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**Report accompanying  
D4.7: Market Place**

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## Executive summary

This Report represents the underlying concepts and build of the Market Place as a community driven forum where users in the audiovisual archiving community can investigate and interact with the tools and services of Presto4U to fulfill their find support to their preservation needs and requirements. An important part of the Market Place is the PrestoBroker, a service by which the AV preservation community can assess current needs and challenges in digital preservation, and respond by offering available solutions.

The Market Place as a concept has been built upon the existing PrestoCentre website. Most effort has been spent on improvements to content reorganisation and integration, and the improved navigation and responsiveness of the overall website and the services built by Presto4U. The improvements will contribute to the continuous collection of information about the AV preservation community, and will support community interaction. It also provides a central starting point to access the main services including the Presto4U Standards Register, the Software Tools Catalogue, and other resources aimed at the different Communities of Practice. Finally, a brokerage service, PrestoBroker, represents the core of the Market Place concept, where CoP members are guided through their search for Community-adopted technology solutions.

Most of the development work for the Market Place concerned the front-end redesign of the Drupal-based PrestoCentre online platform, the reorganisation of the PrestoCentre membership, content, and access rights, together with the integration of the brokerage tool.

## Introduction

This report describes the production and launch of the Market Place Deliverable that can be found at <https://www.prestocentre.org> (homepage) and especially <https://www.prestocentre.org/prestocentre-broker> and <https://www.prestocentre.org/dashboard>.

In this report we explain the concept and technical build of the Market Place as the combined set of services produced and implemented by Presto4U Task 4.3 *Brokering technologies to Communities of Practice and Suppliers*.

The Market Place, as a concept, is the central starting point for the audiovisual preservation community for the integrated delivery of information acquired through the project. It will further support the collaboration between AV archives, and between AV archives, vendors and the research community and their interaction with the services from Presto4U and those produced by the previous projects, PrestoPRIME especially.

The Market Place builds upon the knowledge identified and the tools built in the project. A core element is the brokerage and tailoring service (PrestoCentre Broker, or PrestoBroker in short) that has been built to help the audiovisual preservation community and its various Communities of Practice finding solutions to their needs.

As certain online services and interfaces created as part of this deliverable are not available without registration by the user, we have created a test account for the European Commission and the reviewers for the purpose of reviewing the Market Place and the related services. The address for login is <https://www.prestocentre.org>. The login name is “Presto4U test” (note the capitals) and the password is “prestocentre”.

This document is structured into clear sections to describe the development of the Market Place. Chapter 1 offers an introduction to the thinking behind the Market Place. Chapter 2 reports on the work integrating various Presto4U services into the Market Place. It covers the PrestoCentre homepage redesign, membership and content considerations. Chapter 3 presents the brokerage tool that was built as one of the central services underpinning the Market Place. It also addresses the future maintenance of the service. Chapter 4 details the Market Place benefits to the audiovisual communities, the needs data collection and the role of the knowledge schema developed under Task 2.1. Chapter 5, finally, looks at additional value and user experience from a vendors perspective.

# 1. The Market Place Concept

Research shows that “more than 90% of the conversations about products, services and brands that take place every day” happen offline or face-to-face.<sup>1</sup> Thus billions of product, services and recommendations conversations happen in this offline space and only a small percentage are currently happening in online spaces, whether driven by social media or commercial spaces. Even a small percentage of billions is a significant number, of course, but there remains considerable scope for growth in digital modes of community based discussion, sharing and recommendation. Especially in specialist areas where there is not currently a strong digital space for such conversations then promoting the building and delivery of communities that can share experience, knowledge and most importantly requirements, needs and recommendations is seen as an important innovation.

For the Presto4U project there is a discrete community of audio-visual creators, curators, collectors and consumers who are currently supported by the services and products of PrestoCentre. Our vision was to develop a place where audiovisual communities could come together to immerse themselves in services and resources aimed at fostering a better understanding of audio-visual preservation choices. We sought to foster the development of an open space that encourages the expression of needs. Through such needs identification the levels and types of demand can be enumerated and defined as a means of guiding suppliers who are seeking to address the markets desires.

The concept of a digital marketplace in this context was to engage with traditional definitions of a marketplace as a physical space that provides for a regular gathering of people for the purchase and sale of provisions, stock, and other goods. In other words, it is a place of trade, where buying and selling occurs in all its forms (including monetary, barter and other trade exchanges). The digital marketplace is based in PrestoCentre as the destination space. The component parts of the Presto4U service offering are thus the encouragement to gather and share knowledge and needs. The communities of practice fostered by the P4U project can gather in the marketplace to engage in trade - possibly with each other or most likely with commercial suppliers of products, goods and services. We have therefore built upon the existing PrestoCentre online platform to bring together the services developed within the Presto4U project whilst enriching the opportunity for collaboration between the different stakeholders. We want to make it easier for communities of AV practitioners to use the marketplace concept to find the information they need to procure the right products and services.

Virtual marketplaces have changed the way people do business and created new opportunities for smaller businesses and startups as well enabling larger, well-established companies to reach out to new customer bases. eBay started this trend way back in 1995 as it revolutionised the market for used goods, more recently Uber is changing the way people book and use taxis. One of the hardest tasks in this digital ecosystem is matching supply with demand especially when trying to reach specialist community with relatively niche interests. Our approach to building the marketplace for the project was to consider the following key attributes that are seen in all virtual marketplaces:

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<sup>1</sup> Keller,E and Fay, B. (2012 )The Face-to-Face Book: Why Real Relationships Rule in a Digital Marketplace, Free Press

1. **Offer something the community needs.** Building resources that will bring members to the marketplace to share knowledge and experience. Resources such as the Standards Register, Technology Watch and Tools Catalogue assist in this activity. The opportunity for members to express their needs is an essential element to building the understanding underpinning the marketplace.
2. **Take offline experiences online.** We worked hard to get close to our Communities of Practice and also looked at other groups (such as AMIA and FIAT/IFTA) to analyse how we could bring those offline conversations into the online space.
3. **Build a platform that works for suppliers and is easy for consumers.** The marketplace must seek to provide suppliers with a platform to connect their products and services with the expressed desires of the consumers. The development of the PrestoBroker is the projects reponse to this marketplace need.
4. **Offer choices.** A marketplace has to offer genuine choices to consumers that matches their needs with the supply base available. See PrestoBroker again.
5. **Enable filters and promote influencers.** Breadth and depth of choice has to be augmented with the ability to get straight to the content and services most needed by the consumers. Our CoPs offer expert influencers that can bring consumers to the resource and guide their use. The Web resource also should ideally provide a number of filters to enable users to be selective and only see those aspects of the marketplace that suit their needs.
6. **A place to trade.** The marketplace should ideally provide the capacity (whether through brokerage or e-commerce) for actual trades to take place between suppliers and consumers.
7. **Sustainably meeting stakeholders needs.** The marketplace must respond to the needs of its stakeholders in a sustainable fashion that will outlast any given project. Primary categories of stakeholder includes PrestoCentre, community members and the suppliers. This can lead to tensions between the wish for a fully open and free to access marketplace desired by one contingent and issues of sustainability and feasibility of delivery faced by other participants.

Our research explored other exemplars of active communities in audiovisual sphere. We mined the experience of our CoPs but also looked at other models of community action available. In particular, AMIA and FIAT/IFTA.

Our research also created a series of consumer personas that allowed us to consider how the offline conversations we observed in our CoPs and in the active communities of the above associations could be transferred into a marketplace setting. A persona allows us to model types of behaviour and consider the different needs of the different parts of the community.

We used the information gained from the Workshops run by the project to gather information about how CoPs interact with each other and also with the commercial supply base. This has provided a basis on which the brokerage elements could be modelled and built.

Sustainability became a defining factor in many of the decisions regarding the design and building of the marketplace. PrestoCentre has to be able to sustain the resources, services and the marketplace over the long term and this places fiscal pressures on the sustainability model. Consumers and the active participants in Communities of Practice may wish to access the content, services and brokerage without cost to them. However, no marketplace operates without a business model in which both the consumer and the supplier are sustaining the costs of the marketplace's existence. There are many modes of achieving this where the balance falls

more on one party than the other - but someone is always bearing the costs. Even in apparently open systems, the reality is that the consumer is themselves usually contributing more than suppliers through the exploitation of their personal data (Facebook), their time/resources (Wikipedia) or an indirect charging model such as advertising or the freemium model (Google). The nature, scale and reach of the AV digital preservation community means that a fully open system could not be sustained purely from the supply side as the volume of demand cannot meet the costs of service delivery. PrestoCentre has tried a number of approaches to address this tension between open and semi-closed systems (where closed means behind a paywall or other technical/financial barrier to untrammelled free access). Thus PrestoCentre, while having lowered the dues significantly to reduce the barrier to access to an absolute minimum, has chosen to introduce member only services to be able to maintain the site's and services' quality in the future. This means that some access to services will be enhanced for paying members - this aligns most closely with the freemium sustainability model. Whilst the Tools Catalogue, Standards Register and TechWatch (all funded foremost through Presto4U) will remain available to free members for some time, the brokerage and dashboard aspects are considered a premium service chargeable through the membership subscriptions and commercial affiliation. In this way the community is sustaining the marketplace concept as a place to visit to share knowledge and meet potential providers of solutions to their technical needs.

## 2. PrestoCentre and the Market Place

### 2.1. *PrestoCentre and Presto4U*

PrestoCentre is a collaboration led and hosted by the Netherlands Institute for Sound and Vision. The Centre, and its website especially, are exploited by the project as an essential tool for the success and dissemination of the Presto4U project output. PrestoCentre offers a new perspective for AV content holders in Europe eager to advance in their preservation actions and to be capable of relying on neutral instances for advice, orientation and services. While archiving is a very ancient activity based on well-established methods, digital archiving is new to most archives and presents a major challenge when decisions and technical solutions have to be defined. Knowing what to do is the main challenge archives have to address. The Presto4U partners, through the PrestoCentre, have the ambition to help audiovisual archives define what to do and to link them to relevant knowledge and initiatives in the domain. The MarketPlace brings together all of Presto4U's services in a visually and functionally attractive manner. It brings structure to the growing preservation knowledge in the domain, builds relationships, and stimulates intermediation between all the relevant interdependent stakeholders: those that have digital AV preservation knowledge and experience with those that need this knowledge and experience; those that are looking for a product or a service with those that offer such product or service.

### 2.2. *Merging Presto4U services into the Market Place*

Since the start of Presto4U, a set of dedicated project webpages (<https://www.presto4u.eu>) has been developed for the purpose of reporting on the project outcomes in a central location. All further Presto4U services, however, have been integrated, mixed and referenced directly with the PrestoCentre website as main publication platform and to allow both members and non-members of PrestoCentre to tap into the latest preservation information and thinking.

The Presto4U Market Place has further exploited PrestoCentre's online platform and expanded its functionality. The Market Place brings together individual project outcomes like the Community spaces, the TechWatch reports, the Standards Register and the Tools Catalogue.

In particular the Standards Register, Tools Catalogue and the PrestoBroker — each new service building on top of the previous one — have been conceived by the project DoW as the main pillars of the Market Place so their integration was considered of primary importance to offer long-term value to the audiovisual communities. The three services work collaboratively and provide information on community adoption and compliance. By using common fields and creating persistent relations between standards, tools, broker mechanisms, community needs, market interest and many of the pre-existing PrestoCentre services, the Market Place offers users a unique benchmark. Community members can search and interact with tools and services to fulfil their preservation needs and requirements, while technology providers can better assess the current challenges in digital preservation.



## **2.3. Functionality and Design**

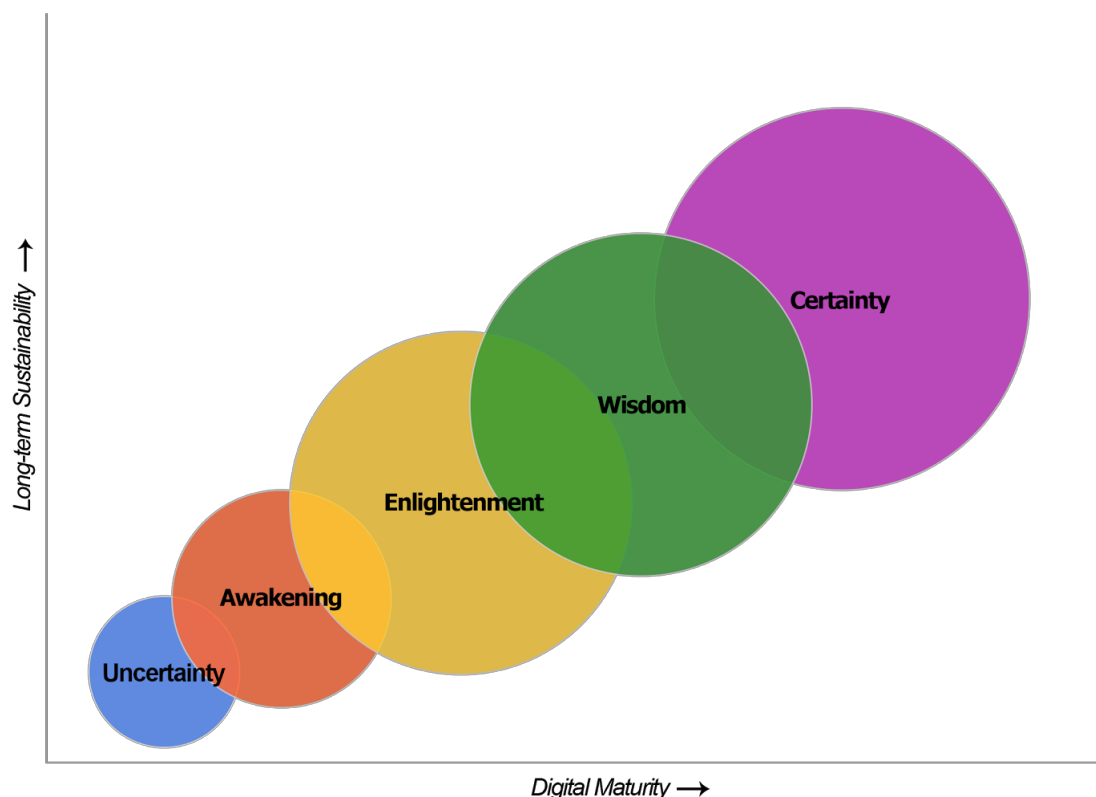
Unlike the Presto4U Standards Register and Software Tools Catalogue, the MarketPlace is not considered a single service. Its aim is to build a “dashboard” on top of these services and tools to improve the experience of both ‘demand’ and ‘supply’. Much of the work on the MarketPlace, therefore, has been gradual over the length of 2014 especially and has developed alongside the production of the various Presto4U services as well as the strategic directions chosen for the PrestoCentre that will be explained in more detail in Deliverable 6.4 (M24).

The most significant changes and developments to prepare the Market Place on top of the PrestoCentre platform were:

### **2.3.1. Membership structure**

As the meaningfulness of the Market Place grows with the number of users participating in the PrestoCentre, the PrestoCentre membership structure has been completely reorganised as part of this project deliverable and Task 6.2, introducing lower dues (sometimes by as much as 60 per cent) and a possibility to sign up as a free member (a wish of the project consortium to keep Presto4U services publicly accessible until at least some time after the project). The exception is the PrestoBroker since this particular service requires users to share additional profile information (e.g. storage capacity, digitisation ambition, standards in use) — an option that is currently only available as part of the paid membership registration.

## How digital are our Members?



1. **Uncertainty:** You are starting the appraisal of your analogue archive with a view to digitise. You will need to outline the challenges, identify the required solutions and the related costs so you can do appropriate project budgeting and prepare a grant proposal. 150 Euro p/a
2. **Awakening:** You have done your preparations and are about to start your first digitisation project, either large or small. You will need to buy equipment, outsource certain work, understand quality control, and data management. 200 Euro p/a
3. **Enlightenment:** You have digitised on a project or programme basis and now need to optimise workflows for digital ingest and transcoding. The number of files is growing and you need to re-think your media asset management and storage. 250 Euro p/a
4. **Wisdom:** You have a digital archive with rich metadata and a mission for the long-term storage of your collection. You will need to understand the impact of changing user requirements, establish contingency plans and guarantee resources. 300 Euro p/a
5. **Certainty:** You have an in-depth understanding of your designated community. You will need a multi-platform strategy to provide quality access. Rights management is a challenge. You are interested in repository assessment and audit. 350 Euro p/a

Exhibit 1. The new PrestoCentre membership levels to digital maturity.

### 2.3.2. Changes to the PrestoCentre homepage and website

The project considered the PrestoCentre homepage essentially the new Market Place: a one stop shop for all information, people and knowledge about AV preservation. The project has worked on a complete overhaul of the PrestoCentre homepage as well as certain updates to the Tools Catalogue and Standards Register, also implementing the additional access levels and

rights for the different kind of users: anonymous users; free members of PrestoCentre; paying members of PrestoCentre; vendors; and contributors (such as bloggers, experts maintaining the registers etc).



Exhibit 2. Screenshot of the new “Market Place” homepage on [www.prestocentre.org](http://www.prestocentre.org)

Other significant work was done to allow users with much smaller screens such as tablets and phones to still be able to enjoy all of the information created by the project, including the standards register, the software tools catalogue and several of the other information services on PrestoCentre. This required a redesign of the site's content and structure to make it responsive to various screen sizes (see Exhibit 3).

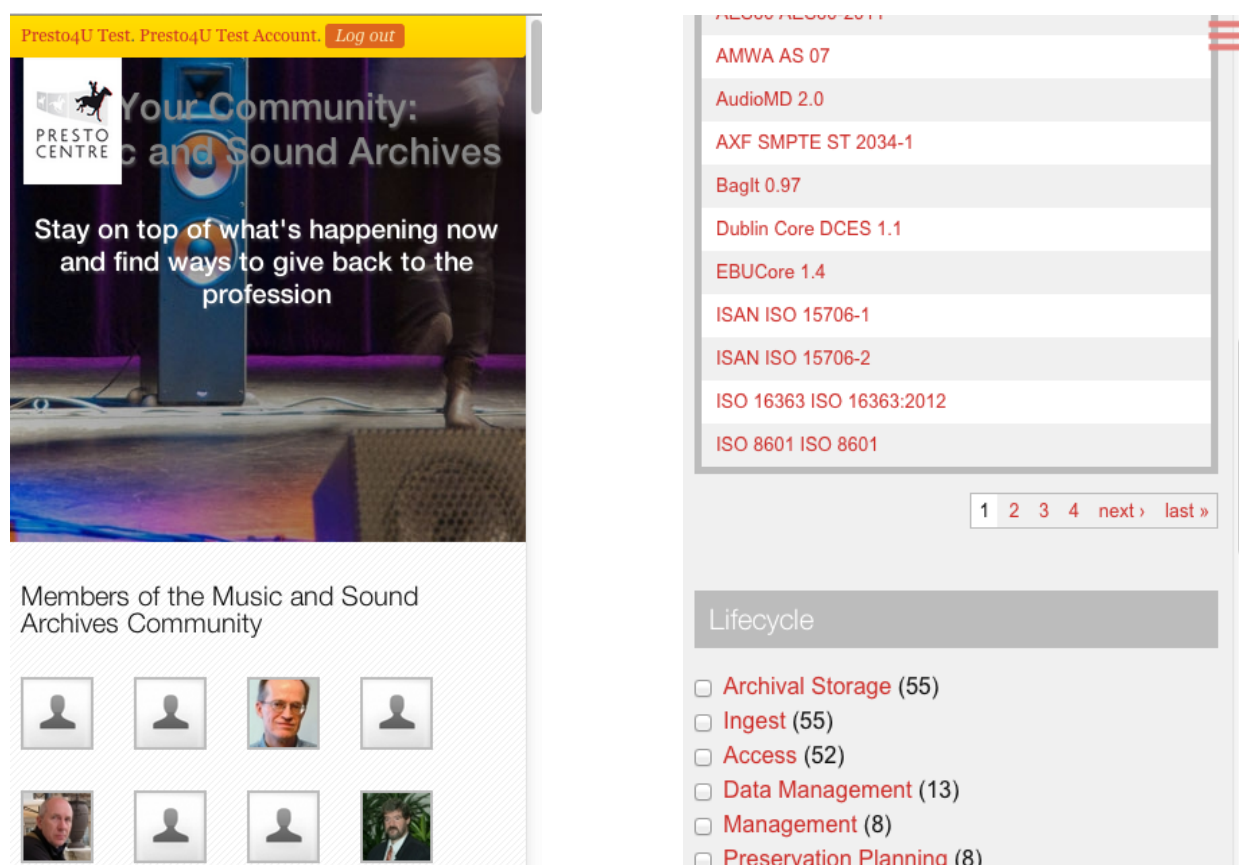


Exhibit 3. Responsive design of a Presto4U Community startpage and the standards register: cellphone view

### 2.3.3. Collecting Data for the Market Place

A basic principle of the Market Place is that anyone signing up to PrestoCentre — either as a free or as paying member — will want to share knowledge, experiences, needs and challenges — or rather simply post questions and get answers. For paying members, the possibilities to finetune their quest for information have been increased by allowing them to complete their organisation profile information with new and more relevant contextual information, such as the type of organisation, the Communities of Practice they belong to, their digital maturity level (see 2.3.1.), whether they have implemented any specific standards or tools (which will help other institutions to compare), what their needs are (see chapter 4), the amount of digitisation they are planning to do, the annual born digital storage growth, etc. Members of PrestoCentre are triggered to complete their profiles with this information, which is not obligatory but definitely useful in helping the user find more personalised and relevant content on the PrestoCentre website. It also serves the other side of the Market Place: those that know about or can help in the building of possible solutions — commercial and non-commercial.

The screenshot shows the PrestoCentre website with a dark grey header. The header includes the PrestoCentre logo (a horse head) on the left, a 'Welcome test user.' message with a 'Log out' button in the center, and a 'Select Language' dropdown on the right. Below the header, there are links for 'About Us' and 'Contact'. A sidebar on the left contains a list of links: 'Preservation', 'Membership', 'TechWatch #2', and 'AV Insider #5'. The main content area features a large image of a red book titled 'AV Insider' with the subtitle 'Let's Grow Together'. Overlaid on this is a white popup with a red header that says 'Please update your organisation profile' and a close button (X). The popup contains the following text: 'Organisation Profile', 'Digitisation', 'How many hours is your organisation planning to digitise?', 'Audio', a text input field, and the word 'hours'. Below the input field is a red 'Save' button. At the bottom of the popup, there is a paragraph: 'To better understand your needs and to offer relevant services to our members we ask you to provide us with a few technical data. You may update these any time by checking out your [organisation profile](#).' The background of the website shows a grid of icons representing different services: 'AV Insider Magazine', 'Library', and 'Tools Catalogue (beta)'.

PRESTO CENTRE

Welcome test user. Log out Select Language

About Us | Contact

Preservation

Membership

TechWatch #2

AV Insider #5

**Please update your organisation profile**

**Organisation Profile**

**Digitisation**

How many hours is your organisation planning to digitise?

Audio

hours

Save

To better understand your needs and to offer relevant services to our members we ask you to provide us with a few technical data. You may update these any time by checking out your [organisation profile](#).

The PrestoCentre is a non-profit organisation dedicated to Keeping Audiovisual Content Alive. It unites the world's best AV technology innovators, audiovisual archivists, media researchers and business decision makers

AV Insider Magazine

Library

Tools Catalogue (beta)

Exhibit 4. Screenshot of popup asking a user to complete the organisation profile information.

## 3. Brokerage mechanism

### 3.1. *The PrestoBroker*

The PrestoBroker is a service which aims to map user (CoP member) needs expressed within PrestoCentre to the products and solutions which are on offer in the Presto4U Tools Catalogue (both commercial and open source) and relevant standards requirements (if any). This falls within the scope of Presto4U's aims regarding the creation of mechanisms for the promotion and uptake new research outputs and commercial solutions in the AV Preservation market. The PrestoBroker's underlying algorithm performs a semantic match between user requirements and product features and aims to provide a best solution for the given seed requirement and within the context of the search. To explain this better, we will first need to consider the background information and needs which the broker algorithm takes into account in order to perform the match.

1. **Needs:** These are mainly free text fields and capture both functional and non-functional requirements (e.g. dataset types, type of organisation, barriers, budget etc) mostly in free text form. These needs are generic in nature and represent the overall goals of the organisation. A knowledge schema for the acquisition of these needs was developed as part of WP2 in Presto4U. These needs can be captured in an offline and asynchronous manner.
2. **Organisational profile:** This is metadata regarding the organisation as a whole which includes generic information about the type of organisation, the kind of AV Preservation workflows they deal with, their financial information, size of the collection to be digitised, their mission and goals etc.
3. **User requirements:** These are individual requirements of specific user working on a specific use case. The requirements here will immediate ones and captured using a user interface with the help of controlled vocabulary input mechanisms.

Users can interact with the broker after logging-in to PrestoCentre and start by specifying the User requirements (3) first. These are captured via an intuitive user interface which builds a complete profile of the user's requirements using key fields controlled via taxonomies. See Exhibit 5.

Exhibit 5. PrestoBroker user requirements interface.

The “Your request to the PrestoBroker” part of the page allows users to select each of the fields marked in blue from a list of existing values loaded from a taxonomy database, created for the standards register, for the tools catalogue, and for various content types on the PrestoCentre website to produce appropriate relationships. Once the “Send Request” button is pressed, these key value pairs (e.g. Commercial Type → Non-Commercial) are collected and passed onto the broker algorithm to perform matching with the Presto4U Tools Catalogue. In addition, the user can also specify the importance of each field as one of “Mandatory”, “Optional” or “Unknown”. The ranking of the result will depend on these preferences set initially by the user. The TRL (Technology Readiness Level) field allows the user to choose a range within which the TRL level of the tool should be.

The generic Needs (1) and Organisational profile details (2) are pre-loaded from existing databases in PrestoCentre. This is because (1) and (2) are offline requirements which are entered as part of the profile competition process by PrestoCentre members. This organisational profile data is completed once and is not updated on a frequent basis. Examples are type of organisation, the digital maturity level (based on the PrestoCentre’s member category chosen), the organisation’s storage capacity and growth, the number of items to be digitised, and the type of MAM system in use.



Needs on the other hand are updated incrementally and the user may add any number of generic needs in an offline manner at any time. These three pieces of information is what the broker calls a data-packet (see Exhibit 6).

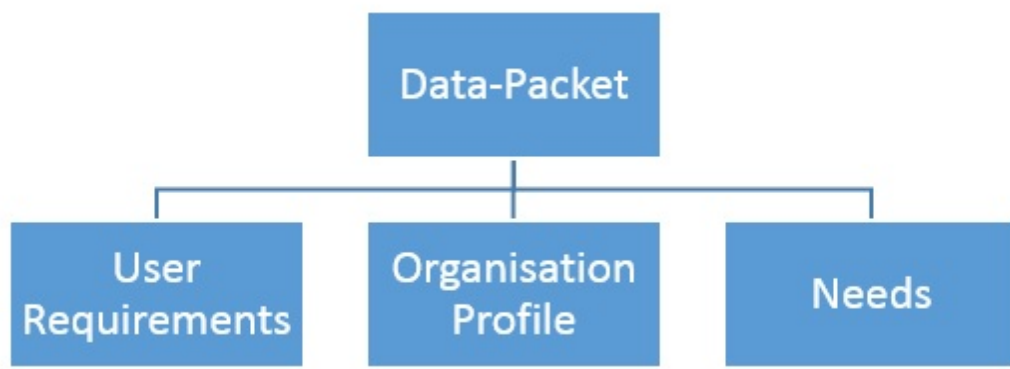


Exhibit 6. Data packet for needs gathering

Once the data packet is collected at the server-side, this information is then passed onto the algorithm which performs matching from the Software Tools Catalogue. Before we go into the details of the algorithm, the overall architecture of the PrestoBroker service is explained in brief.

### 3.1.1. PrestoBroker Architecture

The PrestoBroker is hosted as an external service (which hosts both the user interface for immediate user requirement gathering and the algorithm). Since PrestoCentre and the broker were being developed independently, it allowed for faster development times. Given the timescale of the Presto4U project, this was the most efficient option.

The user interface for the broker however, is served up on PrestoCentre itself after the users have logged-in. This enables the option of exposing the profile to members within PrestoCentre.



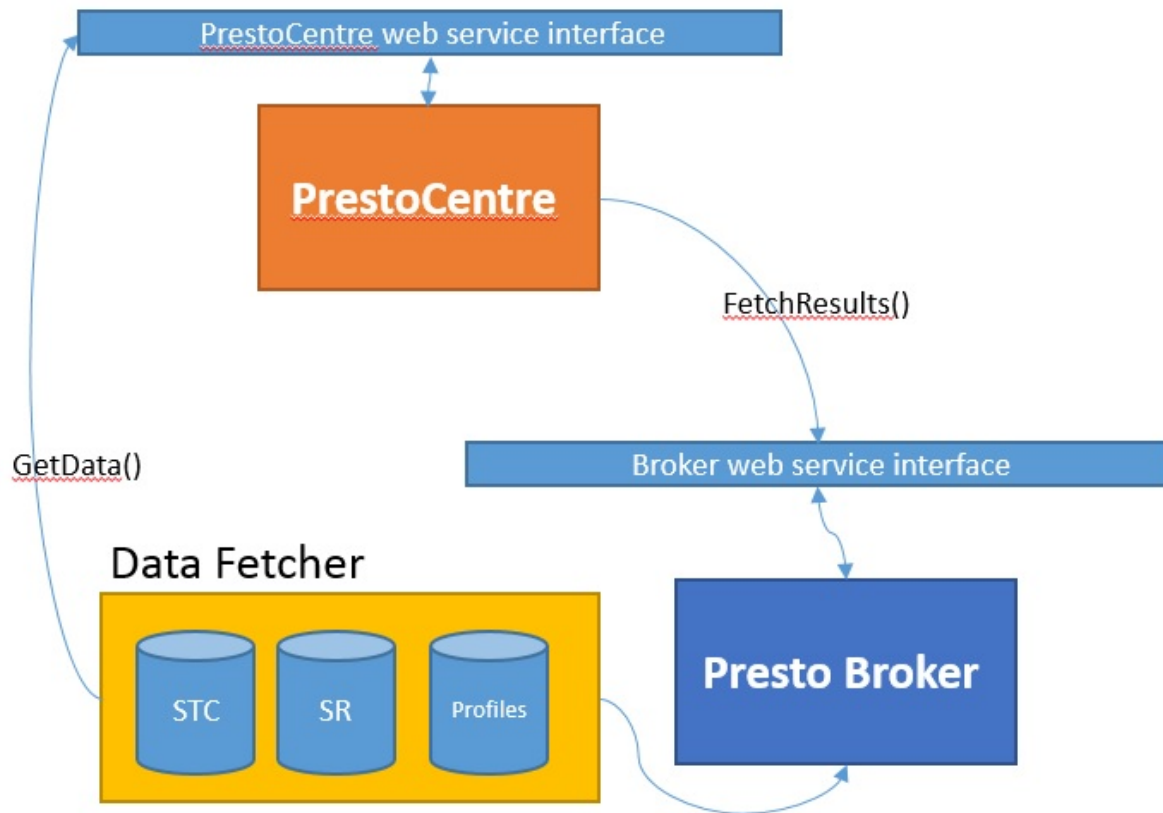


Exhibit 7. PrestoBroker conceptual architecture

The main components of the architecture are as follows:

1. **PrestoCentre/Broker UI:** This is the user interface as described in Figure 1. It enables users to specify immediate requirements for software tools and the organisational profile and generic needs are automatically loaded as background information.
2. **Data Fetcher:** This is a collection of databases implemented on server side (within PrestoCentre) and exposed via a web service. It consists of the Software Tools Catalogue (STC), The Standards Register (SR). The broker also maintains an internal cache of all the searches performed. This helps build a profile of the user based on past history and will be used in the future for providing analytics within PrestoCentre and for automatic suggestions of new tools and services based on their changing requirements. Finally, the user can browse through past results and reconstruct a result set without having to perform the entire search operation again.
3. **Broker algorithm:** The core algorithm which performs semantic matching. This will be described in detail in the next sub-section.

### 3.1.2. Broker Algorithm

The algorithm which is currently implemented and deployed works in the following manner:

1. For every immediate user requirement: Collect the key-value pair from relevant taxonomies (Exhibit 5)
2. Create data-packet in memory and send to a search and retrieve component.
3. Search and retrieval component searches for these key value pair combinations within the Software Tools Catalogue and relevant standards requirements (if any). This components makes extensive use of regular expressions to make sure all possible matches are retrieved initially.
4. A full list of potential matches are retrieved as a result.
5. Based on the preferences set by the user for each field (Mandatory, Optional or Unknown) and the range of TRL level: Add weights to each result.
6. Create a final rank for each result object by aggerating the weights for each field within the result object.
7. Sort results as per final ranking
8. Send results back to user interface for display purposes.

On-going and future work on the algorithm includes the parsing of Needs to further refine the ranking. This will involve the use of Natural Language Processing techniques to perform automated entity extraction from free text entered by users. For example, we could create classifiers for semantic extraction of concepts like desired features, funding (which may not be expressed in numerical form or embedded somewhere within the text), barriers (examples might include what the tool should not contain e.g. a commercial licence as it is outside the organisations policy). Similar techniques when applied to the generic organisational profile will provide further insight into the broad needs (e.g. a post-production house aiming to make the transition from HD video production to 8K may have changing AV preservation needs in terms of storage). Future work will also include methods on scaling up the algorithm so that it can deal with large datasets of requirements and tools. The current size of these databases in PrestoCentre is quite small and hence the current implementation of the broker works fine. In the future, when the amount of data is vast, the algorithm will need to implement reverse indexing scheme as a way to retrieve results quickly and efficiently.

### 3.1.3. Technical Specifications

Broker Component	Technology Used
User Interface	PhP + Bootstrap web development toolkit.
Database	MySQL backend
Algorithm	Client side JavaScript
Webservice implementation	PhP web service client stubs

## 4. Audiovisual Communities and Needs gathering

The Audiovisual Communities of Practice are at the heart of the Market Place. They are brought together by the shared desire to improve their digital preservation practices and find solutions to their needs. It is around the ‘expression of needs’ that the work carried out with the Knowledge Schema under WP2 finds its final implementation in the Market Place.

The Knowledge Schema has been developed under task 2.1 to manage the overall quality of information to be captured within each CoP. Using a standardised general-purpose modelling language (UML) and an XML-based annotation, it has been designed to structure the needs in the form of knowledge statements that can be automatically processed in order to support the match of needs with the research outputs.

The following sections of the schema have been implemented in the ‘needs gathering’ tool, which is now live on the PrestoCentre as part of the work on the MarketPlace:

1. *Organization*
2. *Need*
3. *Dataset*
4. *Functional requirements*
5. *Non-functional requirements*

This tool sits under the ‘Member Profile’ area and is presented to users with a simple ‘Add a need’ button allowing PrestoCentre members to share information about their needs, which may later be used as part of their interactions and experience on the site (esp. the PrestoBroker).

Home » Create Need

Search site...

**General**

Need description \*

Storage

Currently used technology

NAS storage, YouTube for public sharing of some video files

Reason of dissatisfaction

Amount of disk space. The storage facility cannot sustain the amount of data to be stored

Desired technology or service

NAS technology is fine for storing and sharing, however much more space is needed.

Barriers

availability of funds

↑

Exhibit 8. Example of a Member’s “need” data entry form.

The user is guided in the identification of the area of need with a multi-select option (e.g. validation, metadata extraction, storage etc). If the need arises from dissatisfaction with existing technology, then the user can specify the currently used technology and the reason for the dissatisfaction. Additional fields allow CoP members to describe a specific need in terms of the main desired functionalities and the dataset(s) to which the need applies.

Although we recognise that some users might find the request of information quite extensive, none of the fields are 'required' and can be filled and updated at different times. From M23-M24, CoP leaders and expert group members will start using the tool to share their needs. This will introduce the first incremental collection of needs which will remain available and updated after the project through PrestoCentre's members and which will guide the connections of challenges and solutions underpinning the PrestoBroker algorithm and service. It will also constitute the intelligent link between market and needs, through which PrestoCentre might report to specialists and vendors to analyse trends and address requirements for future technologies.

## 5. The Market Place Supply Side

In the Marketplace on the supply side one can identify a wide range of vendors, all depending on the specific needs of members and visitors. Many vendors offer products and services in one specific part of the AV archiving business process. For example Digitisation, Storage or Media Asset Management Systems. On the demand side (AV archives), there is also a wide variety of requirements based on size of an organisation, type of archive (broadcaster, museum, general purpose library, dark archive etc), budget and many other differentiators.

### 5.1. Dashboard

As part of the work on the Market Place, we have taken the revamped membership organisation from PrestoCentre and presented its Digital Maturity timeline as an indication of the key needs of PrestoCentre's members. This high level view on the community has become the start of the so called "Market Dashboard" and that is available to commercial affiliates of PrestoCentre.

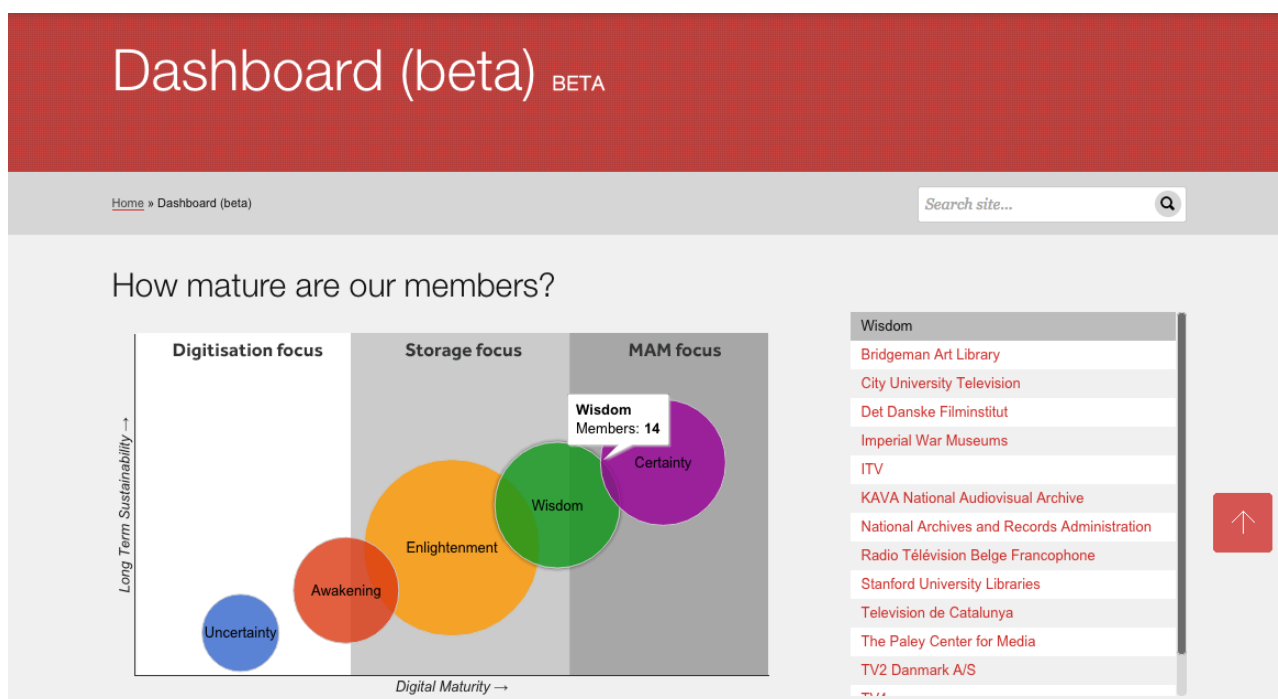


Exhibit 9. PrestoCentre's "Market Dashboard"

While inputting needs and working with the PrestoBroker, users will be stimulated to share and update their institutional actual needs. This process of sharing and updating will gradually populate a database with rich and up to date organisational needs and requirements. Prestocentre will offer commercial affiliates the opportunity to search and explore this database, it will provide them an in depth understanding of the market and potential business opportunities. Service providers can discover the amount of hours of analogue content still to be digitised. Technology vendors can discover current needs of storage and MAM vendors will receive

valuable market information based on the level of digital maturity of certain communities and types of organisation. This perpetual updating of digital maturity, storage needs and annual growth, and digitisation plans will shape the other side of the Market Place and helps PrestoCentre to improve its brokerage mission.

The beta version of the dashboard also provide vendors information about digitisation potential in hours and storage capacity today, annual storage growth and need for a MAM. This beta vendor service will further develop based feedback and data analysis.

### What is our members' Storage Capacity and Need?

Organisation type	Total Storage Capacity (average)	Higher Education Institution or Programme
Film Archive, Video Archive	- PB	California Digital Library - PB (annual growth: - TB)
Footage Sales Libraries	- PB	IUAV -University of Venice - PB (annual growth: - TB)
Higher Education Institution or Programme	- PB	Royal Conservatory - Institute of Sonology - PB (annual growth: - TB)
Mediatheque	- PB	Royal Irish Academy - PB (annual growth: - TB)
National AV Archive	- PB	Screen Archive South East - PB (annual growth: - TB)
Other	- PB	Scuola Normale Superiore - PB (annual growth: - TB)
Professional Association or Membership Organisation	- PB	The London Film School - PB (annual growth: - TB)
Research Institution	- PB	The Open University - PB (annual growth: - TB)
Television and Broadcast Archive	- PB	Universidad Nacional de Educación a Distancia - PB (annual growth: - TB)
AV Archive or Collection	- PB	University College Dublin
Funding Organisation	- PB	
Library	- PB	
Museum	- PB	
Art Museum or Gallery	- PB	
AV Production	- PB	

Exhibit 10. PrestoCentre's "Market Dashboard" (continued)

### What digitisation potential do our members represent?

Organisation type	Media	National AV Archive
Film Archive, Video Archive	Audio: - hours Video: - hours Film: - hours	Austrian Film Museum Audio: - hours Video: - hours Film: - hours
Footage Sales Libraries	Audio: - hours Video: - hours Film: - hours	Cinémathèque Française Audio: - hours Video: - hours Film: - hours
Higher Education Institution or Programme	Audio: - hours Video: - hours Film: - hours	Cinémathèque québécoise Audio: - hours Video: - hours Film: - hours
Mediatheque	Audio: - hours Video: - hours Film: - hours	EYE Film Institute Netherlands Audio: - hours Video: - hours Film: - hours
National AV Archive	Audio: - hours Video: - hours Film: - hours	Filmarchiv Austria Audio: - hours Video: - hours Film: - hours
Other	Audio: - hours Video: - hours Film: - hours	KAVA National Audiovisual Archive Audio: - hours Video: - hours Film: - hours
Professional Association or Membership Organisation	Audio: - hours Video: - hours Film: - hours	National Audiovisual Institute Audio: - hours Video: - hours Film: - hours
Research Institution	Audio: 24 hours Video: 20 hours Film: 21 hours	National Library Board of Singapore Audio: - hours Video: - hours Film: - hours
Television and Broadcast Archive	Audio: - hours Video: - hours Film: - hours	National Library of Norway Audio: - hours Video: - hours Film: - hours
AV Archive or Collection	Audio: - hours Video: - hours Film: - hours	Netherlands Institute for Sound and Vision Audio: - hours Video: - hours Film: - hours

Exhibit 11. PrestoCentre's "Market Dashboard" (continued)

Prestocentre will frequently solicit for feedback from vendors in an effort to improve value, functionality and data offered by the dashboard. The Presto4U Preservathons have been instrumental in bridging the gap between demand and supply in the AV archives market. Based on these highly interactive workshops and challenges, Prestocentre will further develop services like the broker and the dashboard and will increase the value for being part of the marketplace for AV archives and AV vendors alike. Apart from an update privacy policy for PrestoCentre members, an exact code of conduct for the Market Place, while it is still in beta, has not yet been defined. Over time this will be developed and deployed as “terms of agreement” of the Prestocentre membership.



## 6. Future implementation

The PrestoBroker populates a database, initially for the duration of the Presto4U project, hosted at Partner IT Innovation. It is expected that the Marketplace and its services will remain as “beta” for at least 12 months. These services will need to be further evaluated and tested during the remainder of the project and some improvements are still expected in 2015 by the PrestoCentre. The level of integration allows agile development of service and an easy and flexible way to deploy further services. From a robustness perspective one would consider to consolidate services at some point in time. For this reason it was decided how and when the remote beta web services will integrate into the PrestoCentre core after testing and evaluation of services and data analysis. This will take place at earliest late 2015. IT Innovation has offered to continue and support hosting of the service and database beyond the duration of the project and at least until the end of 2015.

As part of the work done on the Tools Catalogue, services were developed for a commercial Products and Solutions Catalogue. Where as Tools Catalogue can be used to identify available tools, the Products and Solutions Catalogue will cater for a way to identify trusted vendors from within the community that offer end to end solutions, products and services for AV archiving processes. Vendors that participate as commercial affiliate to PrestoCentre will be able to position their Solutions and Services as an extension to PrestoCentre’s yellow pages.

The current interface within PrestoCentre for the collection of generic needs (see 2.2.3.) was derived loosely based on the purpose of the Knowledge Schema from WP2. In the future, we will aim towards further integration with the knowledge schema. This will enable the use of machine reasoning (since the Knowledge Schema is a semantic representation of the needs) to improve brokerage further and automatically infer new knowledge. We will also aim to simplify the terminology used in the needs gathering (chapter 4) such that it is more user friendly. The complexity of the nested structure within the Knowledge Schema as it stands also might be a barrier in terms of usability. We will further investigate ways to simplify the presentation of this schema during needs collection from CoPs and PrestoCentre members in M23-M24.

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msnyders@beeldengeluid.nl

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