D3.2 - Prosumer Intelligence Toolkit minimum viable product

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Revision History

Version	Date	Author	Document history/approvals
0.1	27/06/2022	George Ioannidis (IN2)	First draft TOC and content
0.2	19/08/2022	Alexandru Stan (IN2)	Draft of all chapters
0.3	29/08/2022	Alexandru Stan (IN2)	Improved draft
0.4	30/08/2022	David Laniado (EUT), Thomas Van Dam (imec), Iris Jennes (imec), Alexandru Stan (IN2)	Internal review and improvements
1.0	31/08/2022	Alexandru Stan (IN2)	Document final formatting and check

Executive Summary

This deliverable accompanies the release of the PIT minimum viable product (MVP) and describes its main functionalities. The Prosumer Intelligence Toolkit is a new prosumer intelligence framework encompassing technology-enabled methods and tools based on data analytics that aims to provide the foundations for establishing effective cooperation with both publisher-managed and open communities of prosumers at all stages of the value chain. It aims to solve the need of unprecedented scaling up of consumer intelligence, both in reach and scope for informing editorial decisions. Thus, it could be used for integrating user-driven approaches in workflows related to book publishing decisions, business modelling, and development of new products and services. The target users of the PIT are publishers, and companies specialized in content creation; in particular, those who monitor markets and users to make editorial and/or strategic business decisions. For these target users the PIT will be an Interactive dashboard allowing for data exploration. In its current form the application provides publishers with a dashboard-driven user interface for the exploration of data gathered from fan-fiction communities. In the next period the MVP will be evaluated by users in the third, open piloting phase and based on the feedback received further improvements will be made until month 30 of the project, when a final version of the software will be released.

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Terminology and Acronyms

EC		*European Commission*
EU		*European Union*
MVP		*Minimum Viable Product*
PIT		*Prosumer Intelligence Toolkit*
WP		*Work Package*

1 Introduction

This deliverable represents the first outcome of Task 3.2 “Prosumer intelligence toolkit” and it consists of a minimum viable product (MVP) of the Prosumer Intelligence Toolkit (PIT) that is made available for the third, open piloting phase (pilot phase 2, 3A, 3B). Based on the feedback gathered during the piloting phase, the PIT will be further improved until M30, when its final version will be released.

The work that led to the PIT MVP builds upon the outcomes of “T3.1 Knowledge extraction models”, namely the digital methods from computational social science in order to extract knowledge about collective dynamics of online fan communities, as well as the outcomes of T2.3 “Architecture, logic, and interfaces” and its deliverable D2.2 Möbius technology blueprint.

The Prosumer Intelligence Toolkit is a new prosumer intelligence framework encompassing technology-enabled methods and tools based on data analytics that aims to provide the foundations for establishing effective cooperation with both publisher-managed and open communities of prosumers at all stages of the value chain. It aims to solve the need of unprecedented scaling up of consumer intelligence, both in reach and scope for informing editorial decisions. Thus, it could be used for integrating user-driven approaches in workflows related to book publishing decisions, business modelling, and development of new products and services.

The target users of the PIT are publishers, and companies specialized in content creation; in particular, those who monitor markets and users to make editorial and/or strategic business decisions. For these target users the PIT will be an Interactive dashboard allowing for data exploration. These dashboards have been thus the main target of the minimum viable product that is made available for piloting.

Starting from the user requirements (described in detail in D2.1) and the functional and system requirements (described in detail in “D2.2 Möbius technology blueprint”), IN2 implemented a first design and mock-up which was then evaluated by stakeholders through the help of imec during the Pilot phase 2 which ran from month 13 to month 19. Based on the feedback received a first minimum viable product implementation of the PIT has been done by IN2, and will be evaluated during Pilot Phase 3 (which runs from month 20 to Month 36). It is planned that at month 30 a final version of the software will be released; after this release and until the end of the project, the technical work will focus on the operation and support as the results are demonstrated at various events and locations (e.g. Pilot 3B).

For more information on the living lab methodology that is at the core of the project’s co-creation approach please consult deliverable D2.1 “Möbius theoretical framework: opportunities, benefits, and risks”.

The document is organised as follows:

- Chapter 2 describes the PIT design and mock-up
- Chapter 3 describes the PIT Minimum Viable Production
- Chapter 4 presents the conclusions

2 PIT design and mock-up

The general architecture of the PIT can be seen in the figure below.

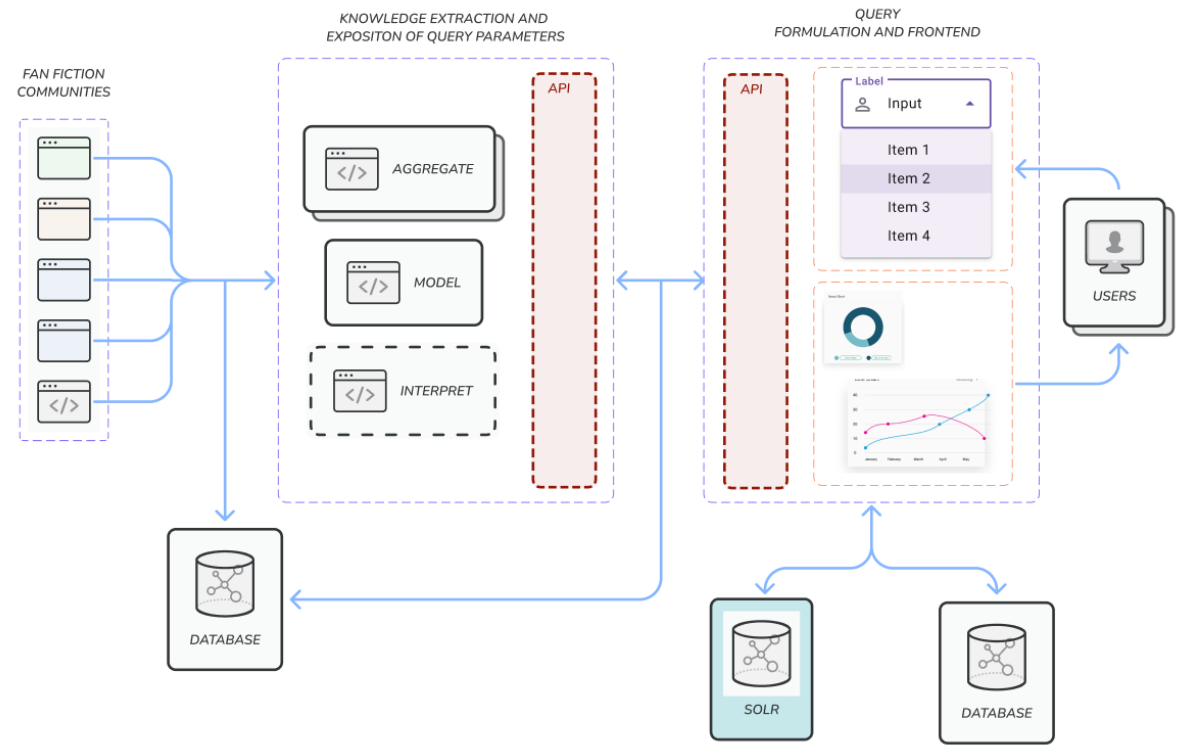

Figure 1: PIT architecture

Using prototyping tool Figma[1] IN2 created a first design and clickable mock-up of the PIT application, with a special focus on the data dashboards. This can be accessed here: https://www.figma.com/proto/EtXOTiiiboZVJFoZxBGPc0/PIT-Dashboard?node-id=1%3A2&scaling=min-zoom&page-id=0%3A1&starting-point-node-id=1%3A2&hide-ui=1

The Dashboard of the PIT is the main user interface and acts as the homepage once a user is logged in. Main aggregated statistics are shown in the home. The top-right corner contains a small avatar which the user can click on to adjust the profile preferences; next to it are notifications and a search bar where the user can insert for instance book titles to explore the data available. Further data dimensions like authors, books and posts can be explored directly from the menu on the left.

[1]https://www.figma.com/

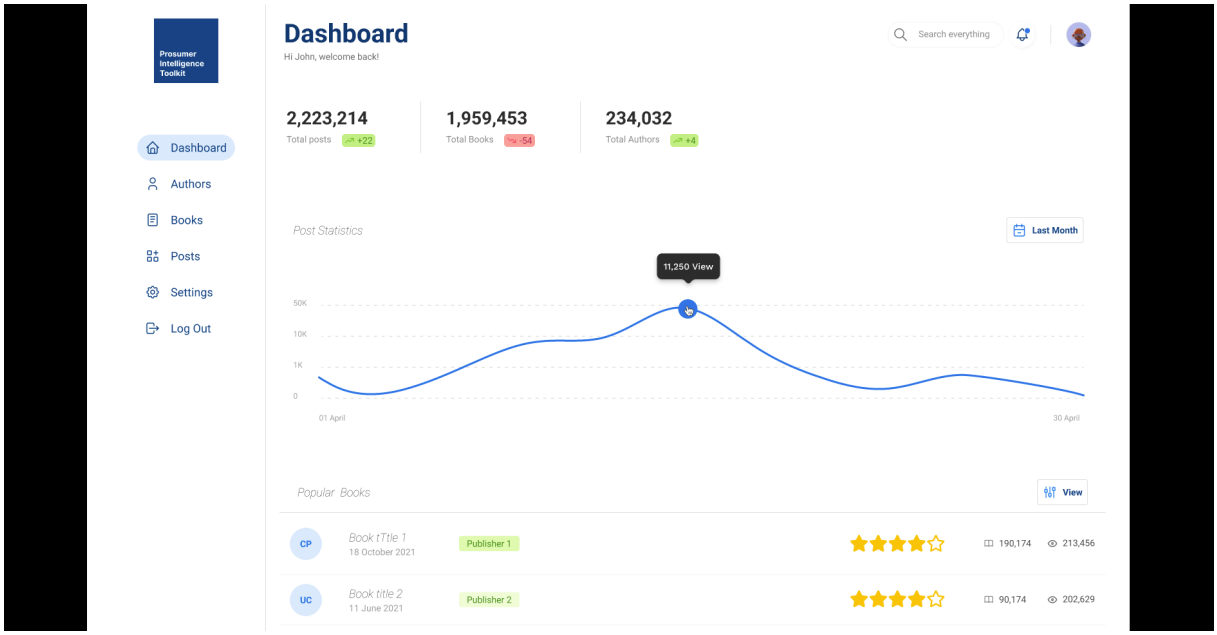

Figure 2: PIT Mock-up Dashboard

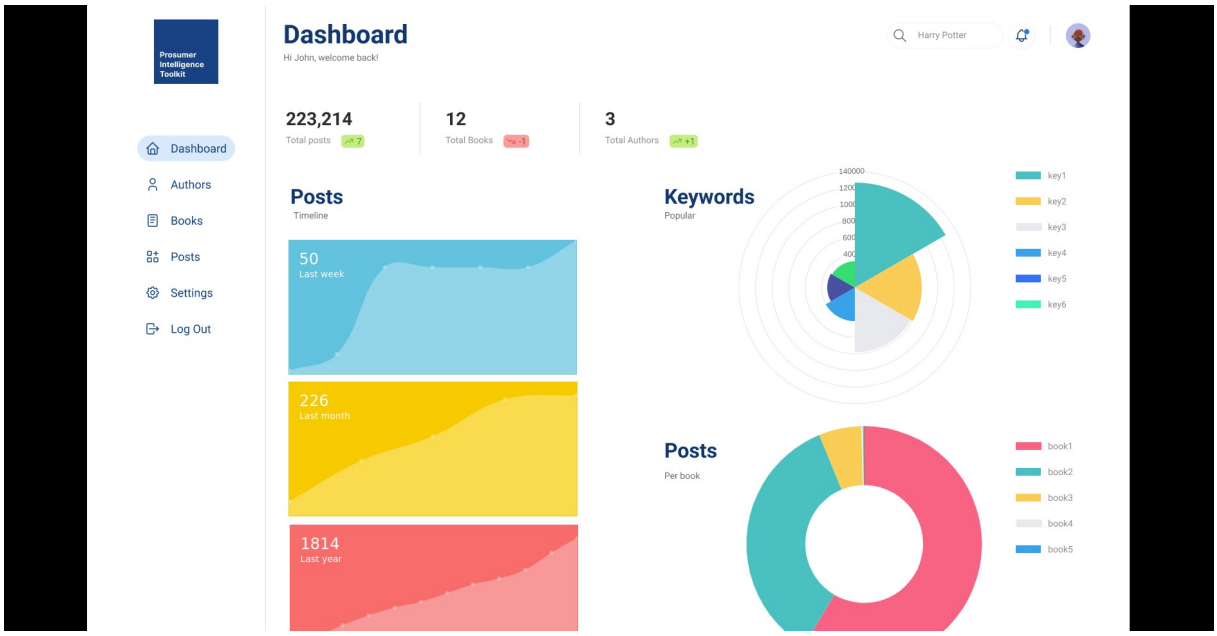

Figure 3: Dashboard details when searching for specific book title

3 PIT minimum viable product

The Prosumer Intelligence Toolkit was implemented as a modern web application. It can be accessed at: https://mobius-pit.in-two.com/

The Dashboard consists of a number of interactive visualisations to explore the underlying data gathered from the fandom communities. The visualisations include the following:

- Polar graphs, which is similar to the radar chart, but has wedges that expand outwards from the centre
- Doughnut charts, which is similar to a more common Pie Chart but allows for more sections to be visualised without a problem
- Area charts, which is a variation of the line chart, especially useful for showcasing changing data over time

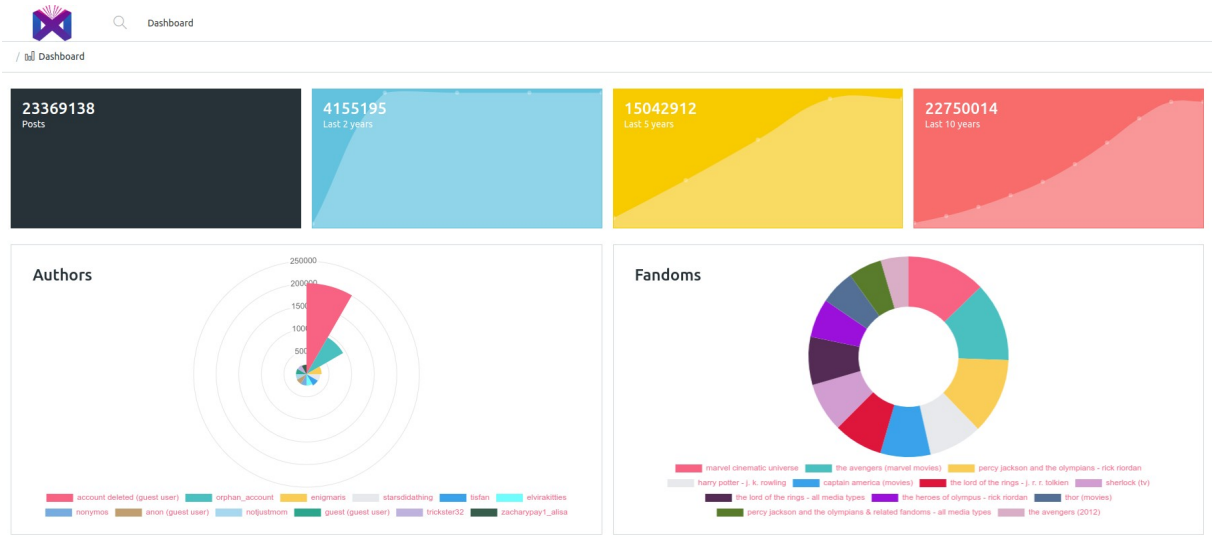

Figure 4: PIT Dashboard Home

When a user hovers over any of the charts, additional information is displayed about discrete data points. Moreover, a user can click on specific data subsets to remove or add to the visualisation, allowing in this way a dynamic exploration of the dataset.

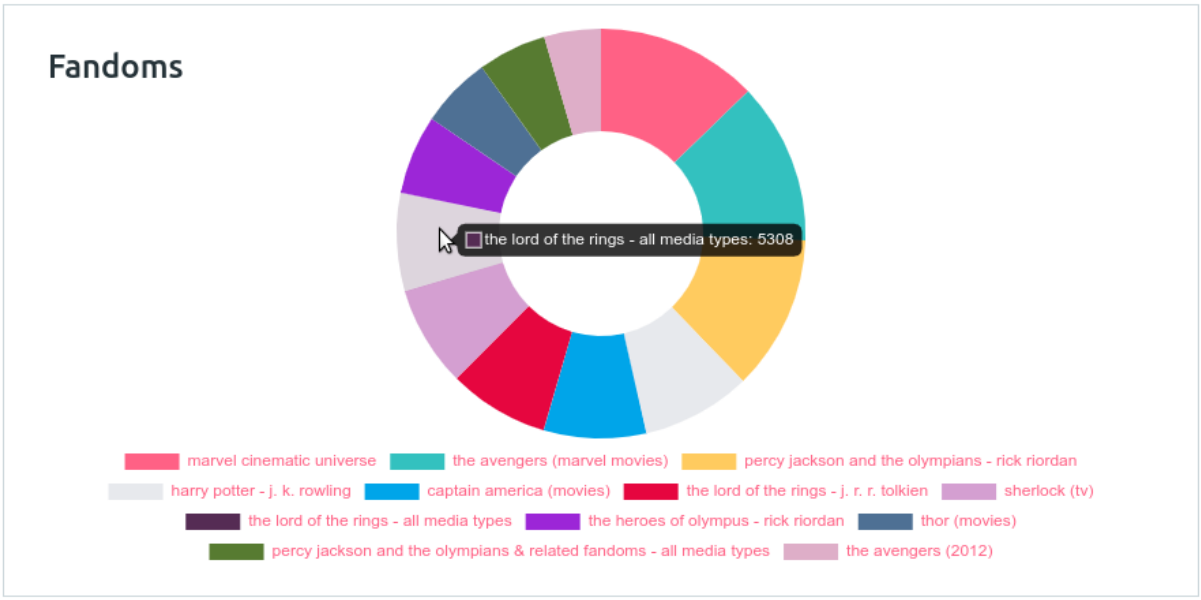

Figure 5: Doughnut Chart detail - hovering over area to see quantitative measure

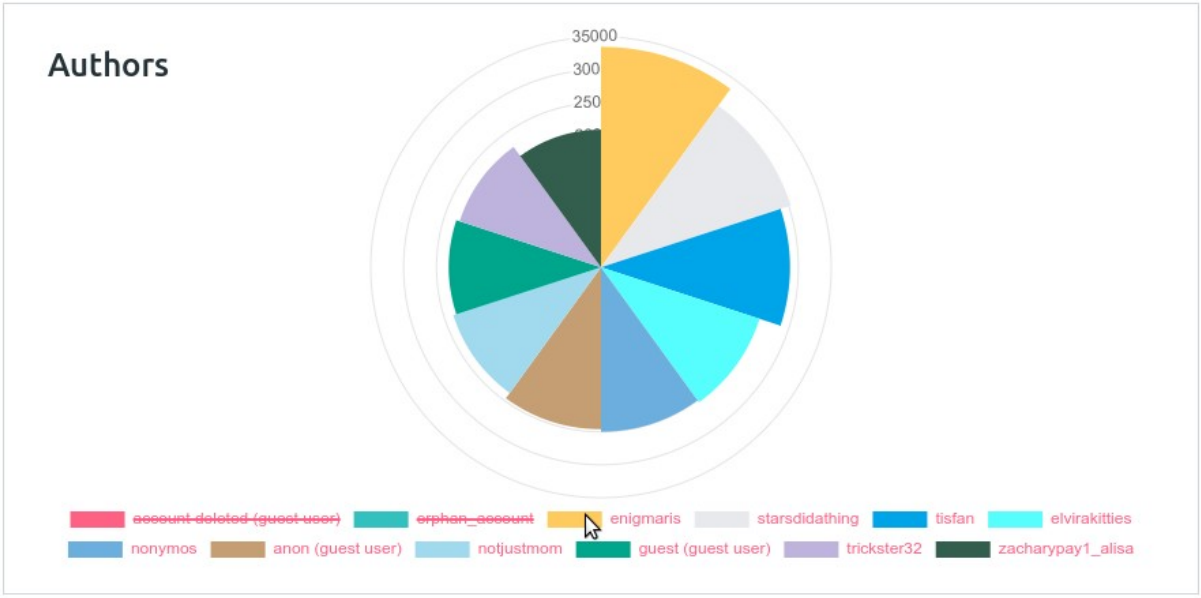

Figure 6: Polar Graph example of Authors removing data about "deleted accounts" and "orphaned" accounts

The first version of the MVP provides a visualisation of the overall dataset (total number of posts, books, comments) as well as the important data facets like authors, fandoms, categories, characters, language, type, kudos received, publication status, and different kinds of metrics from D3.1. By using these data categories as facets in an advanced search,

it is possible for the user to further explore relations within the data. The user can select which facets to use in combination and dynamically see the new data represented in the charts.

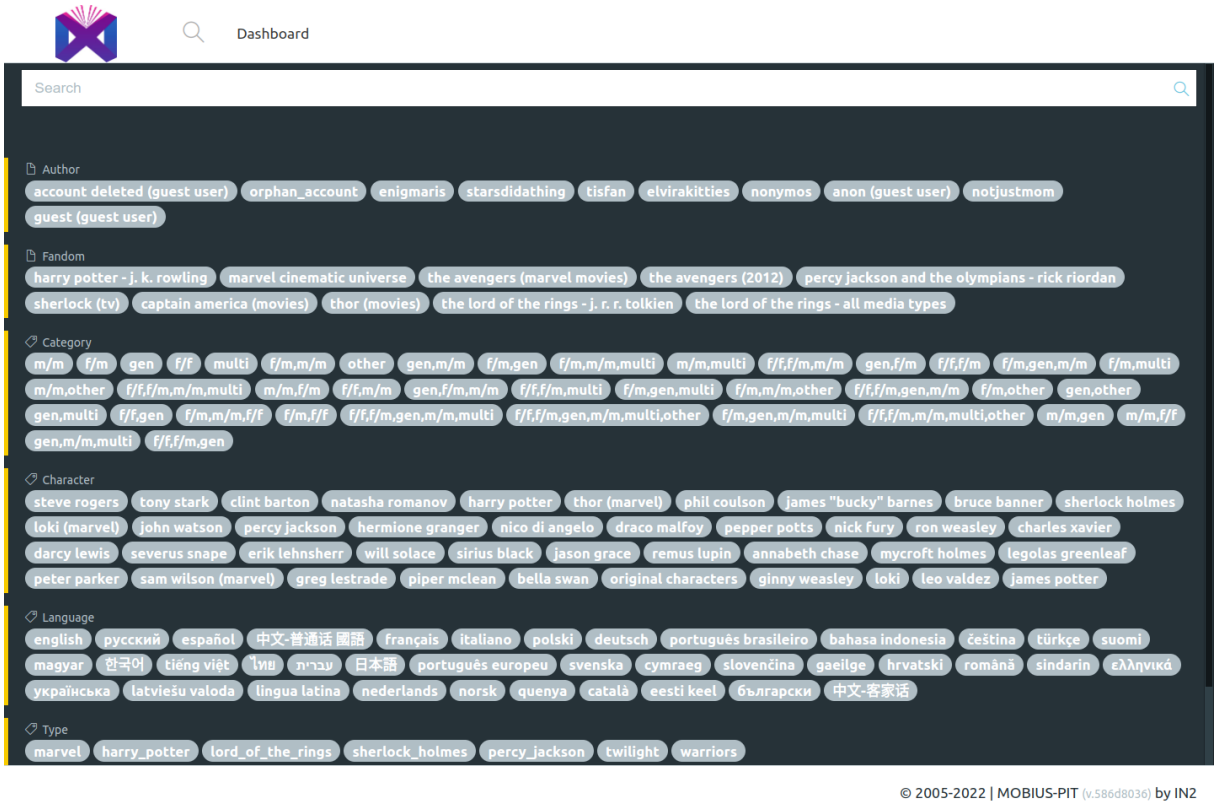

Figure 7: PIT advanced search for data exploration (overview)

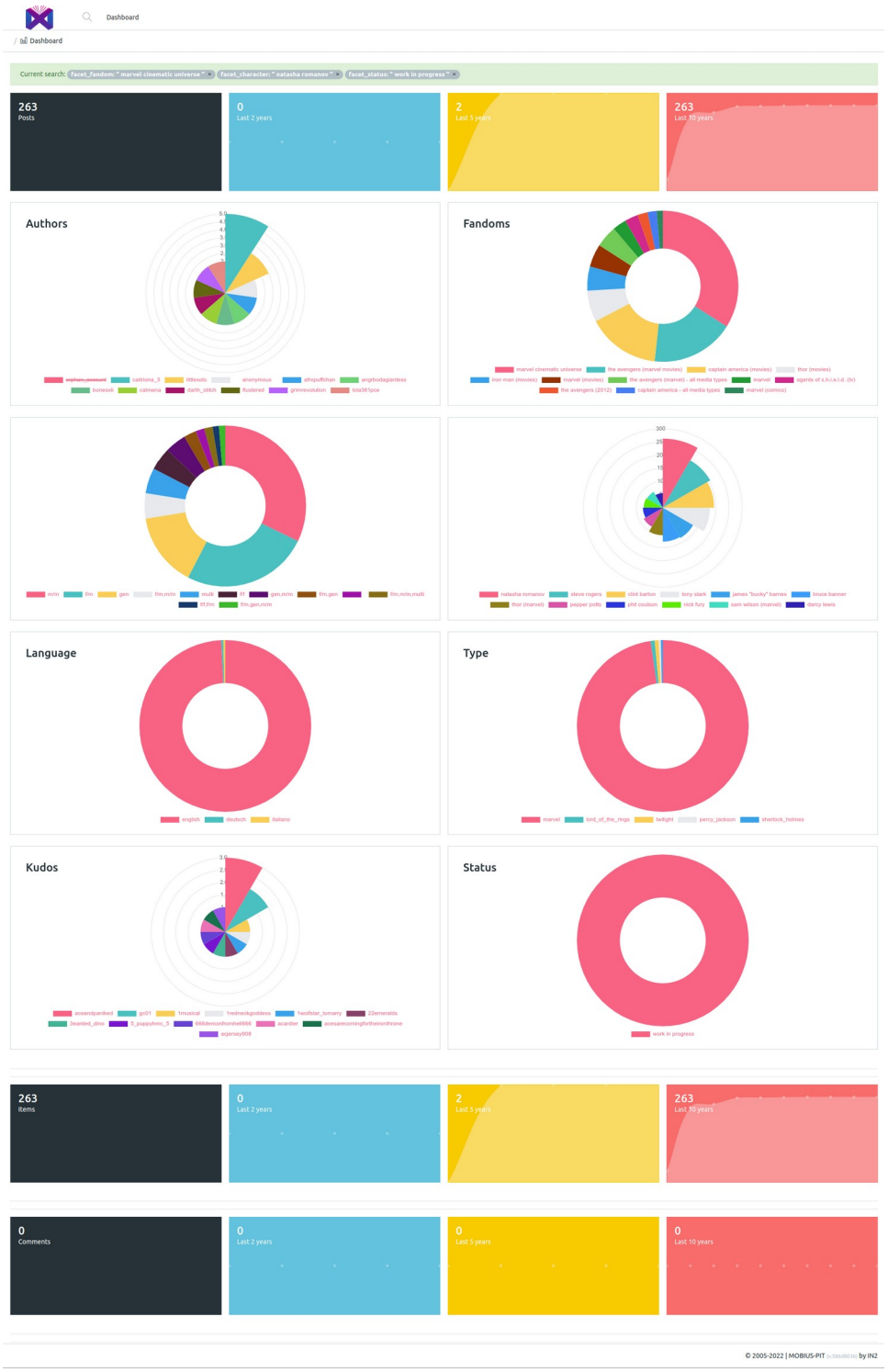

Figure 8: Search example: results to a query for fadoms from "marvel cinematic universe", character "natasha romanov" and status "work in progress"

4 Conclusion

This deliverable accompanies the release of the PIT minimum viable product and describes its main functionalities. In its current form the application provides publishers with a dashboard-driven user interface for the exploration of data gathered from fan-fiction communities. In the next period the MVP will be evaluated by users and based on the feedback received further improvements will be made. Moreover in the next months the MVP will be further expanded with additional metrics from the data analysis conducted in T3.1.