2021-04-08 Rules Engines Drafting Group Meeting Notes

Attendees

- Chris Buchanan, Chair
- Drummond Reed
- Janis Valcins
- Jim St.Clair
- Harry Owen
- Kaliya Young, WG Co-chair
- Noam Arzt
- Rebecca Distler, WG Co-chair
- Rob Broere
- Savita Farooqui
- Trev Harmon, PM
- Viola
- Will Rosie
- Yochai

Agenda Items

Time	Item	Who
2 min	Welcome & Antitrust Policy Notice	Trev
5 min	Agenda and Overview of Next Steps	Chris
30 min	Presentation from ICTS	Viola / Yochai
20 min	Presentation from HLN Consulting	Noam
3 min	Wrap up	Chris

Presentations -

Recording - *Link*

Notes

- Reviewed IP / antitrust notification.
- Chris reviewed where we are in the document.
- Please try to avoid reading other input before reading and commenting on other people's contributions. It makes the overall document more readable.
- The user stories section is still blank.
- After this week, we'll be moving to filling out the template.
- The Governance Framework group is working on a glossary, and it should be ready for comments from the other groups by tomorrow.
- Noam is concerned that our group is a little on the small side, and we may want to take a small step back and recognize that we only know what we know through our limited experience. This is a large, complex topic, and we may be constrained by our naturally limited experience.
- We need to make sure that there is a wider reviewer pool.
- ICTS Presentation
  - Yochai, ICTS's CTO, is giving the presentation.
  - Showed a chart of different requests coming in through the different channels.
  - Every person is evaluated, and it's determined whether or not they can be boarded.
  - Incidents are broken down into three categories:
    - Green — the passenger is cleared to fly without any manual check
    - Amber — a manual check of some type is required for travel
    - Red — Passenger cannot travel
  - Right now, the amber group is a really large percentage, and this is where the airlines would like to see improvement. The amber group has grown from about 7% at the beginning of 2020, to about 77% today. This is a big problem.
  - Showed an example of a request that was submitted through their web channel. The UI didn't show any PII.
  - Rules related to PCR tests aren't just that they've happened, but there are often specific requirements for how those test results are presented.
  - Showed the UI for the creation of a specific rule in the rules engine.
  - Noam asked if there was a standard for the terminology and nomenclature used in the rules engine. Yochai responded that this isn't standardized, and in this case has been worked out through working with their customers.
  - Noam asked if the representation of the rules was proprietary. Yochai responded that it was, but that was primarily because they hadn't considered that anyone else would want to ingest them. They would be open to that conversation.
  - Showed a website that is available to passengers to see how the rules are used by the engine: https://www.traveldoc.aero/
- HLN Presentation
  - Noam is giving the presentation.
  - There are "Five Rights" of clinical decision systems (CDS)
  - CDS is first a knowledge problem. Ingested data is often not created with a digital decision engine in mind. It generally starts as a narrative.
  - The narrative needs to be moved from a narrative state to a structured format, which can then become executable code.
  - AHRQ: CDSConnect: https://cds.ahrq.gov/cdsconnect/
  - People in healthcare are very much into having standards and interoperability for all of this type of data (e.g., CQL)
  - With immunizations, the immunizations have to be evaluated for validity. It is a bit of a special case, because the state of validity for immunizations because the passage of time can change the validity. There are a number of other factors that come into play regarding immunizations schedules and validity.
  - The CDC produces a color-coded table to show all of the immunizations that should be administered to a child by the age of 18. This has four pages of footnotes.

Chat Log

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00:06:33      Trev Harmon:              https://zoom.us/j/99660516398?pwd=VWdVdDR5OGwzbHZONkUySXJrNEt4UT09
00:12:34      Drummond Reed:          This is the Key Interoperability Questions document that Chris is talking
about: https://docs.google.com/document/d/11ci2y13piu70VRLoaQ57h6rXkNv8s_CspmF6ypkqvfo/edit?usp=sharing
00:17:23      Drummond Reed:          +1 to potential reviewers
00:31:18      Noam Arzt (HLN):         Many more are conditional, but the NUMBER is still much smaller, right?
00:31:48      Drummond Reed:          Yochai's audio is somewhat weak - could he get closer to his microphone?
00:33:49      Trev Harmon:          I think that even if the actual numbers are currently smaller, the issue is
that as travel opens up and the number of travelers increases, the current percentage in amber isn't likely
going to go back down.
00:34:01      Drummond Reed:          Agreed
00:35:36      Noam Arzt (HLN):         Yeah, I get that. But that is not necessarily true depending on what
the warning is about. But I trust that these guys have thought that through.
00:37:37      Trev Harmon:          True, but I think the implication from the presented timeline is that the
growth in the percentage of amber is due directly to COVID-19. My assumption is that the rules put in place by
governments and common carriers in response to COVID-19 is what has spawned the growth in amber.
00:39:56      Noam Arzt (HLN):          Right, but the world is not standing still either. It is likely that in
time some conditions will cease to be ones that raise an alert.
00:40:28      Trev Harmon:          Agreed. I would certainly expect that to be the case.
00:43:51      Harry Owen:          I can confirm the growth in amber in the last year is directly because of
the restrictions put into place by government. While the number of passengers submitted to traveldoc has gone
down, their variety is essentially unchanged so it shows a similar spread of scenarios
00:44:57      Drummond Reed:          These rules examples have been excellent
00:45:17      Savita Farooqui:         +1
00:45:23      Trev Harmon:         +1
00:45:34      Noam Arzt (HLN):         Agreed. I have some questions...
00:48:38      Drummond Reed:          Are their published specifications for the ICTS rules engine so that
developers could incorporate it into their apps?
00:49:59      Savita Farooqui:         Would it be possible to take a look at that application? which uses the
rules?
00:50:23      Noam Arzt (HLN):         Wasn't that what he showed first?
00:50:42      Rob Broere:         That is probably their IPR
00:52:22      Harry Owen:         https://www.traveldoc.aero/
00:52:58      Trev Harmon:          This has been a super helpful presentation. Thank you for sharing it.
00:53:57      Drummond Reed:          Harry: does TravelDoc use the ICTS rules engine?
00:54:09      Harry Owen:         Yes
00:54:42      Drummond Reed:          And is TravelDoc an independent app, or is it developed by ICTS?
00:54:57      Harry Owen:         Its developed by ICTS
00:55:59      Harry Owen:         Our rules engine's primary purpose is to provide the rules for TravelDoc
00:56:46      Drummond Reed:          Thanks - I'm asking to understand if external developers could develop
apps that call the ICTS rules engine. Is that a possibility — possibly under license with ICTS?
00:57:18      Viola ICTS:         we can provide the ICTS TravelDoc licence service
00:57:32      Drummond Reed:          Thanks, that's very helpful
00:57:37      Harry Owen:         This would include an API
00:58:25      Jim StClair:          AHRQ - US HHS health agency
00:59:01      Jim StClair:          Well, we say we are LOL
01:06:49      Drummond Reed:          Great points, Noam — the overall world of vaccinations is quite complex.
This is a very important takeaway.
01:17:57      Savita Farooqui:          This serves as the data input
01:25:17      Savita Farooqui:          Got to go... thank you everyone
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Action Items

1. Everyone needs to comment on the content in the document.
2. Still need people to volunteer for the user stories section.