
Using the MadPak Suite for Translations — A Case Study

PRESENTED BY

Chris Steele

PASCO scientific



Objectives



- ➔ **Help you build a business case ...**
demonstrate the value of high-performance tools
- ➔ **Give you objective-based options for your projects ...** demonstrate multiple paths to an end goal considering cost, time, and quality
- ➔ **Provide you with tips and cautions ...** learn from my mistakes

Route



- Example project
- Challenges



- 3-phase solution
- Benefits
- Cautions
- Tips

Who am I...

Education:

- Electrical & Electronic Engineer
- Communication Studies
- Political Science and Philosophy

Places worked:

- Small & large
- Intel; HP; Agilent; FAA; start-ups; consultant (high-tech)

Jobs:

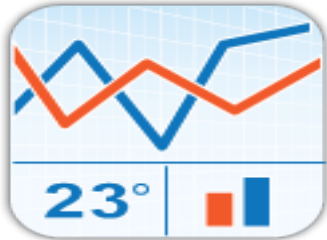
- R & D; Engineering; Marketing; Manufacturing
- Engineer; Project Manager; Manager; COO
- *Currently...*Software Product Manager



Who are we...



Software



Sensors



Interfaces



Science Education

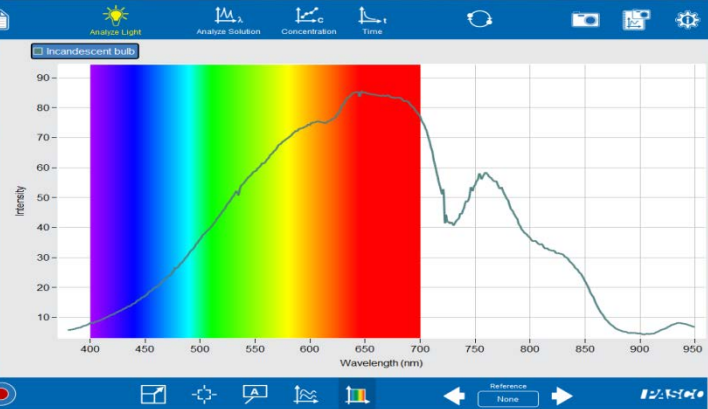
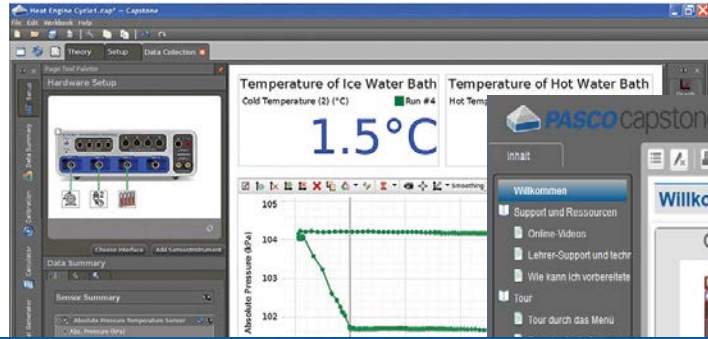
MADWORLD

Types of content

User Interface

Online Help

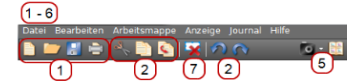
w/PDF



PASCO capstone™

2 Tour durch die Benutzeroberfläche
Tour durch die Menü und Symbolleiste

Tour durch die Menü und Symbolleiste



Das Capstone-Menü enthält häufig verwendete Anwendungsfunktionen und anwendungsspezifische Funktionen. Eine Funktionen stehen als Symbolleisten-Schaltflächen zur Verfügung.

Erläuterungen zu Funktionen in Menü und Symbolleiste: [Tipp¹](#)

1 Datei

Menüelement	Beschreibung
Daten importieren...	Daten in die Capstone-Datenübersicht importieren
Daten exportieren...	Erfasste Daten in eine Textdatei exportieren
Voreinstellungen	Globale Einstellungen wie die folgenden festlegen: <ul style="list-style-type: none"> Einstellungsdatei Allgemeine Anwendung Sprache Arbeitsmappe Anzeigenpalette Werkzeugpalette Steuerelementpalette

2 Bearbeiten

Symbol Menüelement	Beschreibung
	Rückgängig Die letzte Operation rückgängig machen Tipp²
	Wiederholen Eine Rückgängig-Operation wiederholen Tipp²
	Ausschneiden Das ausgewählte Anzeigeelement ausschneiden
	Kopieren Das ausgewählte Anzeigeelement kopieren

¹Capstone enthält Beschreibungen in Dialogfeldern. Klicken Sie auf ein Element, um eine kurze Beschreibung anzuzeigen.

²Der Vorgang, der rückgängig gemacht wird, wird im Menü aufgeführt.

²Der Vorgang, der wiederholt wird, wird im Menü aufgeführt.

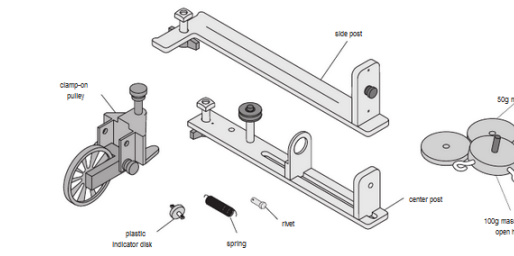
MADWORLD

Types of content

Manuals

Instruction Sheet
for the PASCO
Model ME-8952

Centripetal Force Accessory



Introduction

The ME-8952 Centripetal Force Accessory is comprised of two vertical posts which can be mounted to the Rotating Platform with thumb screws. These posts are adjustable and can be positioned virtually anywhere along the length of the platform. The radius indicator is at the center of the apparatus so it can be clearly seen while the apparatus is rotating. The PASCO Centripetal Force Accessory can be used to experiment with centripetal force and conservation of angular momentum. For the centripetal force experiments it is possible to vary the mass and radius to see the resulting change in the centripetal force. The force can also be held constant and quantities are varied. The Centripetal Force Accessory is powered by hand and the rate of rotation can be manually or read by a computer. Variable quantities are included. This accessory requires the Rotating Platform (ME-8951) to operate.

See the Complete Rotational Manual for setup and use guide.

Equipment

The ME-8952 Centripetal Force Accessory includes:

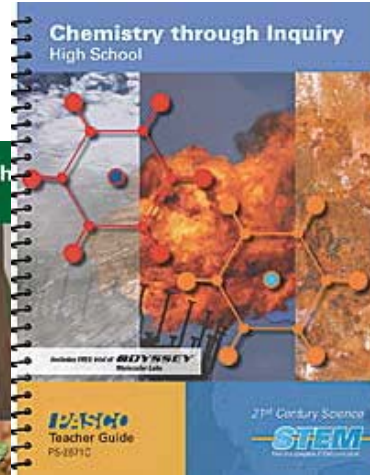
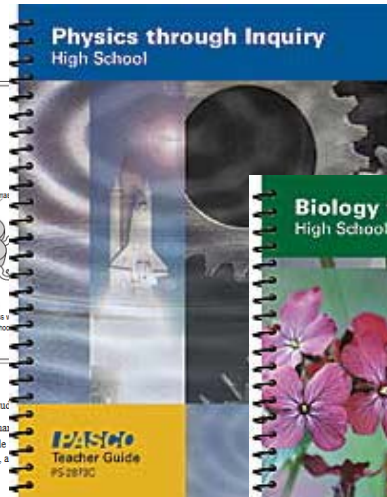
- center post that supports an indicator mechanism which consists of a small pulley, a movable spring holder, a movable indicator, a rivet, a spring, and a plastic indicator disk
- side post for hanging hooked mass
- mass (100 g) with 3 open hooks
- 2 additional 50 gram masses
- clamp-on pulley



PASCO
scientific

10101 Foothills Blvd. • P.O. Box 619011 • Roseville, CA 95678-9011 USA
Phone (916) 788-3800 • FAX (916) 788-8905 • TWX 910-383-2040

012-05294B
10/94
\$1.00

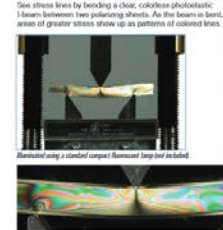


MADWORLD

Brochures/ Catalogs

PASCO Materials Testing System

Photoelasticity Accessory



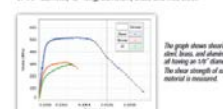
Photoelasticity Accessory includes two polarizing sheets, 1.5" x 1.5" x 1/8" and one Photoelastic Stress Kit. See page 10 for more applications.

Order Information	ME-4041	\$129
Photoelasticity Accessory		
Replacement Supplies:		
Photoelastic Stress Kit (Set of 8)	ME-3011	\$20
Discs in use with		
Stress Accessory	ME-4037	\$100

Materials Shear Accessory

Perform shear tests for a variety of wires.

Accessory accepts diameters of 1/16", 3/32", 1/8" and 5/32". The Shear Accessory includes the ME-4038 Shear Samples, three each of 1/8" diameter, 1/2" long, aluminum, brass and mild steel.



The graph shows shearing of steel, brass and aluminum wires of varying on 1/8" diameter. The shear strength of each material is measured.

Materials Shear Accessory ME-4038 includes: Shear Stress and Shear Samples ME-4039

Shear Samples include: 3 each of three types of wire



Order Information

Materials Shear Accessory	ME-4038	\$149
Replacement Supplies:		
Shear Samples test set of 3	ME-4039	\$20

www.pasco.com

877-373-0300

Challenges



Cost:

- High cost
- Created barrier to enter new markets

Time:

- Long lead times
- Last-minute changes and additions

Scope:

- Domain specific (science and learning)
- Wide-range of education levels Middle school – University
- Complex sentences and structure

Quality:

- Inconsistent terminology and strings
- Breaking source code



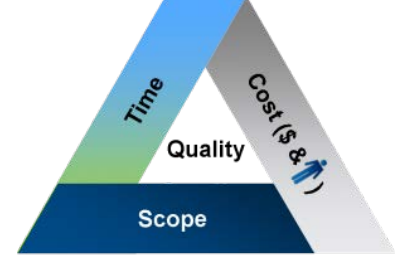
- Expensive
- Took a long time
- Broke stuff

Cost

- \$25,000 /language
- 2 person months

Time:

- 2—4 months

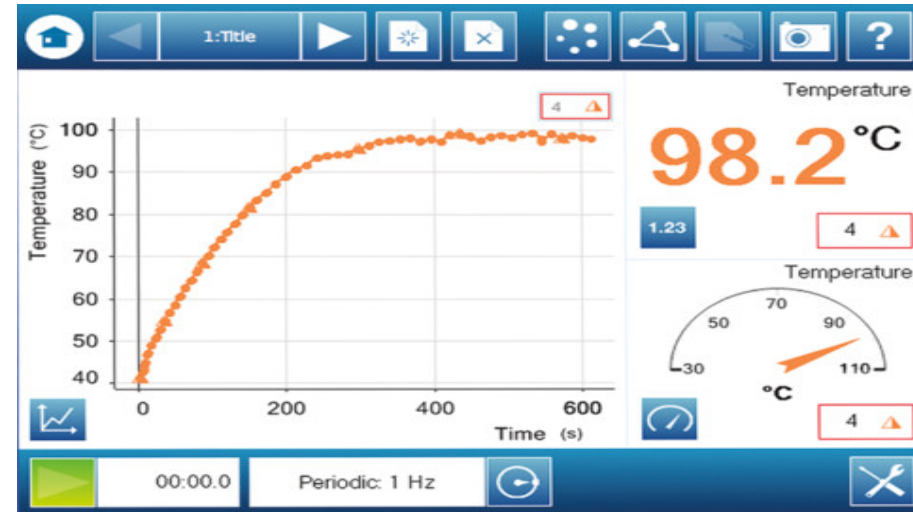


Scope:

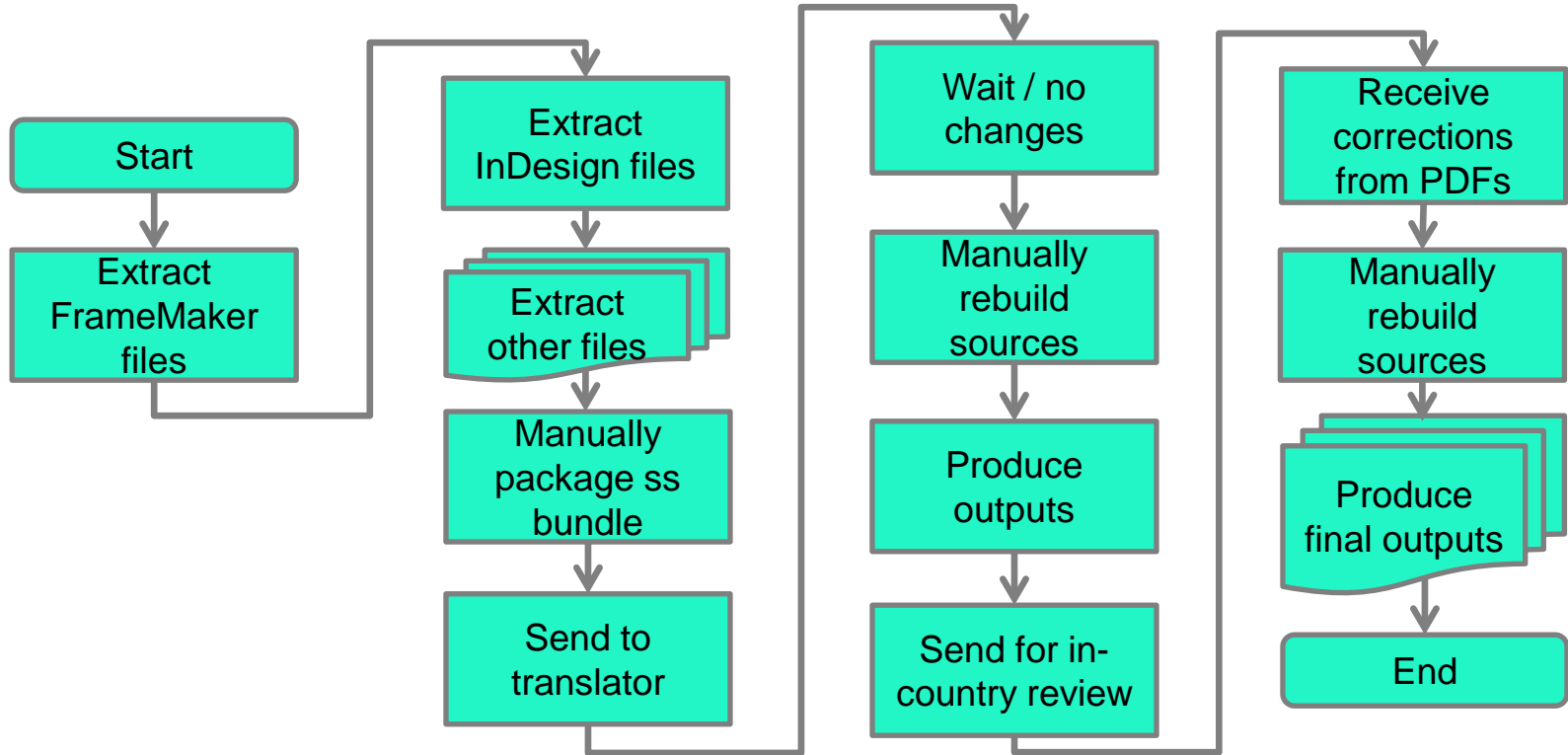
- User Interface (text)
- On-line Help (HTML)
- User Guide (PDF)
- Brochures (InDesign)

Quality:

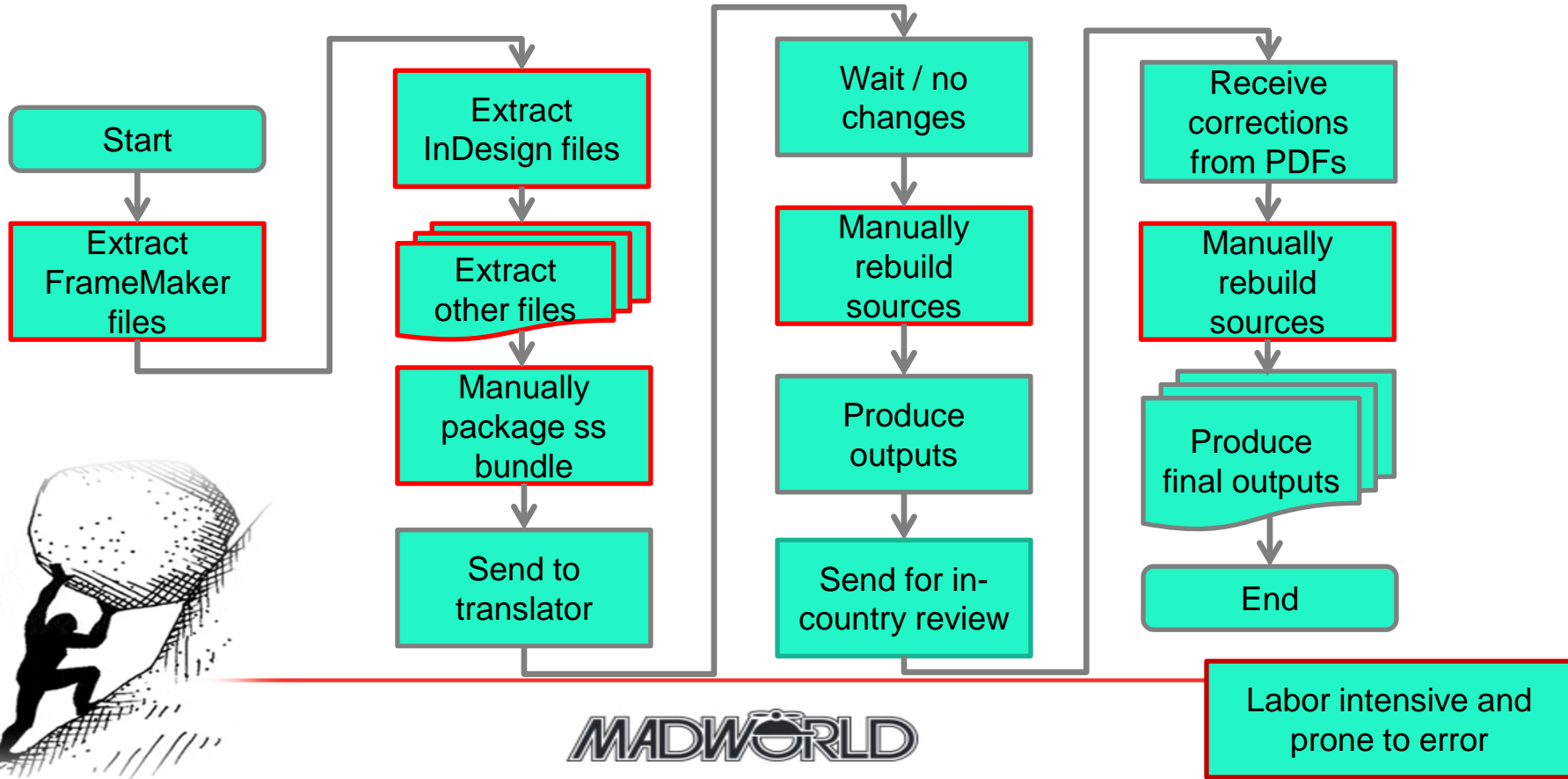
- Inconsistent terminology
- Broke source



Process – Initial



Process – Initial



Solutions

phase

1

Port current OnLine Help...

1. Researched open-source authoring tools that facilitate translation process
2. Selected MadPak Suite after thorough consideration
3. Immediately utilized Flare + Lingo
4. Converted FrameMaker (DITA) & Word to Flare

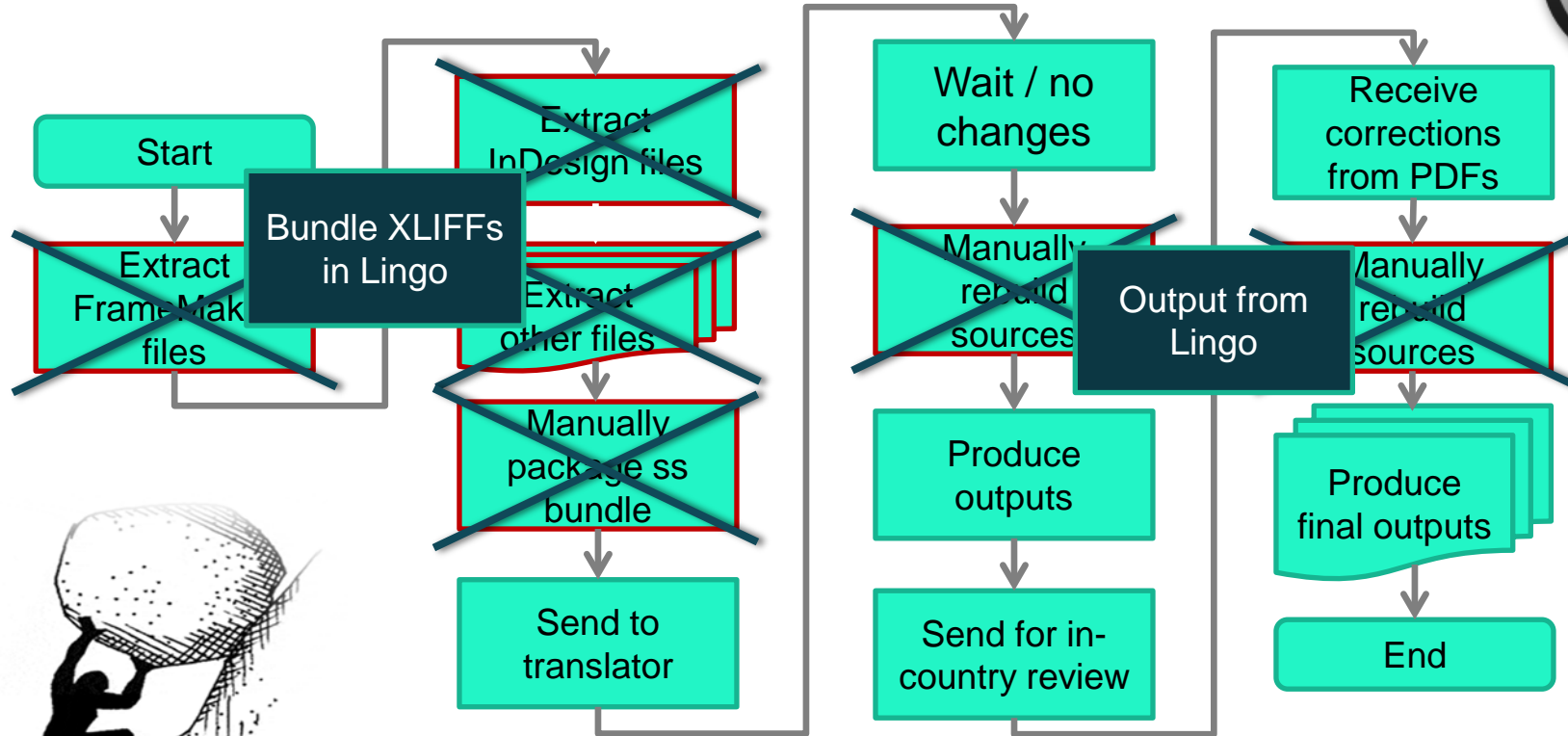
NEW WAY

MADWORLD

Process – Before

phase

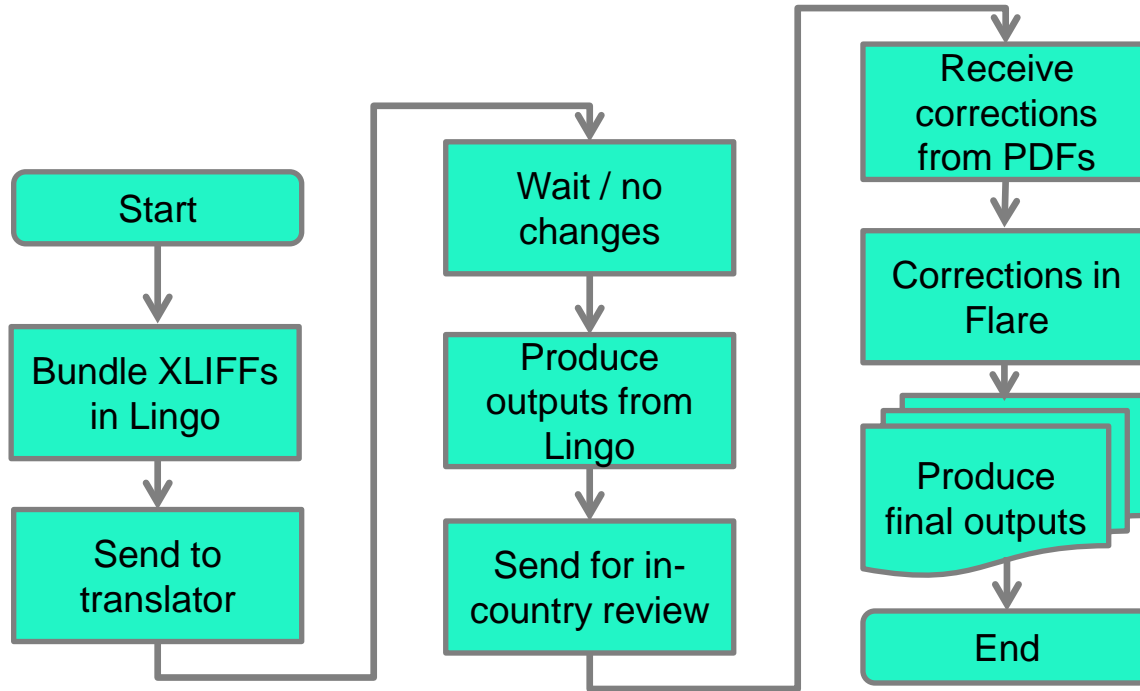
1



Process – After

phase

1





Results

phase

1

	Initial	Phase 1	Results
Cost	<ul style="list-style-type: none">▪ \$25,000▪ 2-4 person months	<ul style="list-style-type: none">▪ \$6000▪ 2-4 person weeks	<ul style="list-style-type: none">▪ Reduced cost 75%▪ Reduced effort 25%
Time	<ul style="list-style-type: none">▪ 2-4 months	<ul style="list-style-type: none">▪ 1-2 months	<ul style="list-style-type: none">▪ Reduced time 50%
Scope	<ul style="list-style-type: none">▪ User Interface (text)▪ On-line Help (HTML)▪ User Guide (PDF)▪ Brochures (InDesign)	<ul style="list-style-type: none">▪ On-line Help (HTML)▪ User Guide (PDF)	<ul style="list-style-type: none">▪ Content coverage 50%
Quality	<ul style="list-style-type: none">▪ Broke source▪ Inconsistent terminology▪ Numerous reviews	<ul style="list-style-type: none">▪ Source not sig. broken▪ Identified common segments▪ One review	<ul style="list-style-type: none">▪ Reduced breakage >90%▪ Improved consistency >50%▪ Reduced review overhead >75%

Solutions

phase

2

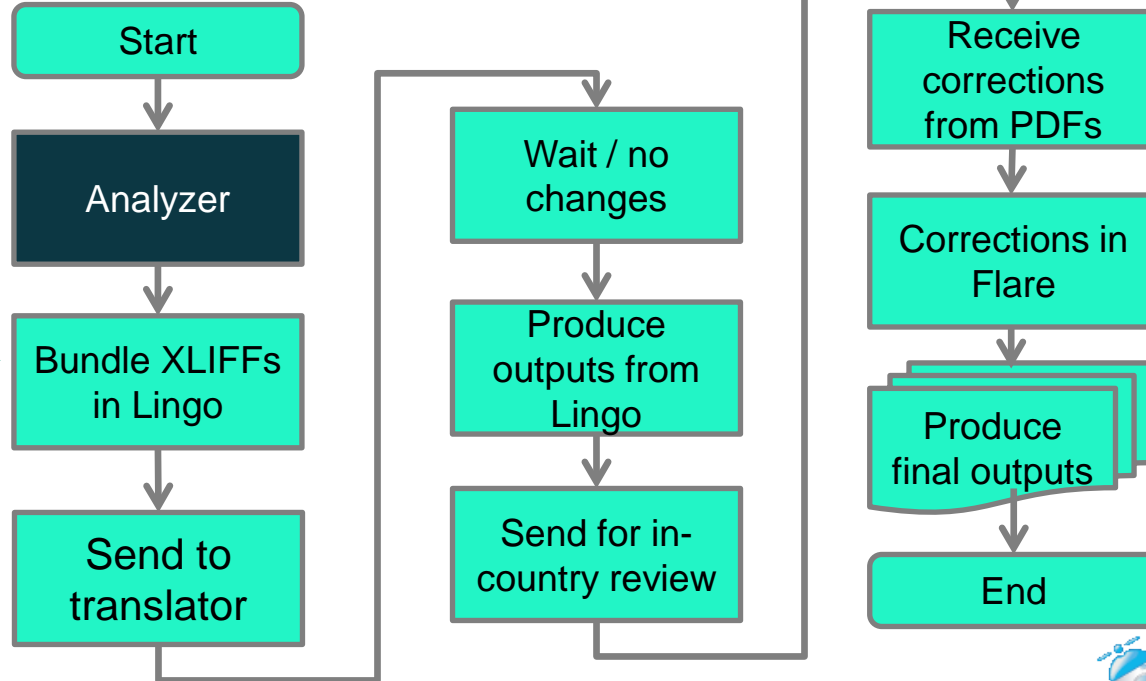
Improve sources...

1. Utilized Analyzer to find opportunities for snippets, variables, styles, x-refs, broken links
2. Utilize file tags to denote translation status
3. Utilized Capture for prop file (callout text)
4. Open to other sources (Word, InDesign, CSV)

Process – After

phase

2



MADWORLD



Results

phase

2

	Phase 1	Phase 2	Results
Cost	<ul style="list-style-type: none">▪ \$6000▪ 2-4 person weeks	<ul style="list-style-type: none">▪ \$4000–\$5000▪ 2-4 person weeks	<ul style="list-style-type: none">▪ Reduced cost 15-30%▪ Reduced effort 25%
Time	<ul style="list-style-type: none">▪ 1-2 months	<ul style="list-style-type: none">▪ 1-2 months	<ul style="list-style-type: none">▪ No change
Scope	<ul style="list-style-type: none">▪ On-line Help (HTML)▪ User Guide (PDF)	<ul style="list-style-type: none">▪ User Interface (text)▪ On-line Help (HTML)▪ User Guide (PDF)▪ Brochures (InDesign)	<ul style="list-style-type: none">▪ Double coverage <p>Now same coverage as <i>pre-MadCap</i></p>
Quality	<ul style="list-style-type: none">▪ Source not sig. broken	<ul style="list-style-type: none">▪ Reduced redundancy; Δ reduced breaking	<ul style="list-style-type: none">▪ Reduced breakage ~10%▪ Improved consistency ~10%▪ No change to review



Translation Memory & Machine Translation...

1. Created Translation database
2. Utilized Lingo-enabled Machine Translation APIs
3. Floating Lingo License – CAT tool for country reviews

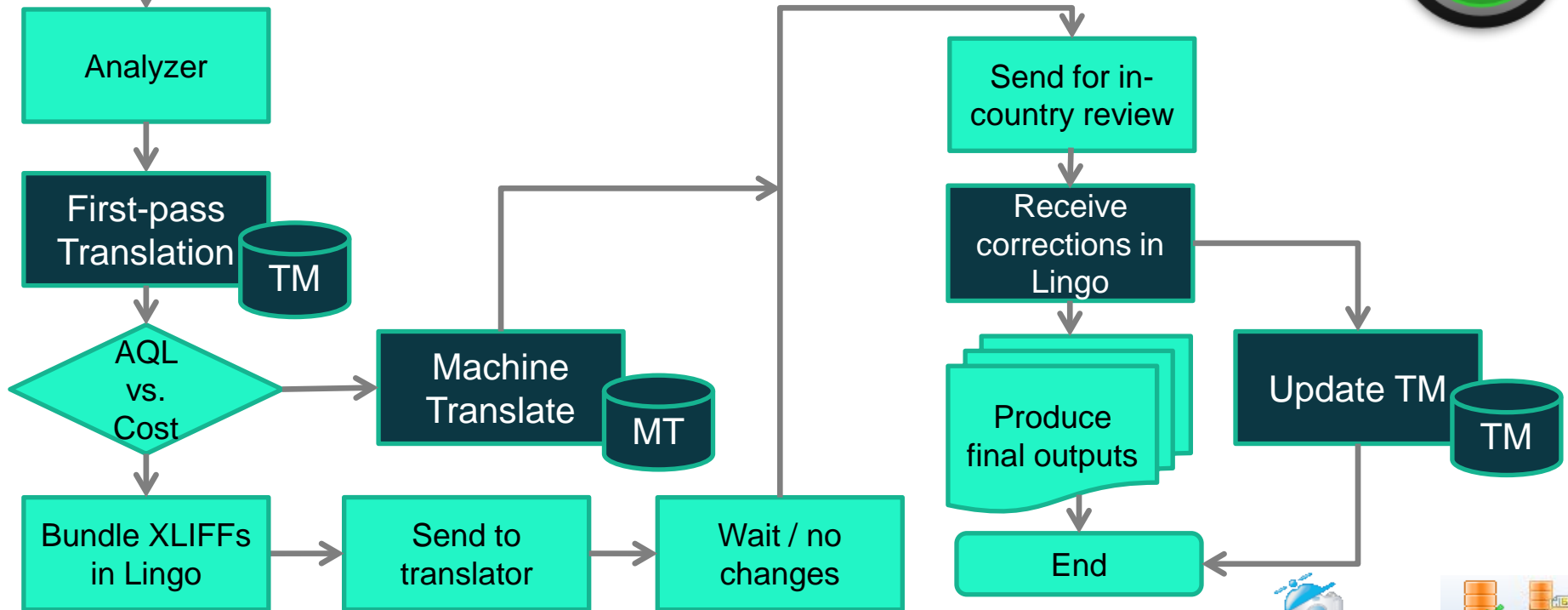
phase 3



Process – After

phase

3



MADWORLD



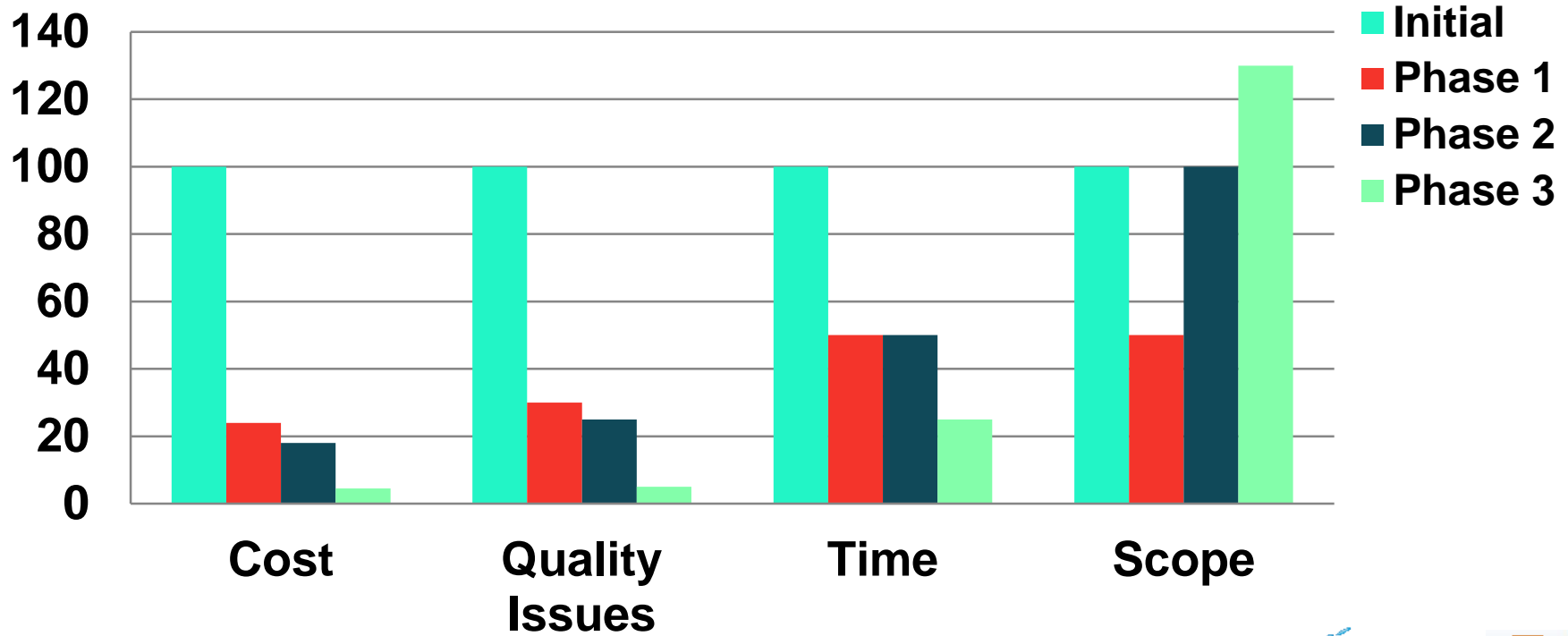


Results



	Phase 2	Phase 3 (TM method)	Results
Cost	<ul style="list-style-type: none"> ▪ \$4000–\$5000 ▪ 2-4 person weeks 	<ul style="list-style-type: none"> ▪ \$100 ▪ 2-4 person weeks 	<ul style="list-style-type: none"> ▪ Removed cost ▪ Reduced effort 25%
Time	<ul style="list-style-type: none"> ▪ 1-2 months 	<ul style="list-style-type: none"> ▪ 1 month 	<ul style="list-style-type: none"> ▪ Reduced time 50%
Scope	<ul style="list-style-type: none"> ▪ User Interface (text) ▪ On-line Help (HTML) ▪ User Guide (PDF) ▪ Brochures (InDesign) 	<ul style="list-style-type: none"> ▪ Text; HTML; PDF; InDesign; Word; FrameMaker; etc. 	<ul style="list-style-type: none"> ▪ Content coverage 125%
Quality	<ul style="list-style-type: none"> ▪ Reduced redundancy; Δ reduced breaking 	<ul style="list-style-type: none"> ▪ Flare source not sig. broken ▪ Identified common segments ▪ One review 	<ul style="list-style-type: none"> ▪ Reduced breakage >90% ▪ Improved consistency >50% ▪ Reduced review >75% ▪ Continuous improvement of TM and Terminology

Normalized Results



Benefits



Two paths...

Machine Translation

low-cost path
(machine
translation) for low
cost and quick-turn



Translation Service

high-quality path
that is optimized
for maximum
benefit

Benefits



Quality...



Continuous improvement— iterative updates to the TM:

- More consistent terminology
- Better contextual language
- Improved grammar

Higher integrity of source

- Reduced manual processing errors
- Less source corruption
- Layout better maintained



Benefits



Time...



Quickly respond to business opportunities

- Expedites proof of performance
- Meet tight deadlines
- Urgent fixes to customer issues

More predicable delivery dates

- Improved planning of resources
- Better communication to customers



Benefits



Flexibility...

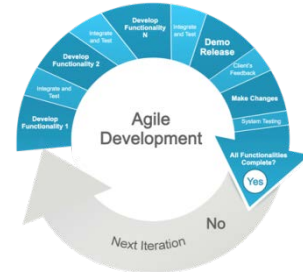


Make changes during project

- Respond to new requirements (UI strings)
- Fix things that do not work

Align to Agile-based projects

- Break work into Sprints
- Have content ready routinely



Caution



In-line anything...

- In-line variables and conditional text
 - Grammar issues: improper conjugation and noun-verb agreement problems

The `<variable>` is tall.

- In-line tags, including `` tags
 - Skewed tags `text`
→ ` text`

text → text

Caution



X-ref text...

```
<MadCap:xref href="../../topics/dogs.htm">  
>Dogs</MadCap:xref>
```

After translation...

```
<MadCap:xref href="../../topics/dogs.htm">  
</MadCap:xref>Dogs
```

PerrosDogs

- Suggest removing the text within the xref...
- `<MadCap:xref href="../../topics/dogs.htm" />`

Tips for translation



Resource Management...

- Batch processes
 - Pre-build clean up scripts
 - Post-build optimization of resources
- Sync common resources across multiple projects/languages
 - Images, common variables, snippets
 - MasterPages/PageLayouts, CSSes, etc.

Tips for translation



TOC & H1 Alignment...

- Use variables
- Allows one master TOC across language projects
- Ensures consistent text for HTML TOC, Headings, Breadcrumbs, PDF, ...

```
<TocEntry  
  Title="Introduction"  
  Link="/Content/Introduction.htm"  
  BreakType="none"  
  PageType="title"  
  AutoEndOnLeftPage="disabled"  
  StartSection="false" />
```

```
<TocEntry  
  Title="[%=TOC.Introduction%]"  
  Link="/Content/Introduction.htm"  
  BreakType="none"  
  PageType="title"  
  AutoEndOnLeftPage="disabled"  
  StartSection="false" />
```

Tips for translation



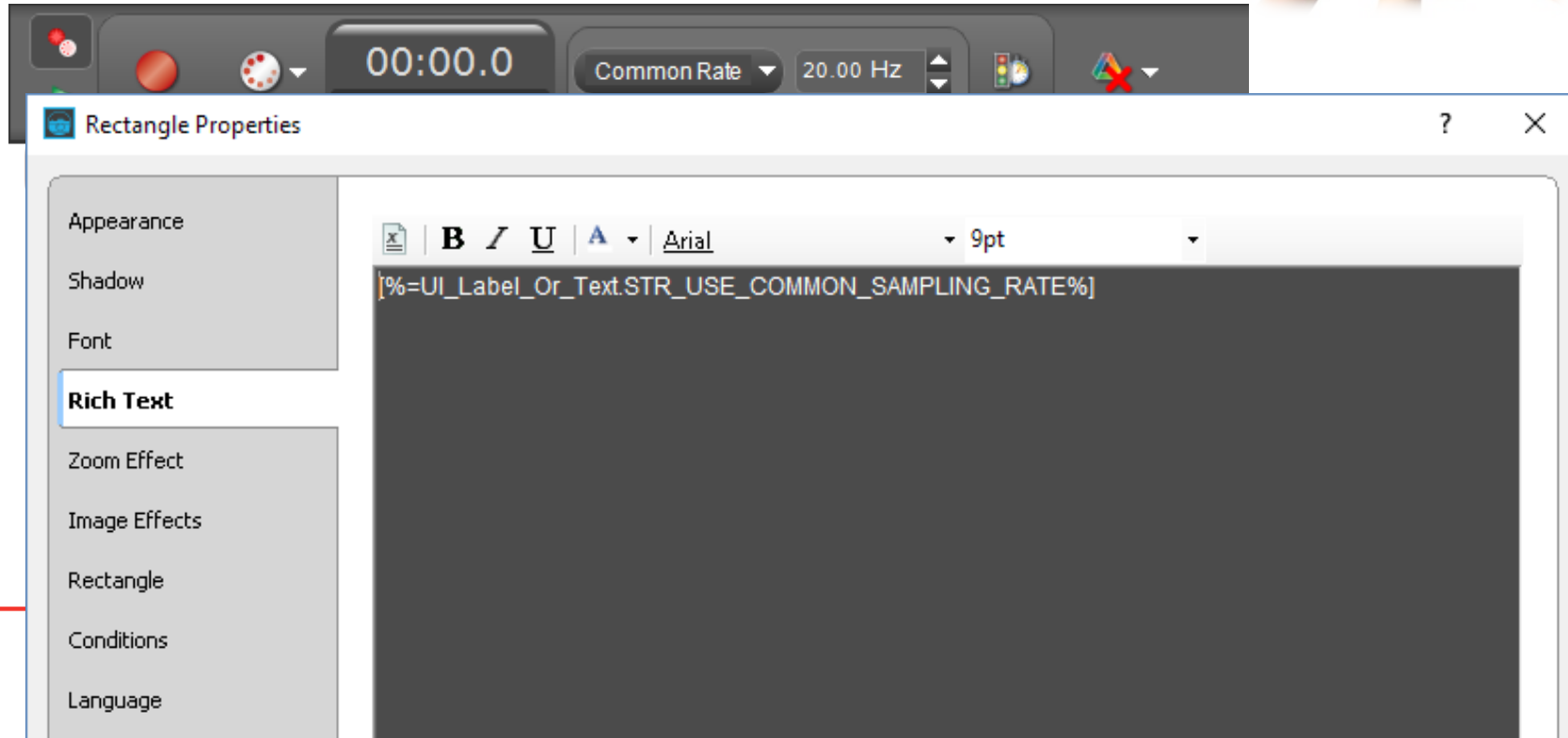
Variables...

- Variables as complete segments only
- Use the strings from the UI as variables in MadCap

Tips for translation



Variables...



Tips for translation



Variables...

Tour the Controls Palette

The Controls Palette is used to start/stop data collection, set the data monitoring mode, set the sample rate, and set the video.



? X



1

2

3

4

Tour durch die Steuerelementpalette

Die Steuerelementpalette dient zum Starten/Stoppen der Datenerfassung, zum Festlegen des Datemonitoring-Modus und zum Definieren von Start-/Stopbedingungen.

Zoom Effect
Image Effects
Rectangle
Conditions
Language



1

2

3

4

5

6

7

Tips for translation



Content...

- Use a source language that is related to the target language (Czech → Slovak).
- Consider the context and culture when selecting translation path.
- Advocate writing for international audiences & translation.

Careful of
pivot
languages

Stretching



Skill building...

- Deep learning of CSS
- Batch processing
- Learn and use Regular Expressions
- JavaScript

Writing Tips



Active Voice

Use Active Voice: [Active voice](#) enables translators (and non-English readers) to easily identify the subject of the sentence.

Present Tense

Use Present Tense: In most cases of future tense can be rewritten in present tense. Use future tense in instances when the order of events is important.

Simple Sentences

Use Simple Sentences: Use simple sentences with the following format: Subject + Verb + Object. Break complex and compound sentences into multiple simple sentences.

Acronyms

Limit Acronyms: Limit the use of acronyms and be sure to define acronyms at the first occurrence if used. (Best to not use them for international audiences.)

Slang

Avoid Slang: Avoid idiomatic expressions, jargon, and slang. Often, these figures of speech have no corresponding term in other languages.

Audience

Use Imperative or Second Person: Address the reader in second person voice (you or [imperative](#)) to provide consistency for both the reader and translator.



Writing Tips



Consistency

Be Consistent Throughout: Use standard and consistent wording and terminology to improve translation accuracy.

Verbs and Nouns

Avoid Verb vs. Noun Confusion: Avoid using the same word as both a verb and a noun (such as default and record).

Modifier Strings

Avoid Long Modifier Strings: (consisting of many consecutive nouns or adjectives) You can usually make modifier strings more readable by reversing the order of the words and using prepositional phrases and relative clauses to clarify relationships between words.

Units of Measure

Include Metric: If using non-metric units, include the metric equivalent in parentheses and spell out all U.S. units of measurement such as feet, inches, etc.

Dates

Write Out Dates: Use full names to avoid ambiguity in foreign languages. Different countries use different formats for dates.

Formatting

Use Consistent Formatting Conventions: Use to signal different types of information, such as overviews, tasks, and steps. Use a standard document template or style sheet whenever possible.



TAKE ADVANTAGE OF CERTIFIED TRAINING

As a webinar attendee, receive **\$100 OFF** your next advanced training course.

MadCap Flare Responsive HTML5

June 14-15, 2016 (web-based)

MadCap Flare Project Management/Team Authoring

June 16-17, 2016 (web-based)

For more details, or to take advantage of this offer, contact sales@madcapsoftware or [click here](#).

Note: Courses subject to change. Availability based on student registration. Certain restrictions apply; cannot be combined with any other offer or promotion. Not valid on courses already purchased.



1000

A word cloud featuring the word "Thank You" in various languages and scripts. The central text is "Thank You" in a large, bold, black font. Surrounding it are numerous other words in different languages, including:

- English: Thank, You, Gracías, Merci, Shukria, Biyan, Grazie, Juspaxar, Dankscheen, Arigato, Mehrbani, Tashakkur, Shukuria, Komapsumnida, Paldies, Maake, bolzin, suksama, Shukria, Chaltu, Dhanyabaad, Meristamry, Snachalhuya, Juspaxar, Biyan, Grazie, Shukria, Merci, Gracías, Thank, You.
- Hindi: धन्यवाद, शुक्रिया, तशककुर, अरिगतो, मेरिबानी, कम्पसुमनिदा, पाल्डी, माके, बोलज़िन, सुक्समा, शुकुरिया, मेरि, ग्रासिया, थैंक यू, जसपाखर, बियान, ग्राज़िए, चाल्तु, धन्यबाद, मेरिस्तमर्य, स्नाचलहूया, जसपाखर, बियान, ग्राज़िए, शुकुरिया, मेरि, ग्रासिया, थैंक यू, जसपाखर, बियान, ग्राज़िए, चाल्तु, धन्यबाद, मेरिस्तमर्य, स्नाचलहूया.
- Urdu: شکریہ، تھانک یو، گراسیا، مری، جاسپاکار، بیان، گراسیہ، شکریہ، مری، جاسپاکار، بیان، گراسیہ، شکریہ، مری، جاسپاکار، بیان، گراسیہ.
- Persian: تشکر، متشکرم، ممنون، سپاس، شکر، تشکریه، متشکرم، ممنون، سپاس، شکر.
- Other: Komapsumnida, Paldies, Maake, bolzin, suksama, Shukria, Chaltu, Dhanyabaad, Meristamry, Snachalhuya, Juspaxar, Biyan, Grazie, Shukria, Merci, Gracías, Thank, You.