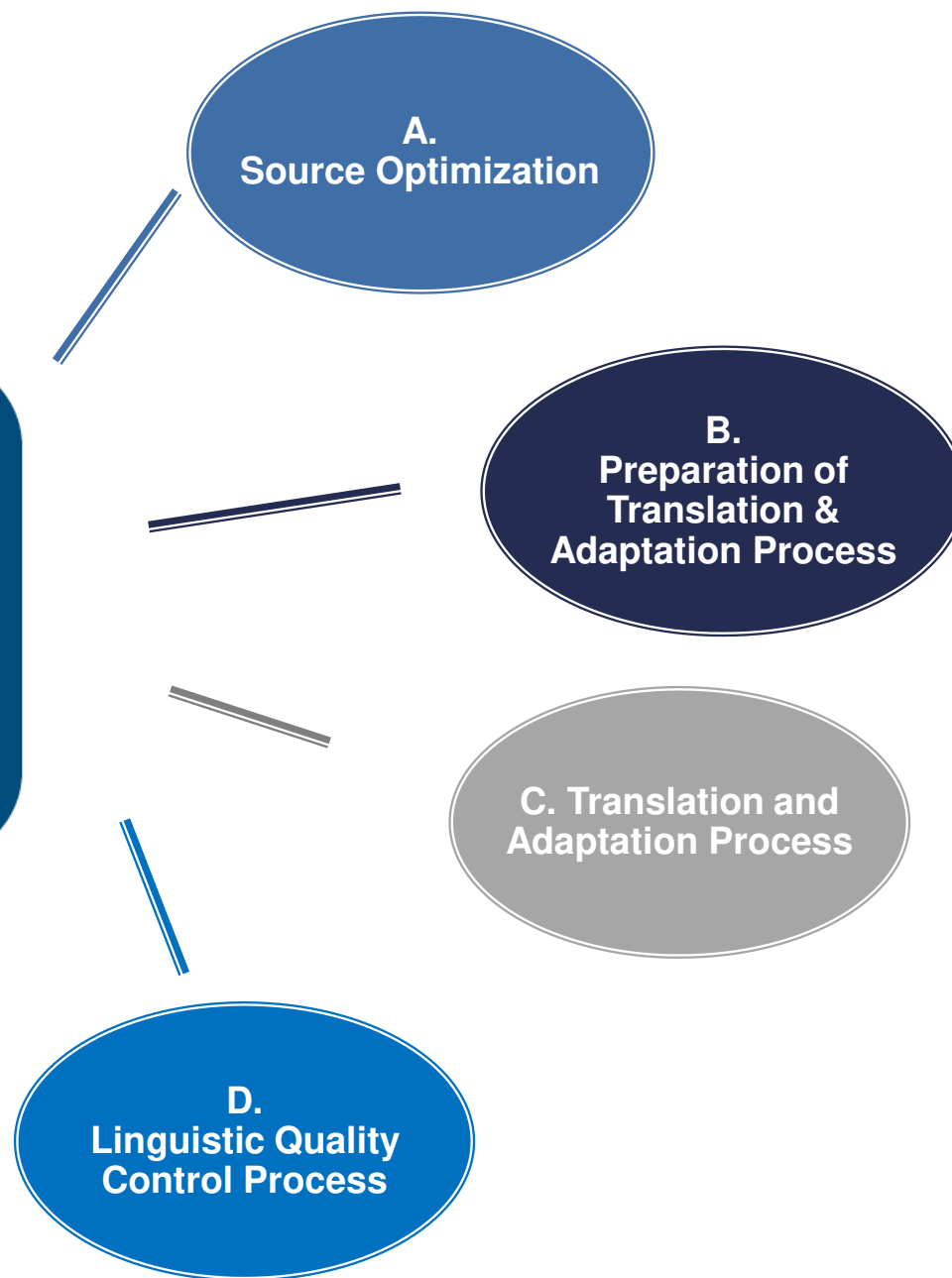
Customers

- International organisations: OECD, UN, EU
- National organisations: universities, research institutes, education ministries
- Private sector: testing industry, talent management companies, pollsters



United Nations
Educational, Scientific and
Cultural Organization





A holistic approach to assessment translation and adaptation

We shape, streamline, implement, improve and promote best practices in test localisation

Agenda

Translation or adaptation?

Planning, the most important step

Designing your process

Translation process in Questionmark

Translation technologies

Managing translation vendor

How to pilot and check equivalence

Summary

Translation or Adaptation

Can't one just translate and administer the test?
What do you mean by *Adaptation*?

Translation or Adaptation

► In translated tests

- Meaning shifts (language-driven) may lead to measurement errors
 - Perception shifts (culture-driven) may lead to bias
- Early versions of IQ test designed to identify most productive white-collar employees => timed assessments with speed as a component of the score
 - Speed and time management play a (much) smaller part in African cultures => low performers on speeded IQ tests

Without adaptation, no fairness (and no comparability)

Literature & empirical findings tell us how and why different forms of adaptation (to local context and usage) affect measurement

Working definition of adaptation in assessments:

**ADAPTATIONS ARE DESIRABLE IN ALL OCCURRENCES
WHERE DIRECT TRANSLATION COULD PUT RESPONDENTS FROM
THE TARGET GROUP AT AN ADVANTAGE OR A DISADVANTAGE**


Commonly used in English
but (very) hard to render in (a number of) other languages

► Idiomatic English, neologisms

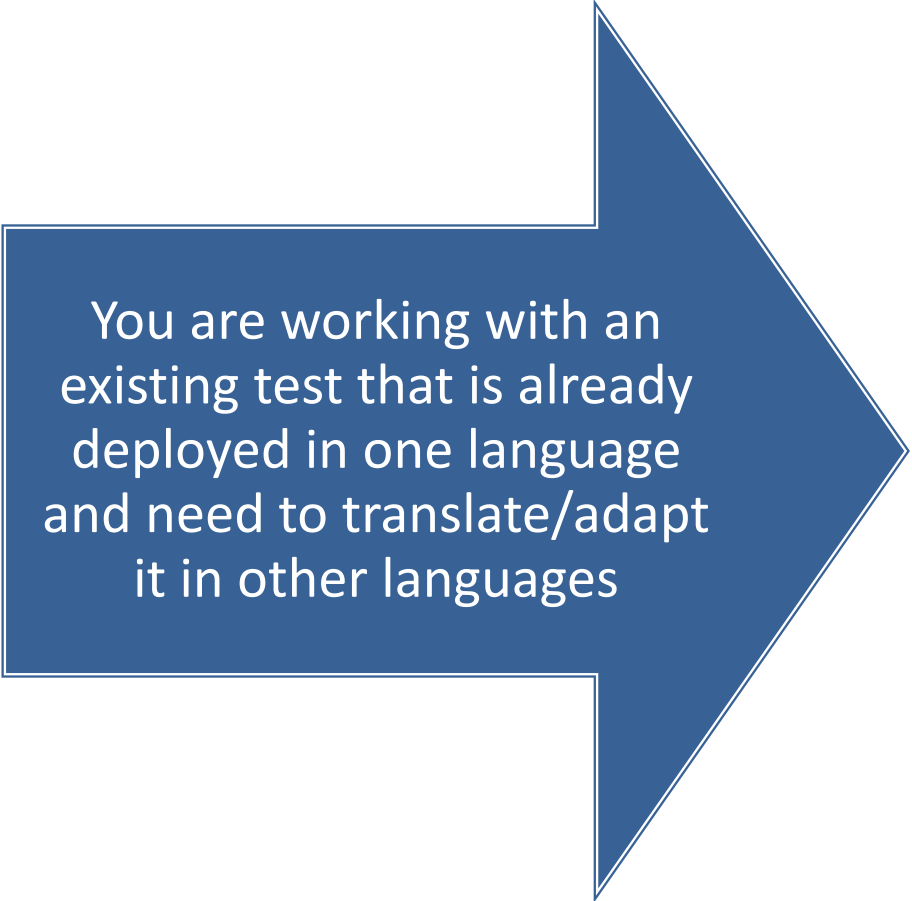
- Earmarked for...
- Stagflation
- Trade-off
- Greenwashing
- To look forward to
- To value
- To have fun

Planning, the most important step

Two approaches to planning



You are designing a new test and want to make it applicable to 2 or more languages/cultures



You are working with an existing test that is already deployed in one language and need to translate/adapt it in other languages

Planning for a new test

Start with purpose

- Why is test **being developed**?
- **What is construct** or domain being measured?
- What is done with pass/fail or test scores?

Identify target cultures/languages

- What is population?
- What languages is it reasonable for them to take the test in?
- Are there different cultures (e.g. Indian English vs UK English vs US English)?

Seek advice

- Whether the construct/domain has any issues in any of languages/cultures
- Whether item formats need adjusting for languages/cultures (e.g. right to left)

Design with this in mind

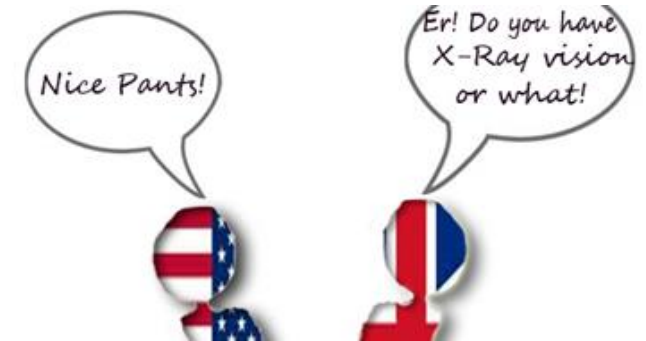
- Define objectives/topics
- Progress exemplar items
- Define translation process

Translatability assessment after initial design

- Check items and principles work before going onto full development

Translating an existing test

- ▶ Identify which languages to translate into
 - Base this on the test purpose – what you are trying to measure
 - Identify target population and fairness/equity and balance vs cos
 - Choose languages and cultures
- ▶ Ensure translation makes sense
 - Do the constructs and domains apply in the language/culture
 - How much adaptation is needed, how much translation?
- ▶ Translatability assessment
 - Especially useful if translating into several languages
 - Find issues before doing the actual translation

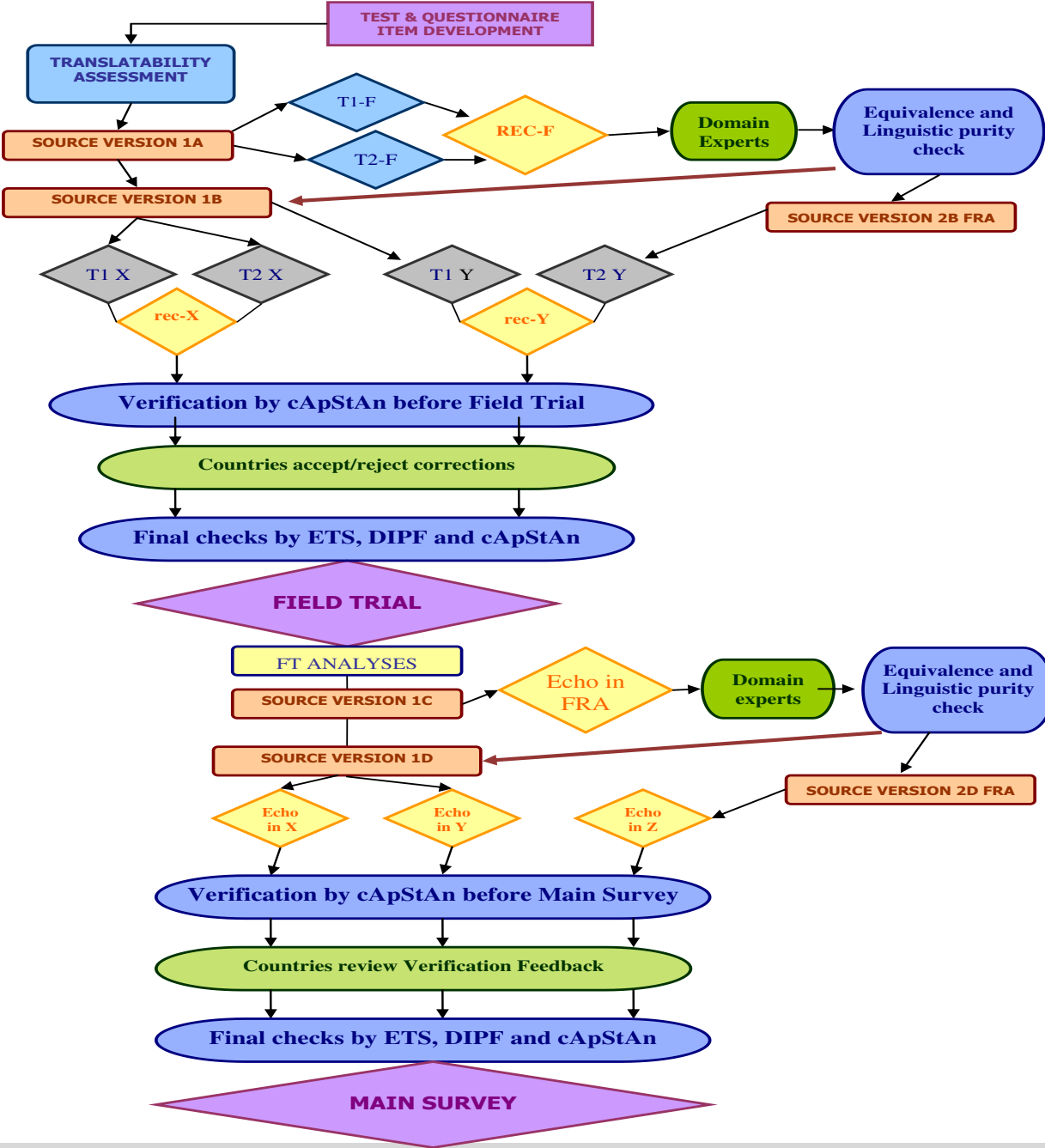


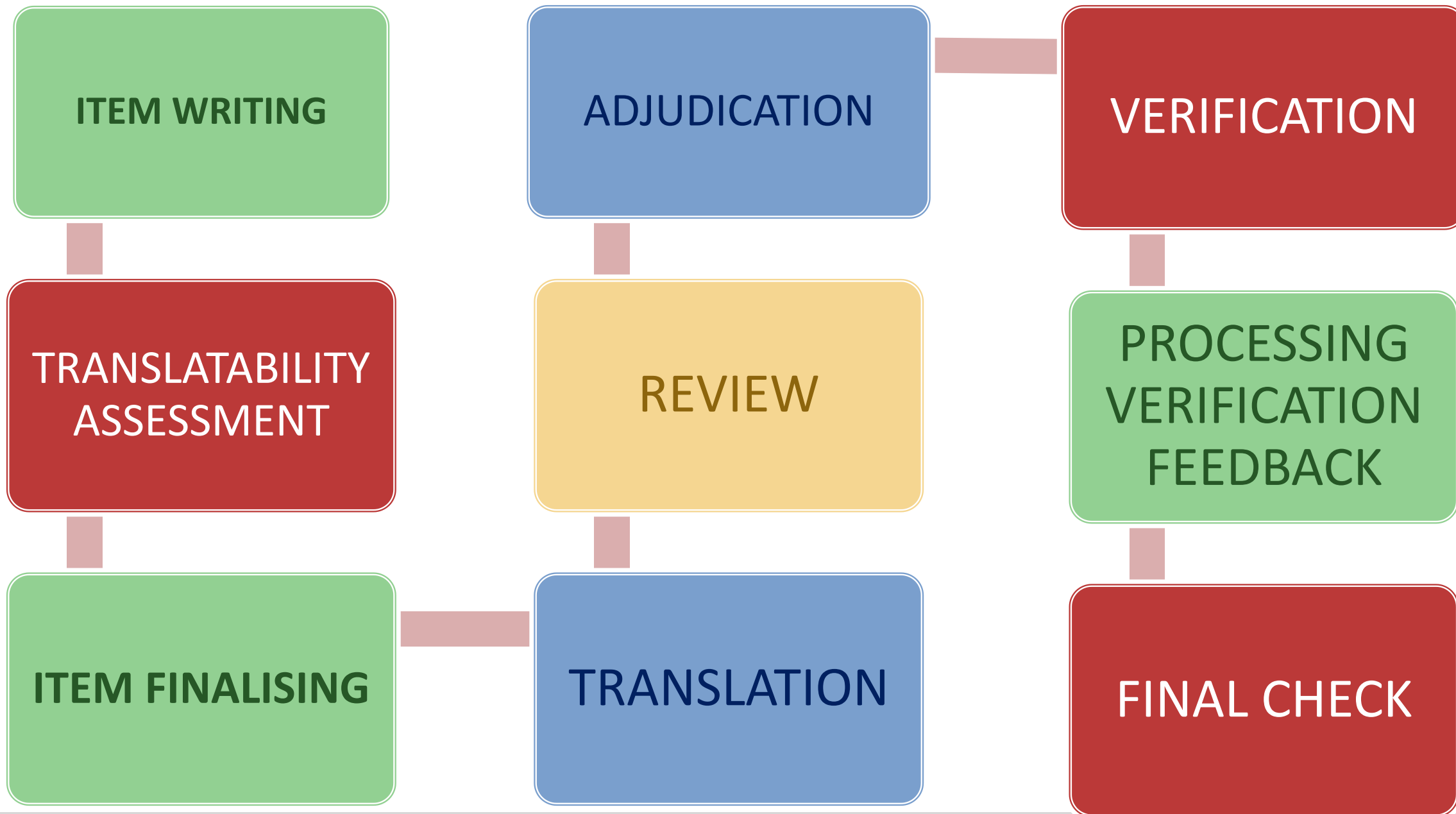
Designing your process

Making informed decisions about the translation, adaptation and linguistic quality assurance design

Typical translation /adaptation design for international large scale assessments

Too complex for most assessment ecosystems







A. Source Optimization

A1 controlled writing

A2 file preparation: parsing, segmentation, locking untranslatable content

A3 Translatability Assessment

A4 create project-specific rules

B1 create glossaries

B2 create style guides

B3 create language-specific rules

B4 translation & adaptation notes

B5 trend mgt (content transfers)

B6 monitoring tool, documentation

B7 train translators (& verifiers)

B. Preparation of Translation & Adaptation Process

C. Translation and Adaptation Process

C1 double or single translation

C2 reconciliation

C3 (team) adjudication

C4 consultation (domain experts)

C5 proofreading

D1 automated checks

D2 translation verification

D3 errata and updates mgt

D4 review of verification feedback

D5 post-verif final checks

D6 reports, updated TMs, post mortem

D. Linguistic Quality Control Process

EXAMPLE A4. Create Project-specific Rules

Compliance with these rules can be checked automatically

- ▶ Rules that can be linked to attributes of the source version
 - Define max. number of characters in captions
 - Forced adaptations (e.g. imperial vs metric)
 - Identify the need for dynamic text (e.g. gender)
 - Determine how text styles must be treated
 - Proportional length of response choices



Distractor B is much longer
→ More attractive

What is the purpose of the question at the end of "Disaster in the making"?

- A To encourage readers to agree with the writer.
- B To make readers doubt the value of being part of a community.
- C To suggest that no-one understands this topic completely.
- D To encourage readers to form their own opinion on the topic.

Proportional length
of key and distractors
can be checked
automatically

შას ისტ დერ გვამცკ დერ რაბა ამ ნაო ვონ ,, ობა ატასტროკკო
ზეოცკეტი სოცკ აბ“?

- A ესერსცკაფტი ზუ ერმუტიობან, მით დერ უტორ ეონერ ეონუნა.
- B ესერსცკაფტი ან დერ ბერტი, თეილ ეონერ ემეონცკაფტი ზუ სეონ,
ზეუიფილან ზუ ლასენ აკვამლან ლერ აქ მქანჯბკ კანელ.
- C ნეუდუტიან, დასნ ნეიმანდ დონეს თკემა კომკლუტიტი ვერ.
- D ესერსცკაფტი ზუ ეონერ ეობანან ეონუნა ზუ დონეს თკემა ზუ.



EXAMPLE B1. Create (and maintain) glossaries

- ▶ Creating glossaries is best practice in (pre-)translation, but remains underrated and underused
- ▶ bilingual or multilingual glossaries rather than explanatory glosses in the source language
- ▶ Creating glossaries involves some work, brings immense quality gains, particularly in domain-specific assessments

Glossaries may contain

- ▶ any terms and words that need to be translated consistently (technical concepts, cultural entities, ...)
- ▶ fictitious names
- ▶ terms or expressions that involve some research
- ▶ terms or expressions that can be translated in more than one way
- ▶ recurring prompts
- ▶ acronyms
- ▶ names of months and days
- ▶ names of questionnaire sections or modules
- ▶ names of buttons, tables and other UI elements

Adherence to the glossary can be checked automatically



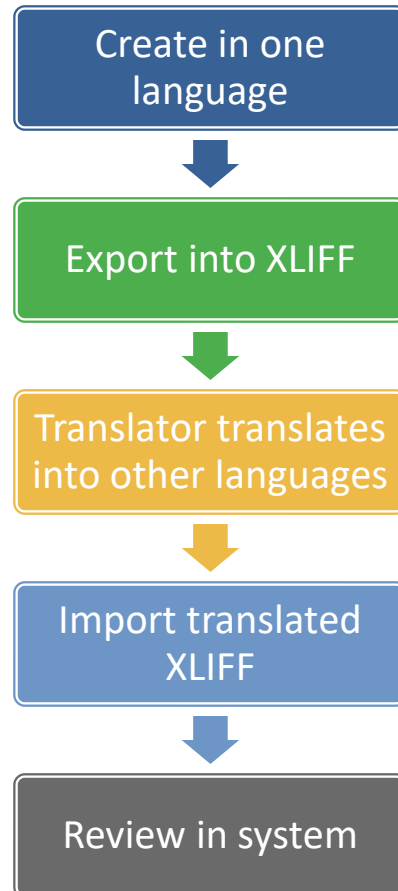
EXAMPLE B4. Translation and Adaptation Notes

Solution:

- ▶ Automate what can be automated
- ▶ Prepare clear, concise translation & adaptation notes
 - Item by item
 - Ideally: appear in the TEnT (Translation Environment Tool)
 - Draw attention to translation traps and psychometric traps
 - Specify which adaptations are required, desirable, or ruled out
- ▶ Set up a system whereby
 - Translators need to confirm they have read the T&A note
 - Verifiers need to confirm that it has been addressed

Translation process in Questionmark

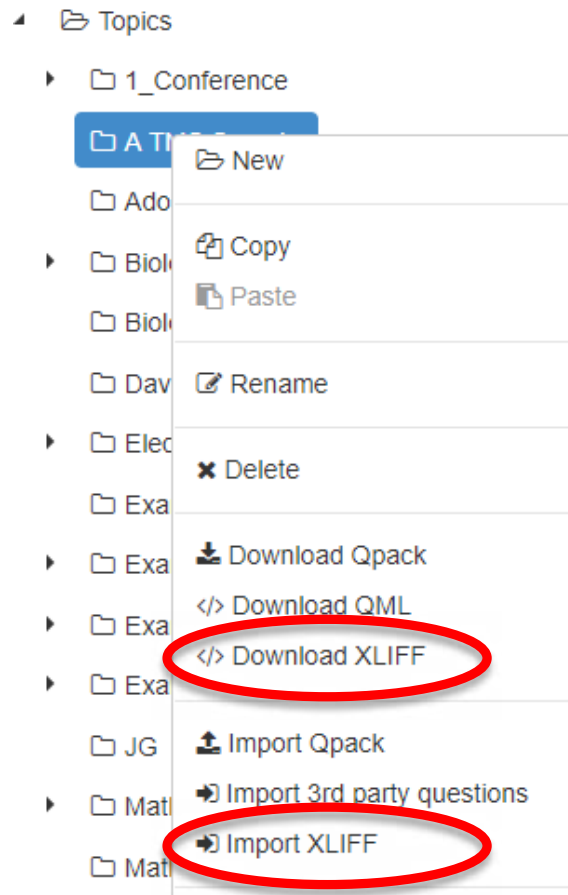
Technical translation process



► XLIFF

- XML Localization Interchange File Format
- Structured text with tags
- International standard from Oasis (who create open data standards)
- Reasonably well supported by translation tools

Export XLIFF for Translation



Manage Translations of Assessments

Search criteria

Question

Description

Assessments

+ New

Copy

Delete

Export

Tryout

Publish

Print for review

Import XLIFF

Translations

	Title	Type	Assessment ID	Created by	Created on	Modified on	Last e
<input type="checkbox"/>	CRCE Exam	Test	0229312000229312	brian@questionmark.com	8/17/2018	8/17/2018	
<input type="checkbox"/>	Electrical Motors and Switch Gear Test	Test	0068820000068820	brian@questionmark.com	6/29/2017	8/9/2018	

Translation technologies

CAT TOOL

≠

MACHINE TRANSLATION

- ▶ A specialized program that helps a translator
 - increase productivity
 - obtain a higher degree of consistency
 - ▶ by leveraging **language assets** such as translation memories and term bases.
 - Translation quality depends on human translator
- ▶ Artificial Intelligence uses
 - rules
 - large sets of data
 - statistics
 - machine learning algorithms
 - ▶ To produce computer-generated translations
 - ▶ Translation quality depends on the quality of sets of data + algorithms
 - ▶ (some providers are pivoting towards machine translation + post editing models)

Language assets

Prehistoric approach

- ▶ Source files (in Word, Excel)
- ▶ Key Terms definitions (in Word)
- ▶ Bilingual glossary (in Excel or a Word table)
- ▶ Guidelines (in Word, Excel)
- ▶ Reference files:
 - Materials from the previous cycle (in Word, Excel)

Computer assisted approach

Project download link / Project package

Source

Standard: .xliff

Termbase

Standard: .tbx

Guidelines

Translation memory from previous cycle

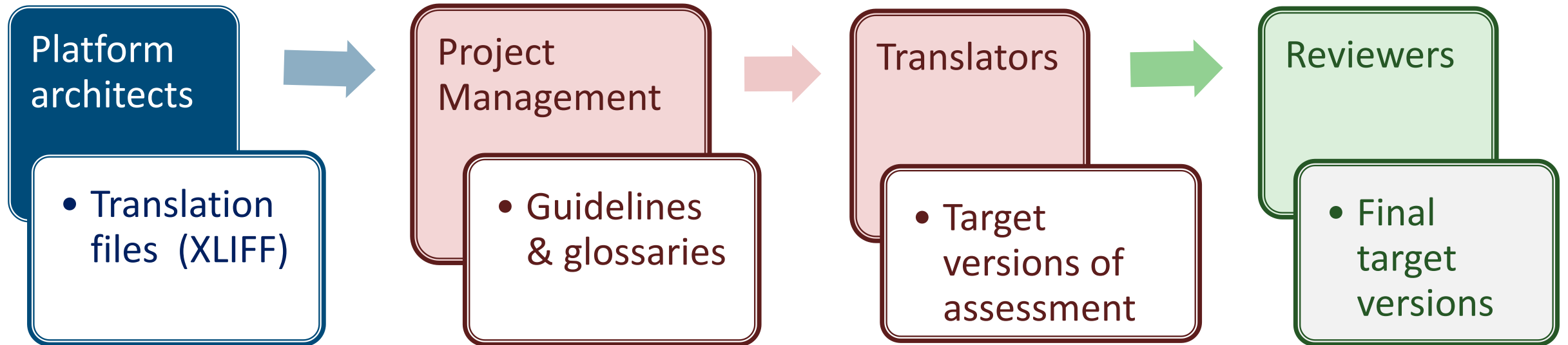
Standard: .tmx

Managing translation vendor

Vendor management advice

- ▶ Determine your approach and requirements yourself, don't let translation vendor talk you into theirs
- ▶ Require translation memories as part of deliverables
- ▶ Each step in the workflow should be documented
- ▶ Translators should only translate into their mother tongue
- ▶ Ask to see vendor document on how they recruit and evaluate their linguists
- ▶ For large or high stakes projects **use independent linguistic QA**
- ▶ Set up and impose secure file transfer (including within translation vendor)
- ▶ Ensure NDAs with all translators to protect question security (often overlooked)

Before and after the translation vendor



- ▶ Translation industry best practices:
 - Optimal preparation of projects for translation
 - Optimal working environment and language assets
 - Linguistic quality assurance

Translation Verification

- ▶ Segment by segment comparison of source and target
- ▶ Compliance with translation and adaptation notes
- ▶ Focus on semantic equivalence and on level of difficulty
- ▶ (while we're at it, check linguistic quality)
- ▶ Use standardized verifier intervention categories to report issues
- ▶ Describe all issues in a centralised monitoring tool
- ▶ Propose corrective action directly in the target files

Translation Verification

Source	Translation	Verification Guidelines	Verifier Version (if different from original)	Verifier Intervention Category	Verifier Comment
Please agree or disagree with the following statement: During the last week, there were people who appreciated me.	過去1週間、自分を評価してくれる人がいた。	"appreciated" may be translated as "praised" or "complimented" in your language if more appropriate. It should <i>not</i> be understood as "evaluated" or "increased the value of".	次の記述についてどう思いますか：過去1週間、自分の良さを認めてくれる人がいた。		

Verification

- Focus on maintaining same difficulty level and ensuring correct item functioning
- Less leeway as regards form (especially in key parts)
- Preferential changes to be avoided
- Source should not be improved
- Literal matches/ synonymous matches

vs.

Proofreading

- Focus on linguistic fluency and correctness
- More leeway as regards form
- More room for preferential changes
- Improving source not a problem
- Repetition / consistency

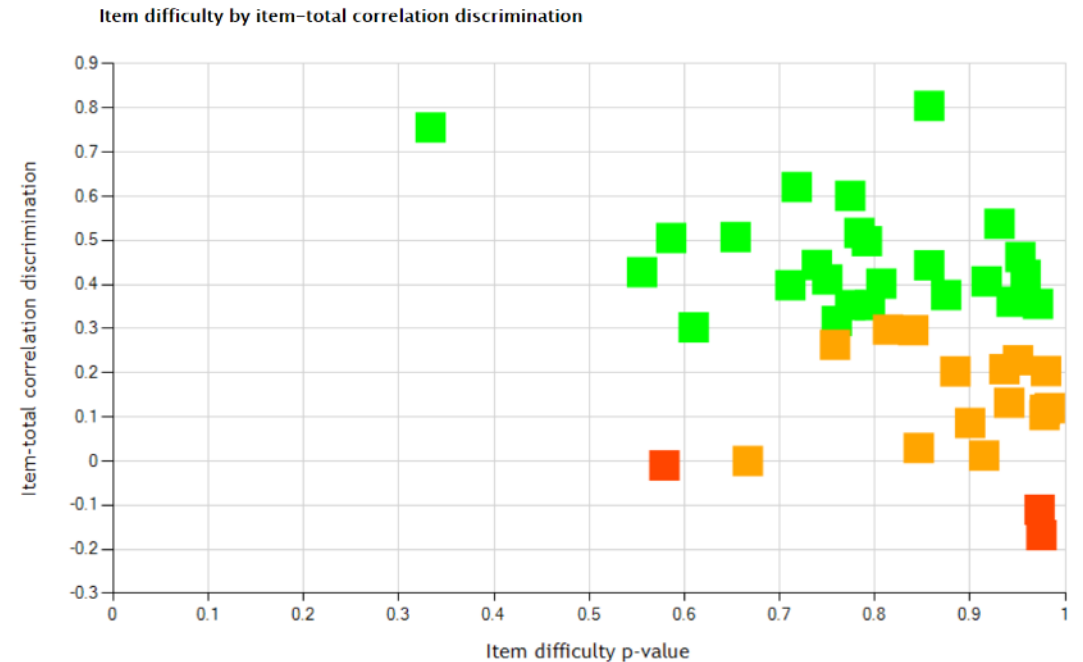
How to pilot and check equivalence

Piloting

- ▶ Build in a pilot to be carried out on a small(er) scale, e.g. a dry run in (some of) the target language(s)
- ▶ Or cognitive pre-test (need trained interviewers in target language)
- ▶ Finalise translation of test items before pilot
- ▶ Analysis of pilot results = a wealth of information
- ▶ Can be used to perform a **focused** linguistic and formal verification before going live

Analysis methods

- ▶ Qualitative
 - Feedback from pilot test-takers
- ▶ Quantitative
 - Run item analysis
 - Compare means of difficulty in different languages
 - (If enough data) run item analysis by language and identify discrepancies



Propose corrective action

- ▶ Items that have behaved anomalously on any of the criteria are flagged (dodgy items)
- ▶ Dodgy item reports examined by testing organisation, by linguistic reviewer and possibly by local subject matter expert
- ▶ explain why such results may have occurred.
- ▶ **Test developers propose corrective action to be implemented by linguists**
- ▶ **Linguists propose corrective action to be endorsed by test developers**
- ▶ and then...



More information

- ▶ International Test Commission Guidelines on Adapting Tests
 - <https://www.intestcom.org/page/16>
- ▶ PISA guidelines (OECD program for international student assessment)
<https://www.oecd.org/pisa/pisaproducts/PISA-2018-TRANSLATION-AND-ADAPTATION-GUIDELINES.pdf>
- ▶ Translation and Cultural Appropriateness of Survey Material in Large-scale Assessments
<http://www.capstan.be/share/#publication-4>
- ▶ Useful blogs
 - cApStAn : <http://www.capstan.be/news/>
 - Questionmark: <https://blog.questionmark.com>



Summary – key messages

- ▶ Translation/adaptation can (and should be) embedded in test design
- ▶ Involve specialists at the earliest stages of a translation project
- ▶ Time spent (i) optimising the source version; and (ii) preparing the translation/adaptation process drives quality of translated tests
- ▶ Export out of your assessment system to allow translators to work with state of the art technology (importing back in should be tested first)
- ▶ Organise (at least some) independent quality checks of the translations

Your questions

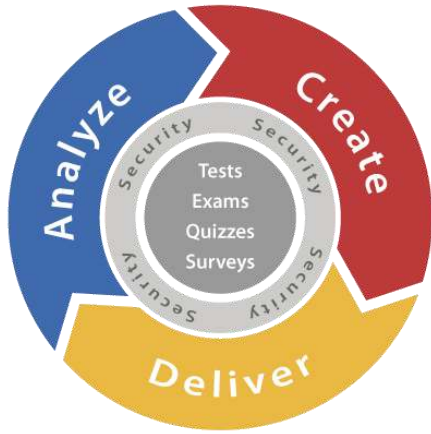
Know your translation needs, know your options

Before embarking on the journey of producing multiple language versions of you assessment:

- ▶ Request a **free translation needs & requirements analysis** by a senior cApStAn consultant at info@capstan.be

You already have a language service provider and you already have translated tests:

- ▶ Ask us to organise a **sample-based translation quality evaluation and equivalence check** at projects@capstan.be



How to Evaluate Questionmark

- **Request a one-on-one demo**
The Questionmark team will contact you to arrange a demonstration tailored to your needs and questions
www.questionmark.com/go/request-demo-enus
- **Request a 30-day trial of Questionmark OnDemand**
Complimentary technical support during trial
www.questionmark.com/go/od30us

Upcoming Webinars

November 28th



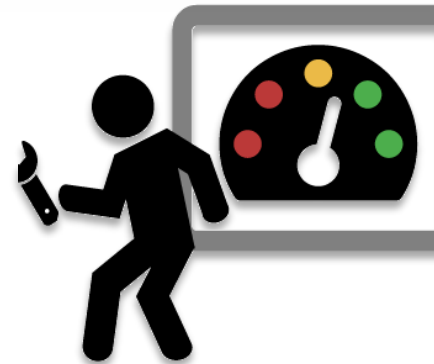
9 Risks to
Test Security
(and what to do
about them)

December 5th



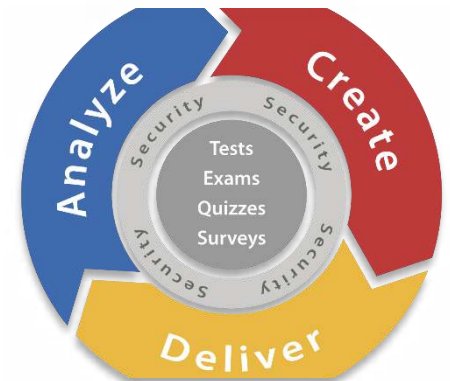
Tips for Writing
Good Test
Questions

December 18th



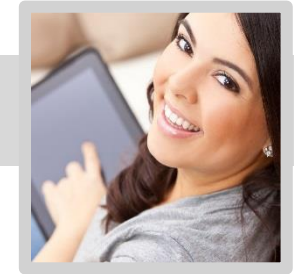
10 Quick Tips
to Improve your
Tests and Exams

Weekly



Introduction to
Questionmark
(Live product demos)

www.questionmark.com/webinars



Thank you for attending!

Keep up to date with Questionmark at blog.questionmark.com
and with cApStAn at www.capstan.be/news/

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