Nutzlos, Bien Pratique, or Muy Util?

Business Users Speak Out on the Value of Pure Machine Translation

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Global Learning
NCR Corporation
Objectives

1. Share NCR’s Vision for MT
2. Summarize NCR’s MT Experience
3. Discuss User Survey
   1. Questions
   2. Baseline
   3. Findings
4. Review Lessons Learned
NCR Corporation

- **Primary Strategy**
  - Transforming transactions into relationships™

- **Five Divisions**
  - Retail Solutions
  - Financial Solutions
  - Teradata
  - Systemedia
  - Worldwide Customer Services

- **Employees:**
  - 30,500+ in 80 countries

- **Founded:** 1884

- **International:** 1885
## Audience for Translations

**User language preferences:**

- English: 13,695 (89.7%)
- German: 419 (2.7%)
- Spanish: 358 (2.8%)
- French: 354 (2.3%)
- Japanese: 200 (1.3%)
- Italian: 182 (1.2%)
- Other: 57 (0.4%)

**Totals:** 15,265 (100.0%)

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*Among MyNCRU registered users
NCR’s Involvement with MT

• 1998: Saw Babelfish on Altavista (SYSTRAN and Digital Equipment Corp.)

• 1999: Developed MT vision and RTLT community of interest

• 2000: Sponsored MT “Fly-Off”

• 2001: Applied MT to Learning Newsletter

• 2002: Conducted MT Value Survey

• 2003: Apply real-time MT to web pages on selected intranet sites
Vision for Internal Use of MT

Real-time, transparent language translation

All resources – information and self-service processes – on the NCR Intranet appear to be in the user’s native language.

• Technical implications:
  – Uncontrolled source
  – High quality
  - Real-time
  - Seamless integration
Supporting Objectives

• Translation is good enough not to call attention to itself (minimum requirement: it is consistent with importance of content)

• There is always a single record of reference

• MT is identified as such (for legal reasons)

• Users have easy, direct access to official (legal) source text
NCR’s Real-Time MT Architecture

NCRU

English Web Pages

MyNCRU

Translation Engines

URL

Process Request

User Profile

NCRU Web Server

NCRU Visitor

= English page

= Translated page
NCR’s Real-Time MT Architecture

KEY:
A = Registered user with covered language preference
B = Registered user with language preference = English
C = Registered user with language preference = Other
D = Unregistered user (invited to register)
Final Question

Based on this test, NCR should:

- Use MT now – it works!
- Test it with a larger audience
- Wait and monitor its progress
- Don’t waste more time – it’s years away
"...I am fluent in English, and can read it effortlessly. (probably this is true with most of the evaluators). So, I surely prefer to read English than bad Spanish. But maybe it is not true for all the people that only reads English with great effort.

Maybe you could find a group of evaluators that need the translations and ask them not is the translation is good (it is not), but wether they would prefer to read the translated version, however bad, rather than the original."

- NCR associate in Argentina
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NCR’s Batch MT Architecture

English: 1/second
Translated: 2/minute
User Acceptance of MT

- Implied Acceptance = Subscriber Growth

Total Subscribers

Translation Requests

CMGR = 9.3%

CMGR = 7.0%
User Acceptance of MT

- Explicit Acceptance = Survey Results
  - May 2002: 2 weeks
  - 485 employees invited
  - 280 responded (58%)
  - Confidence interval of ±4% at 95% confidence level
Survey Questions

1. What **language** do you receive?
2. Still receiving **translated version**?
3. Ability to **read and understand English**?
4. **How many translated copies** received?
5. **Quality** of newsletter translation?
6. **Usefulness** of newsletter translation?
Survey Questions

7. Read newsletter if not translated?
8. How often do you refer back to English?
9. Other NCR publications for MT?
10. Recommend this to your colleagues?
11. General comments or suggestions?
12. Help a few minutes each month?
Demographic Information

1. Division
2. Job Role
3. Level
4. Country
5. Name (optional)
Baseline: Similar English Abilities

Ability to Read and Understand English (Self-reported)
Baseline: Perceived Quality Differs
Finding 1: Quality ≠ Usefulness
Finding 2: Most Will Recommend

<table>
<thead>
<tr>
<th>Would you recommend this translation service to your colleagues?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Würden Sie diesen Übersetzungsdienst Ihren Kollegen empfehlen?</td>
</tr>
<tr>
<td>Recommanderiez-vous ce service de traduction à vos collègues?</td>
</tr>
<tr>
<td>Suggerireste questo servizio di traduzione ai vostri colleghi?</td>
</tr>
<tr>
<td>¿Recomendaría este servicio de traducción a sus colegas?</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
Finding 2: Most Will Recommend

Would Your Recommend MT to a Colleague?

- French
- Spanish
- Italian
- German

Respondent's Language

Percent of Respondents

No

Yes

Would Your Recommend MT to a Colleague?
Finding 3: Majority Find Useful

6. How would you rate the usefulness of the newsletter translation?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Number of Responses</th>
<th>Response Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential 4.</td>
<td>16</td>
<td>6%</td>
</tr>
<tr>
<td>Very useful 3.</td>
<td>101</td>
<td>36%</td>
</tr>
<tr>
<td>Fairly useful 2.</td>
<td>119</td>
<td>43%</td>
</tr>
<tr>
<td>Not useful at all 1.</td>
<td>44</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>280</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Finding 4: 16% Would Not Read If Not Translated

<table>
<thead>
<tr>
<th></th>
<th>Number of Responses</th>
<th>Response Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>236</td>
<td>84%</td>
</tr>
<tr>
<td>No</td>
<td>44</td>
<td>16%</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100%</td>
</tr>
</tbody>
</table>

Would you read this newsletter if it were not translated into your language?

Würden Sie dieses Rundschreiben lesen, wenn es nicht in Ihrer Muttersprache übersetzt würde?
Liriez-vous ce bulletin s'il n'était pas traduit dans votre langue?
Avreste letto questo bollettino se non fosse tradotto nella vostro lingua?
¿Leería este boletín de noticias si no fuera traducido en su idioma?
Finding 4: 16% Would Not Read If Not Translated

Would You Read This Newsletter If It Were Not Translated?
Finding 5: English Across Levels

Ability to Read and Understand English  (Self-reported)

Organization Level
- Manager
- Employee

Percent of Respondents

- Poor
- Fair
- Good
- Excellent

Manager
Employee
Finding 6: Some Strongly Negative

- Maschinelle übersetzung ist nutzlos (Machine translation is useless.)
- This poor German hurts in my eyes.
- La traducción automática sólo sirve para hacer reír. (Automatic translation only serves to make me laugh.)
- Elimínenla! Destrozar un idioma es lastimoso... (Eliminate it! To destroy a language is pitiful....)
Finding 7: Some Strongly Positive

• It is OK! Die Übersetzungen sind sehr gut zu verstehen.  
  (The translations are very easy to understand.)

• C'est bien pratique  
  (It is very practical.)

• Ceci ajoute à ma comprehension.  
  (This adds to my comprehension.)

• Me gustaria disponer del traductor automatico, instalado en mi PC.  
  (I would like to have the automatic translator installed on my PC.)
Finding 8: Many Willing to Help

17. Machine translation will constantly improve if readers are willing to identify errors and suggest corrections. Would you be willing to spend a few minutes each month to provide this input for your language?

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<th>Number of Responses</th>
<th>Response Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>186</td>
<td>71%</td>
</tr>
<tr>
<td>No</td>
<td>77</td>
<td>29%</td>
</tr>
<tr>
<td>Total</td>
<td>263</td>
<td>100%</td>
</tr>
</tbody>
</table>
Summary of Findings

1. Usefulness is rated higher than quality
2. A majority would recommend to others
3. 84% rate MT “fairly useful” or better
4. 16% would not read unless translated
5. Managers’ English = general workforce
6. Some recipients are strongly negative
7. Some recipients are strongly positive
8. 71% volunteered to help improve MT
Lessons Learned

1. Don’t let internationalists speak for users
2. Guide users’ expectations; offer a choice
3. Budget for ongoing MT maintenance
4. Use rapid prototyping
5. Develop partnership with MT supplier
6. Persevere
The Power of Commitment

Until one is committed, there is hesitancy, the chance to draw back, always ineffectiveness concerning all acts of initiative and creation. There is one elementary truth the ignorance of which kills countless ideas and splendid plans:

the moment when one definitely commits oneself, then Providence moves too.

All sorts of things occur to help one that would never have otherwise occurred. A whole stream of events issues from the decision, raising in one’s favor all manner of unforeseen incidents and meetings and material assistance which no man could have dreamt would have come his way.

-W.H. Murray, The Scottish Himalayan Expedition
Next Steps for NCR

- Upgrade to **new** SYSTRAN MT platform
- Apply MT in **real-time** to the NCRU Online Campus (original vision)
- Harness **user willingness to help** improve MT quality
Questions?