You Asked For It: Making Sense of User Feedback

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‘User Stories’ - an Agile Myth

A made-up story about what we think the users want

Based on assumptions
Led by convenience
No real users
No real stories

As a user
I want to provide my own feedback
So that customers don’t have to pretend to know what I need
Real User Stories are Priceless

Important source of identifying

- Bugs
- Usability Issues
- New feature ideas

Customers pay for the development of the product, but users decide the fate of the product.
Real User Stories are Priceless

Important source of understanding

User needs → generalizability

User wants → personalisation
Real User Stories are Priceless

Important source of generating business value

Actioning user feedback ➡ trust, loyalty, reputation ➡ sales
How do we get the real user stories?
Proactive Stories

• User Ratings
• User Reviews on App Stores
• User Feedback through Websites
• User Complaints through Call Centers
Automatic Stories

- User Activity Logs
- User likes, dislikes, engagement
- User Demographics
Prompted Stories

- In-app User Ratings
- In-app User Reviews
Elicited Stories

- Co-design
- User experience sessions
- Focus groups
- Observations
- Interviews
- Surveys
- Think Aloud
- Beta testing
- Quasi experiments
What are we really dealing with?

**Proactive**
- User ratings
- User reviews on app stores
- User feedback forms on websites
- User complaints through feedback form, call centre,..

**Automatic**
- Usage activity logs
- User characteristics

**Prompted**
- User ratings in-app
- User reviews in-app

**Elicited**
- Co-design
- User experience sessions
- Focus groups
- Observations
- Interviews
- Surveys
- Think Aloud
- Beta testing
- Quasi experiments

Large Scale
Qualitative Data
Small Scale
We don’t want to deal with real user feedback – Why?

There’s lots of it!
It’s unstructured, messy
It’s hard work
Current Approach

1. **Automated Analysis**
   - Filter noise
   - Apply synonyms
   - Classification based on keywords

2. **Manual Analysis**
   Qualitative data analysis of sample reviews

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Current Limitations

• Helps answer what’s and how’s but not the why’s
• If we only focus on the bugs, we will miss the butterflies
• Competitors can find the butterflies even if we don’t

Need to find a
Socio-Technical Grounded Theory (STGT) – as a Powerful Qualitative Data Analysis Method

“Very frustrated, pro version is scam I’ve had this app for about a month or so. I unintentionally upgraded to the pro version ($99.00) because I had my fingerprint set with the App Store. I called the company phone number listed on my visa statement, only to hear a recorded voice. You’re then told to go to iTunes.com/bill regarding charges, then the call dies. After going to the site, you run into another dead end. AllTrails has zero customer service. I’ve yet to talk to a person from company.”
STGT - Constant Comparison & Abstraction

**RAW DATA**

...App REQUIRES you to have Location Services always on...

...You have no option than to give them consent to sell your data to third parties...

...my account got hacked and another phone was registered...

**CODES**

#forcedLocationSharing

#forcedConsent2Policy

#hackedAccount

**CONCEPT**

#PrivacyIssues
STGT for Qualitative Data Analysis

Enables systematic analysis of qualitative data
• Individual classifications
• Dataset-wide patterns
• Rich insights, guidelines, recommendations (e.g. on improving Privacy)

More rigorous application can lead to...
• Taxonomies
• Theoretical models, theories, ...
New Approach – Making sense of **Real** User Stories using **STGT**

**Automated Analysis**
- Filter noise
- Apply synonyms
- Classification based on keywords

**Manual Analysis using STGT**
Qualitative data analysis of sample reviews

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Breadth

Refined Keywords

Depth

Relevant Raw Data
Benefits for Software Teams

• Smaller, classified piles of user feedback to work with
• Richer analysis to draw out interesting findings
• Catch the *bugs*
• No missing the *butterflies*
Benefits for Users

Increased confidence in updating apps
Better ratings

Benefits for Companies

Actioning user feedback ➔ trust, loyalty, reputation ➔ sales
#STGT - Find Out More

- STGT Guidelines
- Technical Briefing
- Upcoming Talk #ICSE2023
- Upcoming Book

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www.rashina.com/stgt