MORAVIA

Metrics and KPIs for Localization

Erik Vogt, Moravia

Agenda

- Definitions — what are indicators?
  - A brief case for metrics and KPIs — why they matter?
  - A brief case against KPIs — reasons to be cautious
- Practical Localization Metrics 101
- Practical Localization Metrics 200
- Program Dashboards
- Developing Localization Metrics
- Localization Performance Indicators 300+

1 Definitions

Data, Metrics and Indicators

Data is a collection of facts and statistics collected together for reference or analysis

A **metric** is a collection of the same type of data

"You can't pick your data, but you must pick your metrics!"

An **indicator** provides evidence that a certain condition exists or certain results have or have not occurred.

KRIs, PIs, and KPIs

1. **Key result indicators (KRIs)** tell you how you have done in a perspective.
2. **Performance indicators (PIs)** tell you what to do.
3. **Key Performance indicators (KPIs)** tell you what to do to increase performance dramatically.

Why You Need KPIs

"What gets measured gets done" – *Attributed to many**

"Without a standard, there is no logical basis for making a decision or taking action." - *Joseph Juran*

- Some benefits of KPIs
  - KPIs shift a group to proactive mode
  - Healthier partner relationships
  - Pay-for-performance becomes easier to implement (or even possible)
  - Scalability, consistency, normalcy
  - Move away from "constant crisis" style
  - Ability to focus teams on essential goals

KPIs in Action: British Airways

In the 1980s turned the company around by focusing on just one KPI:

- Financial – Operating margin
- Customers – Recommendation
- **Operations – Punctuality**
- Colleagues – Colleague involvement

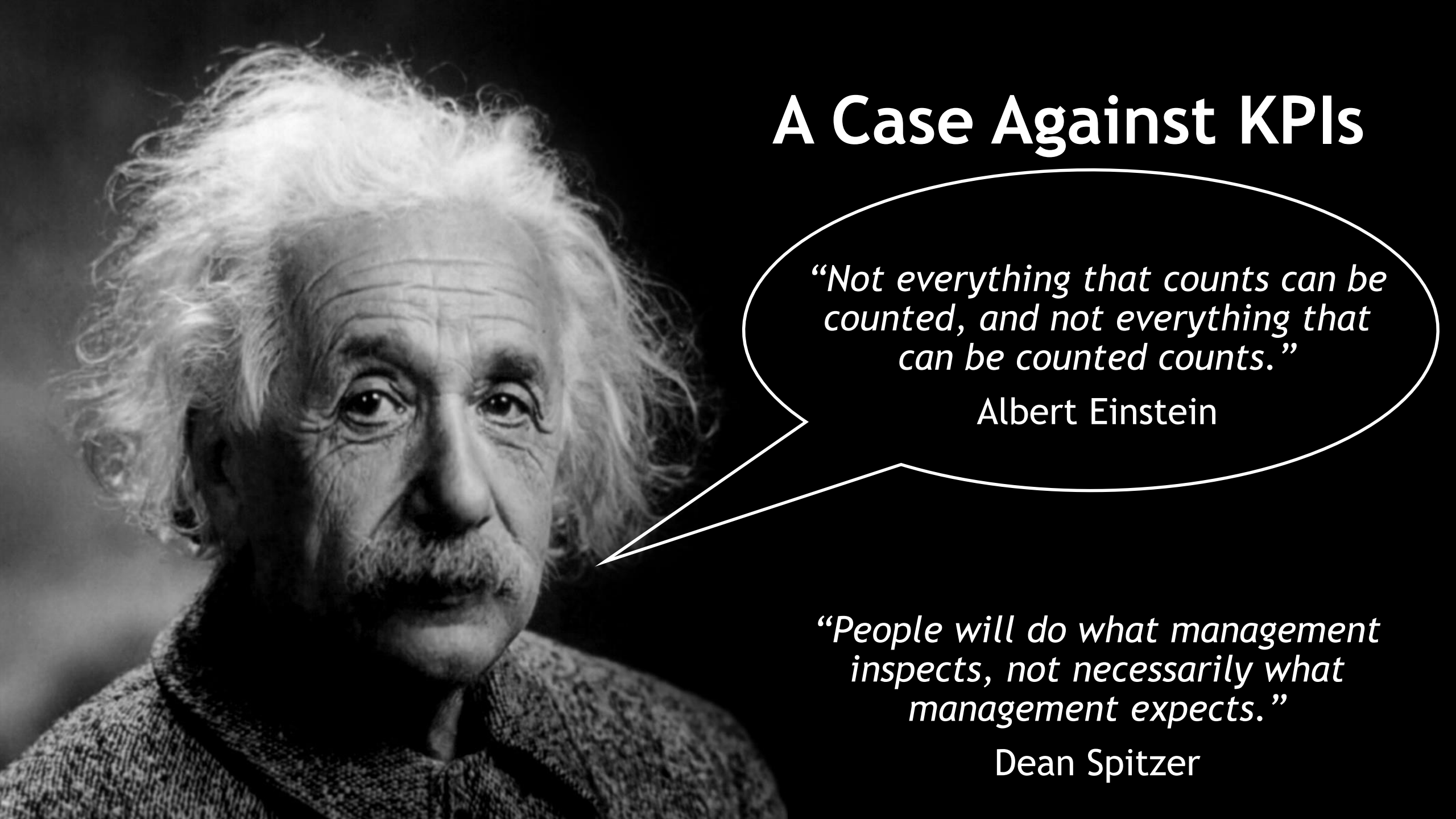
Actions:

- Doubled cleaning crew
- Prioritized refueling
- Personal call policy

Results:

- Lower fuel costs
- Lowered airport surcharges
- Reduced lost baggage
- Improved customer satisfaction
- Improved vendor relationships
- More satisfied employees

BRITISH AIRWAYS



A Case Against KPIs

"Not everything that counts can be counted, and not everything that can be counted counts."

Albert Einstein

"People will do what management inspects, not necessarily what management expects."

Dean Spitzer

2 Practical Localization Metrics 101

The Best Place to Start…

Common localization metrics

- Percentage of on-time deliveries
  - *Data points*: hand-off date, requested delivery date, approved delivery date, actual delivery date
- Number of linguistic or technical quality errors
  - *Data points*: quality framework and measurement methodology
- Pass/fail rates and First pass yield
  - *Data points*: pass criteria, pass/fail data
- Quantified quality tiers
- Average throughput rate
  - Weighted words, hand-offs, pages per business day
- Fully-loaded cost per word

Start with Data

1. Evaluate the data you have. What are the gaps?
2. Tracking sheets and invoicing data is a good place to start
3. An existing TMS will typically have good sources of raw data to export
4. Assign a clear owner for data integrity
5. Normalized data is a MUST
6. Excel is good for modeling and getting started,
   but it stops being effective quickly
7. SharePoint has decent SQL back-end support. Consider
   customizing the user fields by task or station
8. Access and SQL are good next steps, but require more
   specialized skills to configure
9. More advanced systems exist for more mature programs

Percentage of On-time Deliveries

Calculation:

∑ total deliveries that are on-time or early / total deliveries

Best value:

Paces production, focuses team on meeting deadlines

Variables to consider:

Project complexity is an issue

Ignoring holidays often means you get the B-team

You should plan to track 4 data points

MBO opportunity:

Reward meeting target OTD goals (e.g. 98% or higher = +2% month)

Penalize late deliveries (e.g. <90% = -2%)

Average Language Quality Scores

Calculation:

∑ total weighted errors / total word count

Best value:

Pushes client and suppliers to define clear quality expectations

Brings common linguistic issues into focus — easier to address. **Practical** actions.

Variables to consider:

Track translators by ID (not name), use RCA, arbitration & valid statistics

Measure samples and get feedback back to translators in a timely manner

MBO opportunity:

Bonus for keeping average scores above a target (e.g. 95%)

Issue warning letter for fails. 3 Fails on the same language results in an escalation.

Pass / Fail Rate and First Pass Yield

Calculation:

∑ total passed tests / total tests; ∑ total accepted jobs / total jobs

Best value:

Incentivizes consistency

Variables to consider:

Track translators by ID (not name)

Translators should not be penalized for bad source or instructions

Use RCA, arbitration & valid statistics to resolve issues

MBO opportunity:

Bonus for keeping pass rate above a target (e.g. 95%)

Issue warning letter for fails. 3 Fails on the same language results in an escalation.

End-User Escalations / Resolution Rate

Calculation:

∑ total escalations / total products or deliveries per region

Best value:

This is one of several customer-centric metrics that is a “reality check” to traditional quality tracking. How much does quality matter?

Variables to consider:

Important to *understand* root causes

Distinguish between I18n, L10n and source failures

Often difficult to measure and normalize

MBO opportunity:

Bonus for keeping pass rate below a target (e.g. .1%)

Throughput

Calculation:

∑ weighted word count / (network days – holidays)

Best value:

Helps understand performance under range of operating conditions

Encourages a comprehensive view of program capacity

Measures scalability and program resiliency

Better anticipate bottlenecks and plan capacity

Variables to consider:

Measure by type of work (complexity) and priority

MBO opportunity:

Helpful to build a business case for investments to reduce TAT

3 Practical Localization Metrics 200

Quantified Quality Tiers

Process:

Define quality process and error thresholds per threshold

Best value:

Creates opportunity for different workflows and pricing

Allocates QC resources more effectively

Variables to consider:

Consider testing to qualify and monitor individual translators

It is possible to set this up without additional pricing tiers

In-line review, self-certification documentation and tracking

Prioritization

Process:

Create clear process SLA guidelines for priorities (at least 2)

Best value:

Creates opportunity for different workflows and pricing

Allocates QC resources more effectively

More likely to get the urgent things done first,
first come first served

By default everything has same priority and so is first

Theory of Constraints

- Add buffers to production to optimize the performance of the most critical resources — steady work flow eliminates exception management model
- Ideal for reigning in large chaotic workflows
- Set prioritization to allow for buffering
- Set minimum capacity expectations at the maximum number of high-priority projects you expect to require (e.g. 2k words per day)

Fully-Loaded Price Per Word

Calculation:

∑ total outsourced cost/total number of words per project

Best value:

Total program efficiency including development

Helps identify inefficient production, especially if the average is much higher than the new word rate

Variables to consider:

Larger new projects will bump the average up

Higher leverage brings the average down. Track by project type

MBO opportunity:

Can’t be used as an MBO for localization teams only, but it *can* support content development and tech initiatives

4 Localization Dashboards

Effective Localization Dashboards…

- …contain only the highest-priority indicators
- …are updated regularly
- …are validated regularly

Tips:

- Consider designating a data entry and/or analyst to manage the data
- Careful tracking discipline is not a critical path task unless you make it one
- Keep it simple

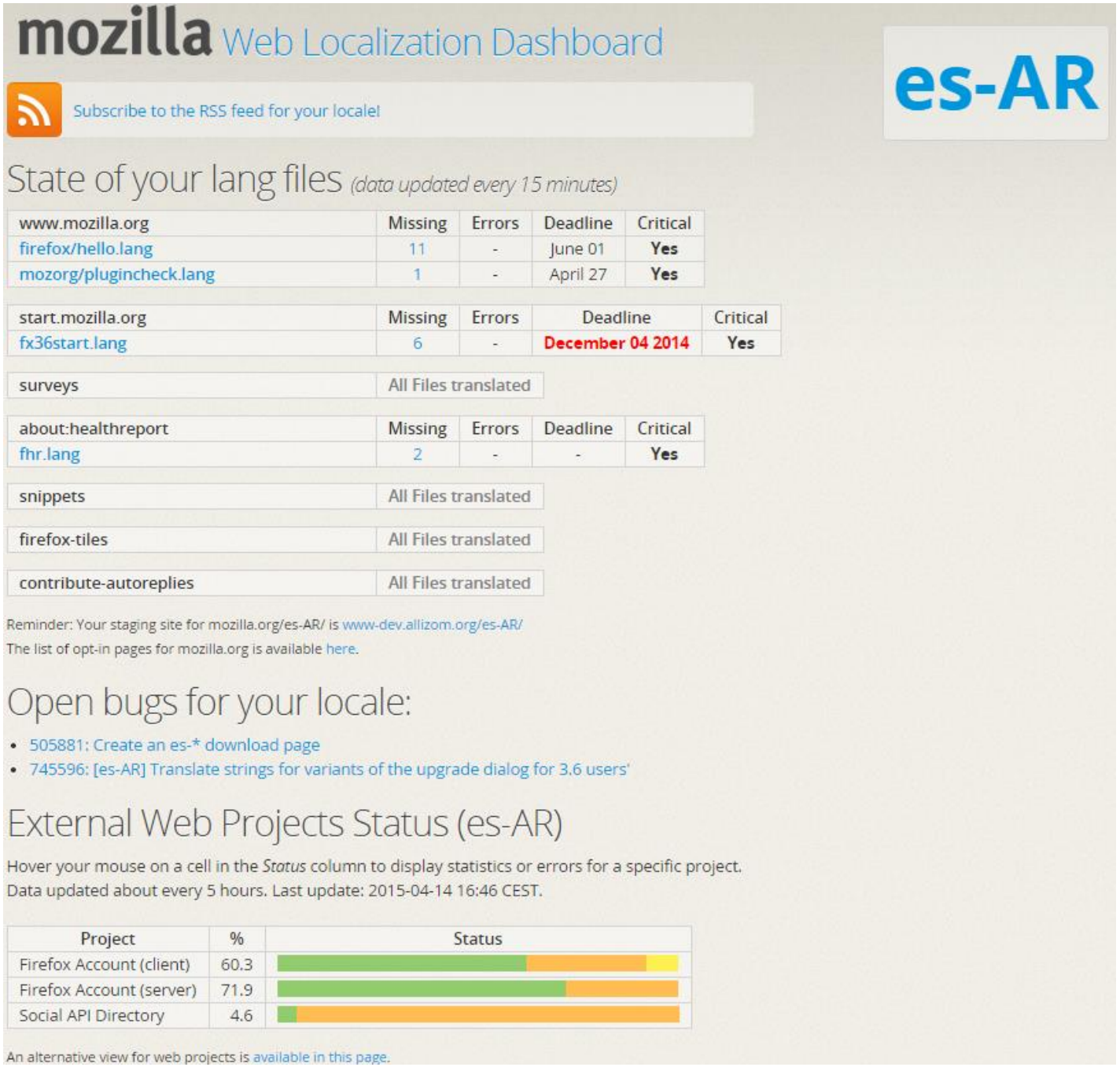
Effective Localization Dashboards

- Schedule
  - **% on-time delivery** (the KPI should be interpreted as “as agreed” rather than “as requested.” The former impacts the production line, the latter is nice to have.
- Quality
  - **Pass/Fail** target periodic performance (yes/no). The data and metrics can be there, but on a dashboard you just want to know if OK or not.
- Cost
  - Could contain periodic costs to date, e.g. against a PO or budget, but most localization teams do not have much control over costs.

Example: Mozilla

Notice the priorities:

- Missing translations
- Errors
- Deadline
- Priority
- % complete



mozilla Web Localization Dashboard

es-AR

Subscribe to the RSS feed for your locale!

State of your lang files *(data updated every 15 minutes)*

www.mozilla.org	Missing	Errors	Deadline	Critical
firefox/hello.lang	11	-	June 01	Yes
mozorg/plugincheck.lang	1	-	April 27	Yes

start.mozilla.org	Missing	Errors	Deadline	Critical
fx36start.lang	6	-	December 04 2014	Yes

surveys	All Files translated

about:healthreport	Missing	Errors	Deadline	Critical
fhr.lang	2	-	-	Yes

snippets	All Files translated

firefox-tiles	All Files translated

contribute-autoreplies	All Files translated

Reminder: Your staging site for mozilla.org/es-AR/ is www-dev.allizom.org/es-AR/
The list of opt-in pages for mozilla.org is available here.

Open bugs for your locale:

- 505881: Create an es-* download page
- 745596: [es-AR] Translate strings for variants of the upgrade dialog for 3.6 users'

External Web Projects Status (es-AR)

Hover your mouse on a cell in the *Status* column to display statistics or errors for a specific project.
Data updated about every 5 hours. Last update: 2015-04-14 16:46 CEST.

Project	%	Status
Firefox Account (client)	60.3	
Firefox Account (server)	71.9	
Social API Directory	4.6	

An alternative view for web projects is available in this page.

Example: Basic Localization Dashboard

Area	KPI Name	Target Compliance	Actual
Linguistic	Language quality pass	≥ 95%	97.8%
Project management	On-time deliveries	≥ 90% for traditional waterfall	99.1%
	Leadership of project management	Feedback	4.0
Engineering	Technical accuracy of deliveries	≥ 95%	98.3%
	Production handback issues	< 5/month	2.3
Finance	Timeliness of invoicing	100%	100%
	Invoicing correctness	0% reinvoicing or corrections	Pass

5 Developing Localization Metrics

A Phased Approach to Developing KPIs

- Phase 1: **All models require starting with good data**
  - If you don't have reliable and consistent sources of data, nothing else is possible
  - Set up the basics and start tracking them: delivery data, priority quality, and any classifications you need

- Phase 2. **Establish your quality measurement system**
  - Without solid quality data, MBO goals are not possible
  - "Intuitive quality management" is worse than the default "if I don't hear about it the quality is fine" management plan

A Phased Approach to Developing KPIs

- Phase 3: **Start setting goals**
  - Patterns will emerge quickly that will drive focused actions almost immediately
  - Use these to normalize data and metrics
  - Clearly and consistently communicate goals and expectations
- Phase 4: **MBOs**
  - Once solid data and processes have been set, MBOs are possible
  - Use the framework to rework pricing and terms
  - Use a combination of sticks and carrots

Some Additional Thoughts on Metrics

- It's helpful to manage at the **job** level. Hand-offs and projects are merely containers for jobs.
  - A **job** is a deliverable (e.g. German UI file)
  - Aggregating data to a dashboard is OK, but the data should always be stored as **jobs**
- Focus on **data integrity**
  - Dates should be dates, numbers should be numbers. Any data point used in a metric needs to have a name, type, range, money should be money and it should have a validation method (to detect errors).
- Data is **not free** — Don't track what you can't use
  - Often data is collected based on the "that might be interesting" policy
- Use ISO!

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Localization Performance Indicators 300+

Localization Business Metrics 300+

Overall cost of ownership

- Globalization (G11n) headcount
- Localization (L10n) headcount
- Outsourced vs. in-house G11n costs
- G11n costs (outright)
- L10n costs (outright)
- L10n cost against L10n product revenue
- Outsourced L10n per word cost
- In-house L10n per word cost
- Internationalization (I18n) resources
- Internal and external linguist cost

ROI (return on investment)

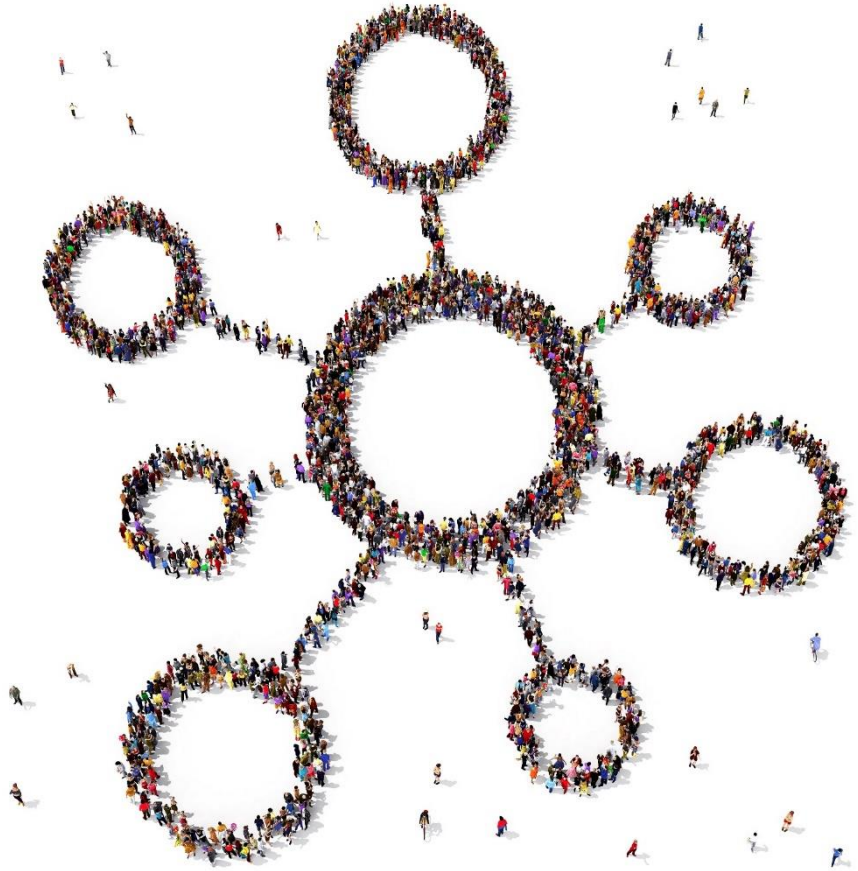
- L10n product ROI
- Tiered market definitions

Parking Lot: Potential future metrics

- International web site revenue
- Click-through rates, and how that translates into dollars
- Customer support — % offered in local vs. source language
- Cost of localizing web sites, web presence (download center, online store, etc.)
- Partial vs. full product localization

Additional Localization Performance Indicators

- Presales metrics
- Business metrics for globalization
- After-sales metrics



Presales Metrics

- International market growth rate
- Relative market share
- Return on investment (ROI) in localization
- Return on localization assets
- Customer online engagement
- Number of qualified international leads
- Cost per qualified international lead
- Online share of voice
- Brand awareness
    - Aided, unaided

Business Metrics for Globalization

- Total localization headcount
- Total localization headcount relative to revenues
- Total localization costs
- Total localization costs relative to revenues
- Fully-loaded average cost per word
- Average cost of outsourced word
- Time to market
- Opportunity cost of a delayed release

After-Sales Metrics

- Support call deflection
- First contact resolution
- Brand recognition by region
- Localized product sentiment analysis
- Customer satisfaction
  - Loyalty metric such as Net Promoter Score (NPS)
  - Praise-to-complaint ratio
  - Track rework, warranties, recalls


Team