Beancounter

You stalking you

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NoTube
What is Beancounter?
There’s information out there about what you’ve been up to.
That can be enriched with common concepts
And can be counted

Concepts (What categories of programme do you like?)
Series (What series have you watched the most?)
Location / context (Where do you usually watch TV?)
Time periods (When do you usually watch?)
Compare with last week, last month, all time, yesterday
Beancounter can profile you
And more importantly
Output a *machine-processable* profile

Beancounter is about dumb accounting - and exporting an aggregated picture for other applications to query via an API
Why?
To use the data for TV recommendations

Inputs

- attention data
- user profile data
- user context data
- cross-domain data
- events data

Outputs

- What the user was doing last
- Interest graphs/profiles for users
- Recommended items as URIs based on INTERESTS AND FRIENDS

Enhance with thesauri, links, and ontologies

Prototyping platform
“The bane of my existence...”

“... is doing things that I know the computer could do for me.” (Dan Connolly)

The web knows what you’ve been watching and doing – we should be able to use this data to suggest things for you to watch
We want to find recommendations across the programmes lifecycle (including archival content)
Or, if that’s too hard...trivial recommendations

Combine ‘series I like’ or ‘series my friends like’ with
Broadcast and on-demand availability data
(‘when is the Wire on next’?)
To say “the Wire is on tomorrow at 23:20 – I think you might be interested”
Some of those ‘friends’ could be professional reviewers (e.g. Charlie Brooker, Guardian Guide)
Data Enrichment
Enhancing with links

• Sometimes we will need to generate links because there’s no URL in the data
• Perhaps using time as a basis ‘I’m watching Channel 4’ and matching the time of the activity to the schedule, to get a URL for the programme
• In the future we might expect TVs that output this data directly
Enhancing with Linked Data

• ‘Pre-enhancement’ - things that you know you’ll need later such as genre names
• On-demand enhancement – following links to related data or querying a sparql store
• Generating DBpedia links where none exist
  -> Enabling us to use common identifiers for someone’s interests – and match those to watchable programmes
Linked Data issues

- Some patterns are only complete when you have multiple files crawled
- Data can be gappy
- Not sure what you’ll be getting
- Hard to test

  Easy(ish) with BBC programmes data – get information about people, series, genres, showings; known schema
Privacy and user control
User control

• Download and run it on your own machine
• Choose which accounts you want to add
• Pick time periods to control
• Write to the web, keep the data private, or make suggestions just to you
Cross-querying user data

• How many people watched Torchwood, and when?
• What else did they watch?
• The Tesco clubcard equivalent point of view

How might this impact privacy?
Privacy issues can be fraught

Beancounter puts the user in control of what is stored about them (mostly)
Some things people might not to want to know about themselves
And definitely not want others to know
Currently
A simple working prototype for BBC programmes only
Next
Interesting problems to address

• Can we effectively distinguish mentions and ‘watchings’?
• Can we use OAuth to create adaptors to private data from different systems?
• Can we create and describe acceptable privacy policies?
• Can we generalise to different channels and providers with less detailed data?
• Can we make interesting recommendations using the profiles?
• Can we get anyone to use it? What are the incentives?
• What else can we count? Could it help with recommendations?
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