FINOS

Fintech
Open Source
Foundation

7 Unexpected Lessons from 2 Years of our SDK in Banks

Host - James McLeod
FINOS Director of Community

Presenter - Tom Schady
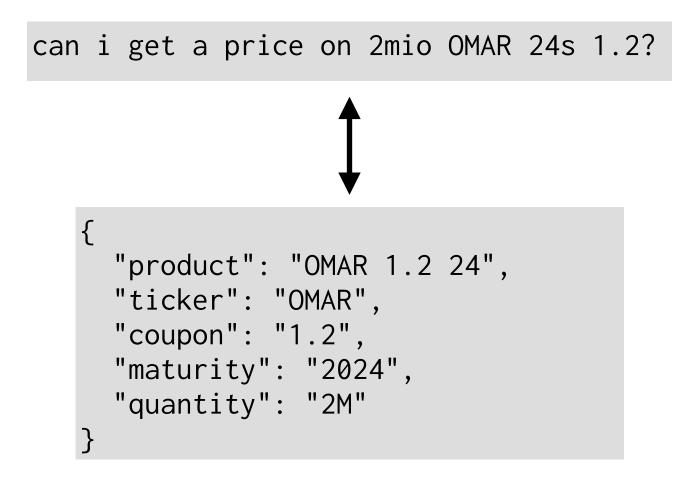CTO GreenKey and FINOS Voice PMC Lead

April 2020

GreenKey Technologies

Better Decisions through NLP

Tom Schady <tschady@greenkeytech.com>

http://www.greenkeytech.com

gk

GreenKey NLP Engine

can i get a price on 2mio OMAR 24s 1.2?

```json
{
  "product": "OMAR 1.2 24",
  "ticker": "OMAR",
  "coupon": "1.2",
  "maturity": "2024",
  "quantity": "2M"
}
```

gk

GreenKey Discovery SDK

➢ You create your rules & definitions with Discovery SDK

➢ GK Discovery Engine does the rest:

  ➢ Transcription -> determine intent

  ➢ Search for relevant entities

  ➢ Proprietary algo for choosing best set

  ➢ Populate JSON

gk

Downstream reports

➢ Unlock Bloomberg chat data

➢ Sell-side rankings

➢ Trade reconstruction

➢ Dictation to CRM

➢ Tag data to generate trade ideas

➢ Wealth management

Contact: sales@greenkeytech.com

gk

Startup ⟷ **Bank**

1. Don't assume GitHub accessibility

GreenKey: Do you have GitHub access?

Customer: Yes, the README looks great.

GreenKey: Great. Clone the repo...

Customer: Oh, we can't *clone* things.

GreenKey: So how should we collaborate?

Customer: Not sure, we can't do pull requests either.

gk

2. Don't assume familiarity with tools

- ➢ Your customers are not you
- ➢ Banks are not the typical open-source community
- ➢ Some tools known: `pip` and `npm`
- ➢ But not always:
  - ➢ Docker
  - ➢ UNIX CLI
  - ➢ **bash** scripts

gk

3. Don't assume tinkering

➤ Users either:
  ➤ Ignore you
  ➤ Do a "hello world", then ignore you
  ➤ Have a mandate and schedule

gk

4. Do assume every possible restriction

➤ Admin access time limited!

➤ Developer laptops half-locked down

➤ Ports, protocols, permissions

➤ FMEA helps

    ➤ "failure modes" – how might every single component fail?

    ➤ "effects analysis" – what are the consequences?

➤ Reverse brainstorming

gk

5. Do provide advanced tutorials

➢ Be **very** explicit. (see #2)

➢ TTFHW not enough for complex product

➢ Use advanced tutorials to uncover risks (see #4)

gk

6. Don't assume efficient communication

"Almost ready to ship.   Have your met our CISO?"

➤ Separate departments =~ separate companies
➤ Few understand their full organization
➤ Engage all teams early: business, infrastructure, security

gk

7. Don't assume anything!

"Almost ready to ship. Can you run it on RHEL 6?"

➤ Aggressively hunt down risks & miscommunications
➤ Think ahead
➤ Ask questions
➤ Expect to be surprised – plan for curveballs

gk

Summary

➢ Don't assume GitHub access (or level)

➢ Don't assume same knowledge of tooling

➢ Don't assume tinkering

➢ Do assume every possible restriction

➢ Do provide advanced tutorials

➢ Don't assume efficient communication

➢ Don't assume anything!

gk

Contribute!

➢ FINOS ::
https://github.com/finos

➢ FINOS Financial Delivery Accelerator ::
https://www.finos.org/fdx

➢ GreenKey Discovery SDK ::
https://github.com/finos/greenkey-discovery-sdk

➢ GreenKey ASR Toolkit ::
https://github.com/finos/greenkey-asrtoolkit

gk