DPF Manager

The open source
COMMUNITY

DPF MANAGER

BUSINESS COMERCIALITZATION PLAN

Project acronym: PREFORMA
PREFORMA - Future Memory Standards
PREservation FORMATs for culture information/e-archives
EC Grant agreement no: 619568
EC Call ID: FP7-ICT-2013-11

Content

1 Executive Summary

1.1 Mission Statement

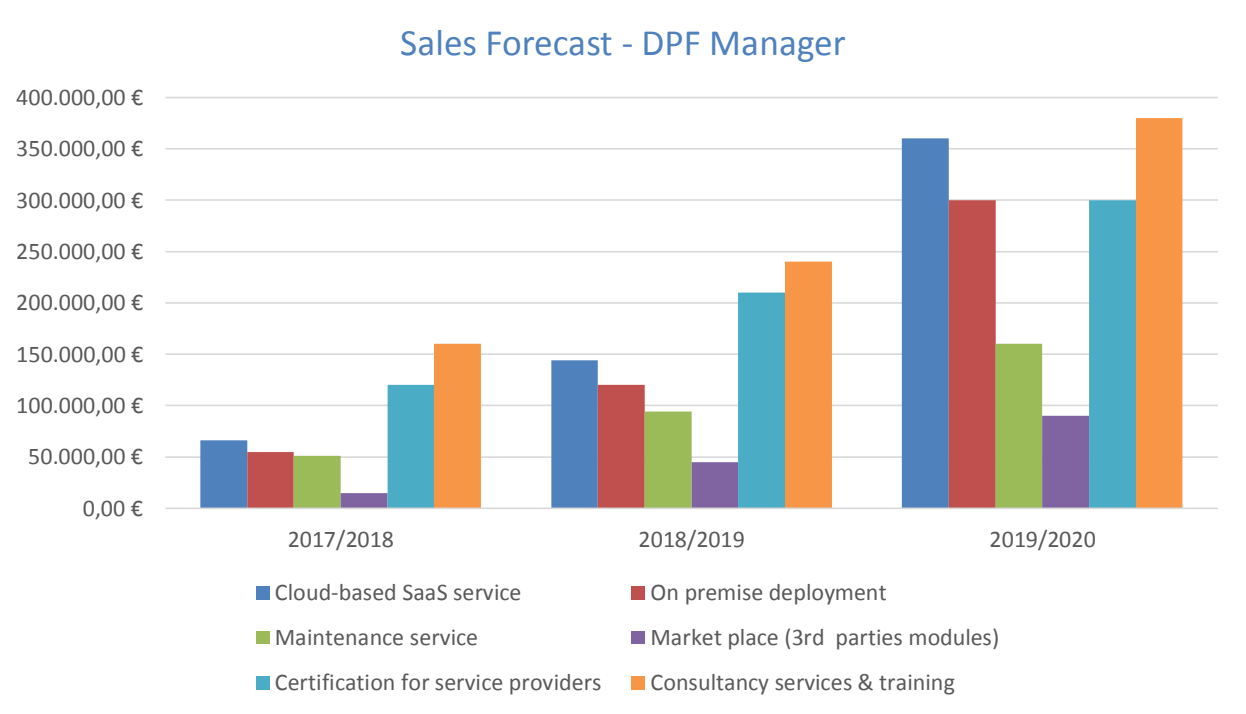
Easy Innova is an innovative data preservation solutions provider. We aim to offer as part of our products the unique Digital Preservation Formats (DPF) Manager – an open-source platform specially designed to be a reference on conformance validation and file preparation for long-term digital preservation.

> *Our mission is* ***'to become the reference platform for memory institutions with the purpose of validate TIFF files format'.***

To achieve that **we aim to build a strong and active data preservation community** by involving as many of developers, integrators, consultants, researchers, memory institutions and standardization bodies as we can within the DPF Manager project, to contribute and guarantee the good quality of the software and to aid in spreading our conformance checker solution.

1.2 Highlights

The commercial plan foreseen for the DPF Manager is very promising. As it can be seen in the next figure, all of the different services proposed on our Marketing Strategy are showing gainful results.



1.3 Objectives

In order to achieve its aforementioned mission, DPF Manager has established the following strategic objectives, aimed at highlighting DPF Manager's durable and sustainable development strategy.

- To become an established presence on the global data preservation market within the next three years, and to reach a portfolio of over 300 memory institutions within the next 3 years;
- To reach yearly gross sales of c. 467,000 Euros, by the end of year one, and expand to over 1.5 million Euros in revenue, by the end of year 3 (2020),
- To certificate 10 service providers by the end of the year one, and grow up to 50 the network of service providers by the end of year 3 (2020),
- To be present in 10 different countries worldwide within the first year, and extend outward to 35 countries at the end of our 3rd year.
- To build a strong and active online community, consisting of the memory institutions that use the DPF Manager, all the way down to the developers, researchers, providers, standardization bodies, etc. contributing to its improvement and flexibility. The community should have over 500 members at the end of our first year of operations and 2,000 at the end of our 3rd year of operation.

We aim to reach a constant number of clients, based on a streamlined social media strategy and platform solution for conformance check TIFF files and a client-friendly approach; the paramount element of this strategy is to generate a high level of exposure on the market, based on providing quality information and inquiry response to each of our clients and tending to their specific needs.

2 Description of Business

2.1 Company

EASY Innova, SL (EASY) core business activities and expertise are on research and technology transfer focused on developing **marked oriented applications** based on Artificial Intelligence, **Digital Preservation** and Complementary Currencies. EASY products are **OSS (Open Source Software)** and stand out for their competitive prices, the simplicity of their installation and maintenance, the flexibility of their modular structure, as well as their adaptability.

EASY has extensive experience in developing applications in the domains of digital preservation, recommender agents, Digital Business Ecosystem (DBE) and Artificial Intelligence (AI) applied to e-Government, e-Learning, digital marketing and social media sectors.

The company is one of the few R&D intensive companies in Spain that develops and exploits **pure R&D based digital preservation solutions** and also has strong cooperation with the academy. Some examples are:

- **GEPiD**. Gamification of the Digital Preservation over the social networks. RTC-2014-2576-7. 2014-2016.
- **DURAFILE**. An Innovative Digital Preservation system using Social Search in Agent Environments. FP7-SME-2013-605356. 2013-2015.
- **MIDPoint**. Micro-trading based preservation system. IPT-2012-0482-430000. 2012-2015.
- **ItIsForever.com**. Digital preservation of personal photos. Commercial. From 2011.
- **PRESERVA**. Comparative approaches to the implementation of intelligent agents in digital preservation from a perspective of the automation of social networks. TIN2010-17903. 2010-2013.
- **PYRAMID**. Towards the preservation of the personal heritage. PPT-020000-2009-19. 2009-2011.
- **PROTAGE**. PReservation Organizations using Tools in AGent Environments. FP7-2007-ICT-216746. 2007-2010.

2.2 Products and Services

2.2.1 Digital Preservation Formats (DPF) Manager

TIFF 6.0 is an open and well documented standard for digital still images. The TIFF specification is very complex and offers many different variants. For long term archival purposes, a suitable subset of the possible TIFF 6.0 variants will be defined.

Easy Innova proposes the development of an open platform specially designed to be a reference on conformance validation and file preparation of TIFF format for long-term preservation. One of its main features will be the capability to be integrated with other open source projects (OSP) and proprietary applications, providing in a simple way a great range of tools to gain full control over the validation and preservation of digital content. The platform will be strategically modularized and prepared to easily incorporate conformance checkers for other

formats in addition to TIFF and other multiple value-added functionalities (viewers, conversion, repair, optimization…).
This open platform will be the basis of the development of different modules. Definitely, the following functional components described in Challenge Brief will be developed and integrated:

- **Shell:** the component with all the parameters needed to configure the conformance checkers, their functionalities and a common interface for other conformance checkers and 3rd party software.
- **TIFF Conformance Checker:** validates TIFF files against TIFF/EP (ISO 12234-2:2001) and TIFF/IT (ISO 12639:2004) specifications.
- **TIFF Policy Checker:** allows memory institutions to define specific rules that TIFF files must accomplish in order to pass the validation process. Although a TIFF file may pass the conformance checks, memory institutions have their own acceptance criteria which must be taken into account.
- **TIFF Reporter:** generates a report with the outputs of the conformance and policy checkers, and the metadata fixer. A self-explanatory report for non-expert users, an advanced report for expert users and a machine readable JSON/XML report file will be developed. Besides, when a check is not successful, the report will include a list of recommendations in terms of actions to be done to solve the issue.
- **TIFF Metadata Fixer:** implements simple automatic or semiautomatic TIFF metadata fixes. For instance, it will be capable of normalising nomenclature of specific metadata. In addition, this module could automatically add a metadata structure suitable for long-term preservation.

Additionally, **an ISO-standardized version of the Tagged Image File Format (TIFF) specialized for the long-term digital preservation will be created**. The aim of proposing a new standard is identifying the profile for TIFF documents that will ensure the documents can be reproduced exactly the same way using various software in years to come. So each file suited to long-term archiving must have the key elements 100% embedded to make certain their reproducibility. Conformance levels of compliance for TIFF files will be defined.

2.2.2 DPF Manager Services

The commercialisation plan foreseen is based on the several services offered around the DPF Manager:

- **Cloud-based/SaaS preservation platform:** for those willing to simplify the adoption process and maintenance,
- **On premise preservation platform:** for those willing to keep full control of content,
- **Technical support / maintenance contracts**
- **Consultancy services:** customization and technical support,
- **Market place:** Open framework where 3rd parties can develop and include their own modules,
- **Certifications** for service providers

- **Training courses.**

Note: The way in which we will monetize the platform is thoroughly described within the Marketing section, 4.4 Pricing. Please refer to this particular section for all the information on the DPF Manager monetization.

The DPF Manager will be offered as an open source platform. The DPF Manager Software outputs and documentation will be released under open licenses in order to empower a wider impact of the results and incentivize its adoption. This approach will encourage the participation on the community and contribution of developers and organisations into their development and deployment.

The **DPF Manager will be offered in two modalities: Cloud-based/SaaS and On Premise.** Both approaches will offer enough flexibility to cover all current needs in the conformance checker TIFF files market. On one hand, we have some players that would like to simplify the adoption process and externalize infrastructures, specially small institutions. In this case, the Cloud-based/SaaS approach would be the most appropriate.

On the other hand, we still have some memory institutions that need to preserve digital data that would opt for an **"on premise"** approach in order to keep full control of their contents.

DPF Manager's uniqueness resides in the fact that it will be designed as an **open platform over which 3rd parties can develop their own modules**. This approach will foster the development of a third party modules/plug-ins market that can enrich and make more dynamic the DPF Manager solution. A **Market place** in the main website of the project will be created for this reason. Moreover, whenever a specific need is not covered by third parties, Easy Innova will put their own efforts to implement and offer it.

The DPF Manager will offer source code, technical documentation, manuals and other materials following an open approach. However, it will offer **high value-added services around the developed solution** such as its customisation to specific environments or requirements.

We will also offer **technical support** to memory institutions and certified providers regarding the possible technical bugs and the maintenance of the platform in terms of software updates to keep the software up to date to the latest market and technical needs. **Maintenance contracts** will be offered to both in order to give them long-term support with a high-level service.

Finally, **Training courses** will be offered to developers, service providers, integrators, managers, decision takers and end-users.

2.3 Partnerships with big players in the industry

It is not always easy for SMEs to have access to big memory institutions as they are used to working with well-known and respected big players in the industry.

In order to overcome this issue, we have started contacting big companies that we have identified could help Easy Innova with the integration with legacy software, commercialisation and support for DPF Manager.

So far we have entered into talks and have a letter of intent from **Hewlett-Packard CDS**, a Hewlett-Packard subsidiary dedicated to the integration and support of HP and third party software worldwide. We have presented the DPF Manager to them, and we have agreed to explore the possibility of integrating DPF Manager functionality into **HP MediaBin** (Hewlett-Packard digital asset management solution) and other DAM software. This contact has been possible because our offices are located in the same technology park as Hewlett-Packard CDS office in Girona.

Based on the questionnaire we sent to numerous memory institutions asking what software they use to manage they archives (amongst other things), we have identified the following vendors that already have an established reputation inside the digital preservation community:

Company	**Software solution**
ExLibris	Rosetta
DuraSpace	DSPACE
Canto	Canto Cumulus
Tessella	Tessella SDB
Libnova	Libsafe
Axiell	Axiell CALM
Preservica	Preservica Cloud, Standard and Enterprise edition

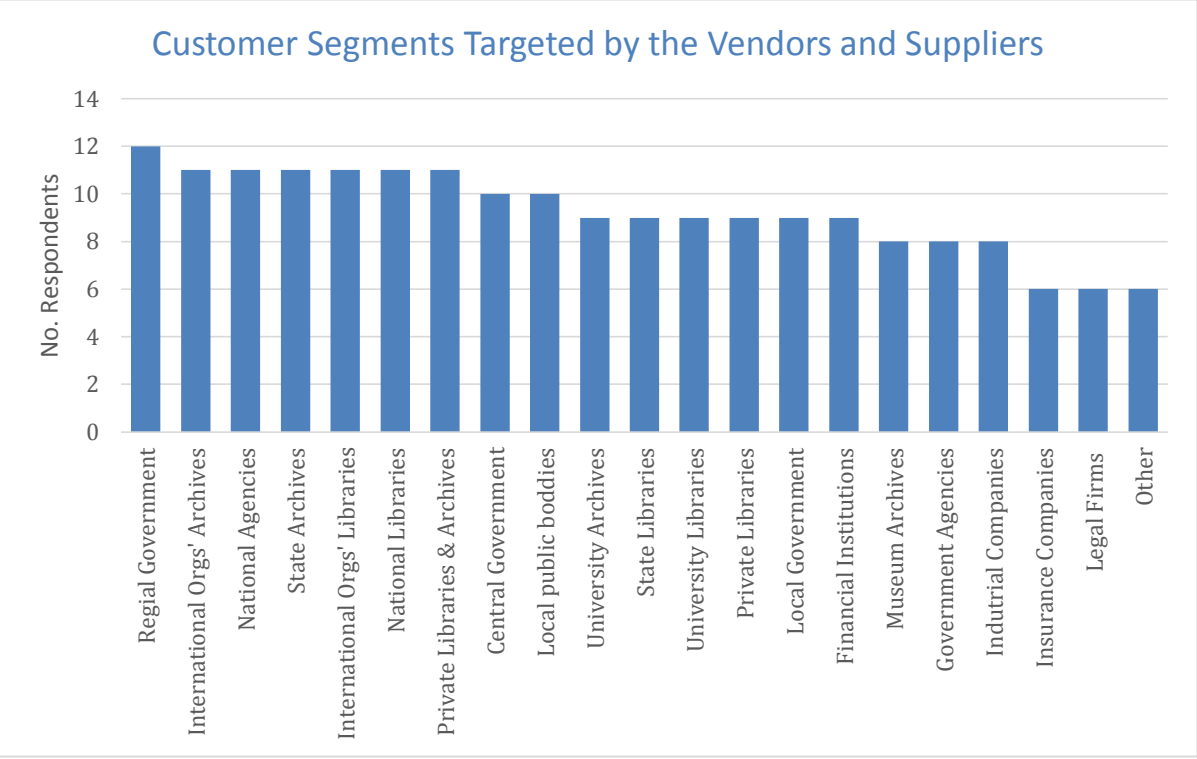
Therefore, they are important candidates to be contacted and to create a commercial partnership if possible. Of course, we will also keep adding companies to the list as we learn about them. The fact that we already have support from Hewlett-Packard CDS will make it easier to establish a working relationship with these.

3 Marketing

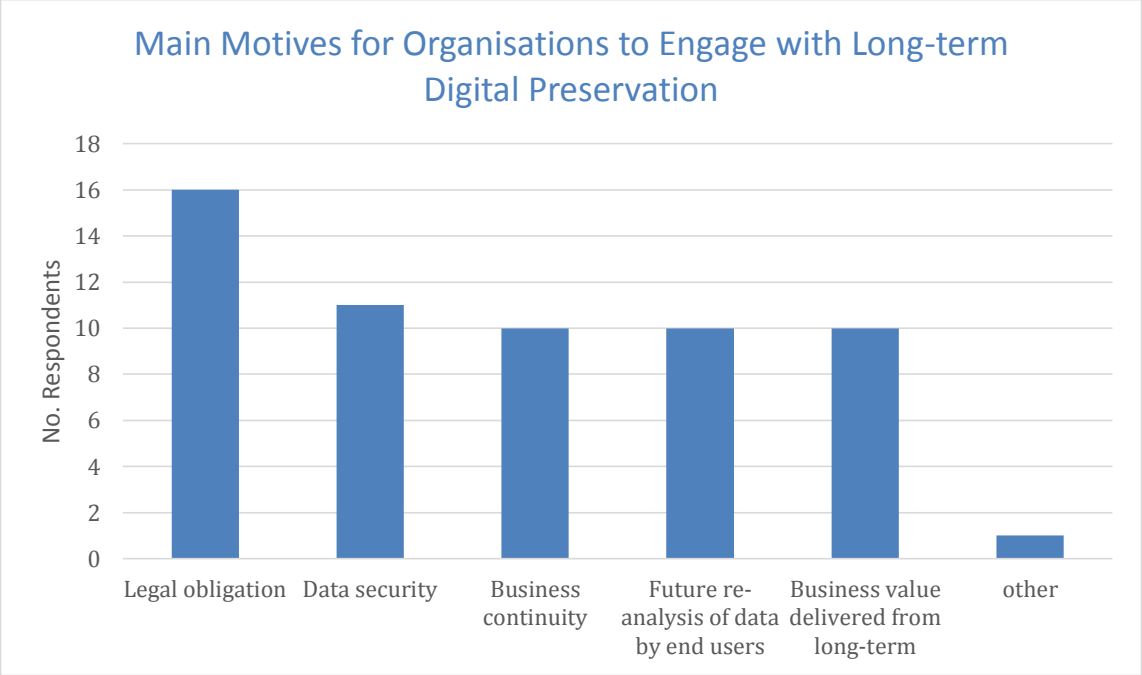
3.1 Market Analysis

According to the Planets whitepaper (An Emerging Market: Establishing Demand for digital Preservation Tools and Services. July 2010) the digital preservation market is still in its infancy. Ibis World Research estimates a **growth rate of c. 10 % – 12 % per year, until 2019**, within the European Union alone. As such, the relevance of digital preservation is extending far beyond memory institutions into all business sectors as the financial sector, healthcare organisations, pharma and oil and photographic industries. For many, though, digital preservation is seen as an onerous obligation not an opportunity to realise the long-term value of existing resources.

Memory institutions are culturally predisposed to retaining information and see inherent long-term value in it. By contrast, other sectors are having this imposed on them from outside, by legislation or business pressures, and regard it as 'another drain on the bottom line'. This is manifested in the lack of digital preservation policies, or their incomplete nature, and the short-term project-based nature of budgets, which vanish in times of economic uncertainty. It is also seen in the confusion about what digital preservation entails.



Customer segments targeted by the planets supplier and vendor briefings' participants



Main motives for organizations to engage in long-term digital preservation

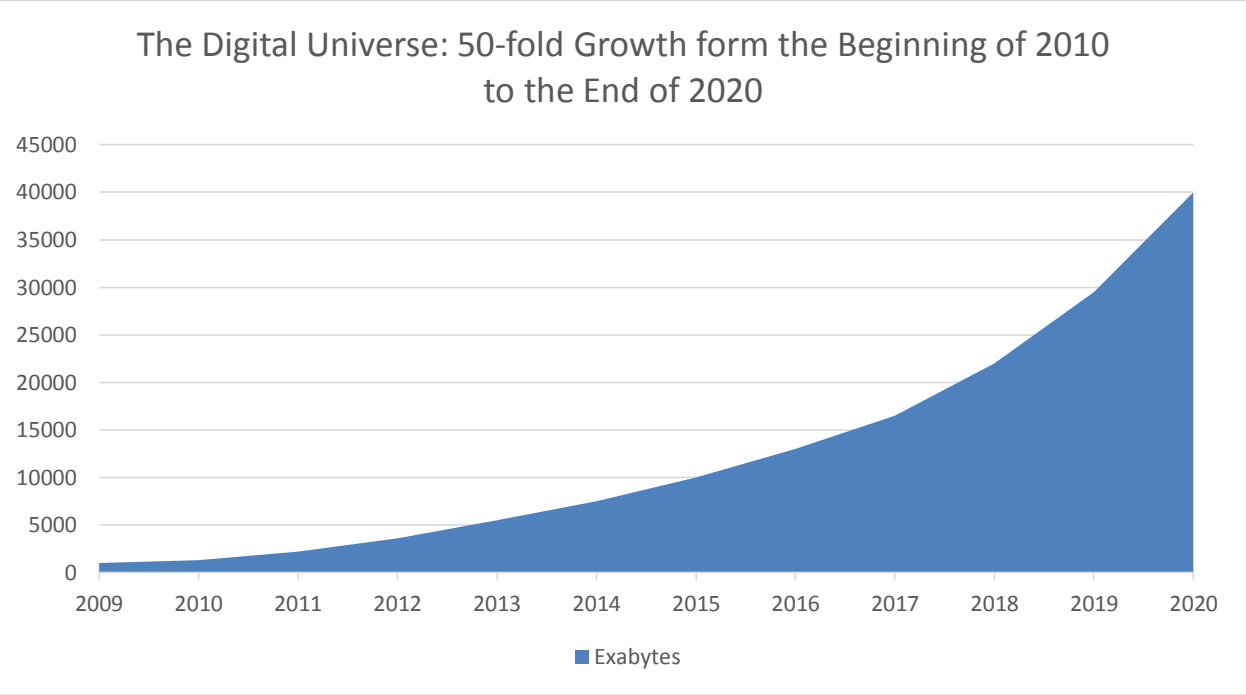
Solutions already need to deal with a wide variety of content and this will only increase in the future. It is therefore no surprise that scalability to high rates of ingest and volumes of content are important now and all research seems to indicate that potential clients care deeply about this. Although preservation is not yet deemed to be necessary for as long as 50 years, the ability to trust a preservation solution to keep an object intact and accessible is regarded as important. The need for preservation standards is recognised, as is the need for their rationalisation. While there is a strong preference for migration, there is emerging recognition that emulation has a place for particular types of content.

Future engagement requires work to be done to raise awareness about the importance of preserving digital information and to articulate a business case for it. At the most basic level there needs to be a clear definition of what digital preservation is. Following on from that, the costs and benefits of digital preservation need to be set out and the cost of no action needs to be clearly demonstrated.

Further guidance on how to implement digital preservation is required and there is a demand for information and training. There is an on-going need for the development of tools and services, in particular to cater for the needs of smaller organisations with fewer resources (SMBs – small and medium businesses account for over 60 % of the European Economy, according to the European Commission). Finally, workable approaches to emulation need to be developed and so predispose end-users to use it where appropriate.

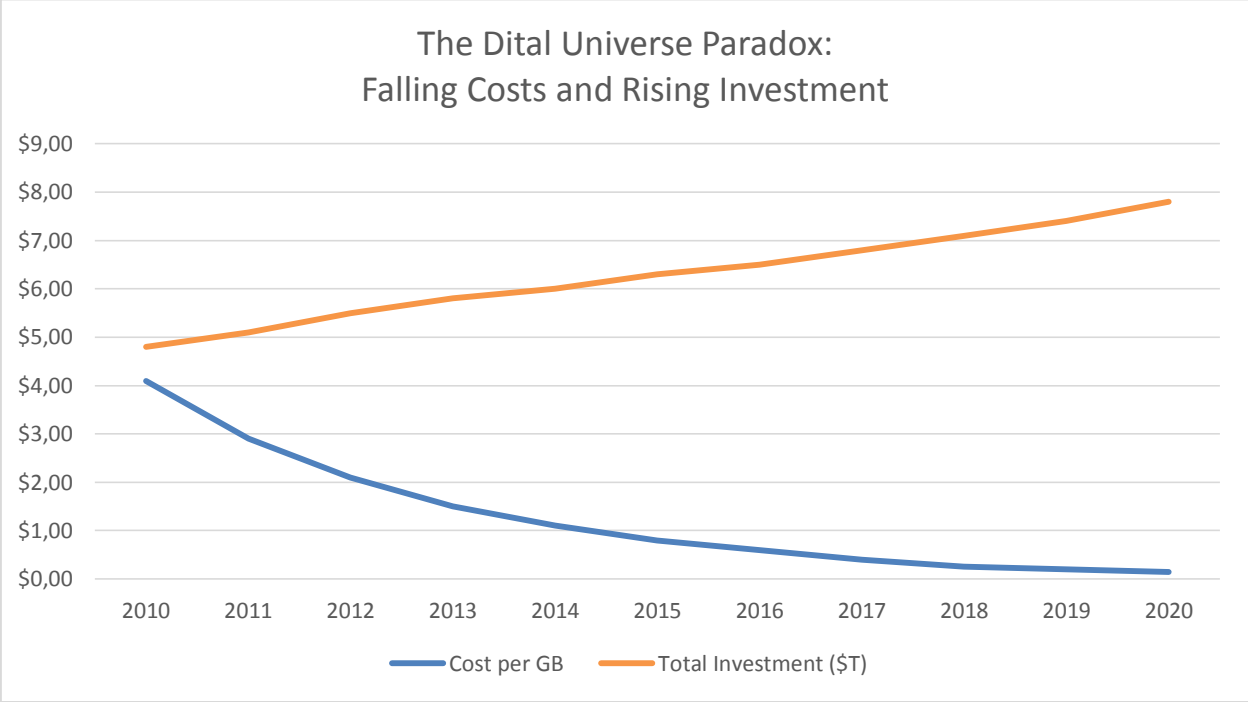
On the other hand, IDC reported the exponential growth in digital information and stated that the number of "files," or containers that encapsulate the information in the digital universe, is growing even faster than the information itself as more and more embedded systems pump their bits into the digital cosmos. They forecasted a growth by a factor of 8 in the 2011-2016 periods and just a slight growth of IT staff available to manage them. Since 2005, the investment

by enterprises in the digital universe has increased 50% to $4 trillion. That represents money spent on hardware, software, services, and staff to create, manage, and store and derive revenues from the digital universe.
IDC estimates that by 2020, as much as 33% of the digital universe will contain information that might be valuable if analyzed, compared with 25% today. This untapped value could be found in patterns in social media usage, correlations in scientific data from discrete studies, medical information intersected with sociological data, faces in security footage, and so on. However, even with a generous estimate, the amount of information in the digital universe that is "tagged" accounts for only about 3% of the digital universe in 2012, and that which is analyzed is half a percent of the digital universe. Herein is the promise of "Big Data" technology — the extraction of value from the large untapped pools of data in the digital universe.



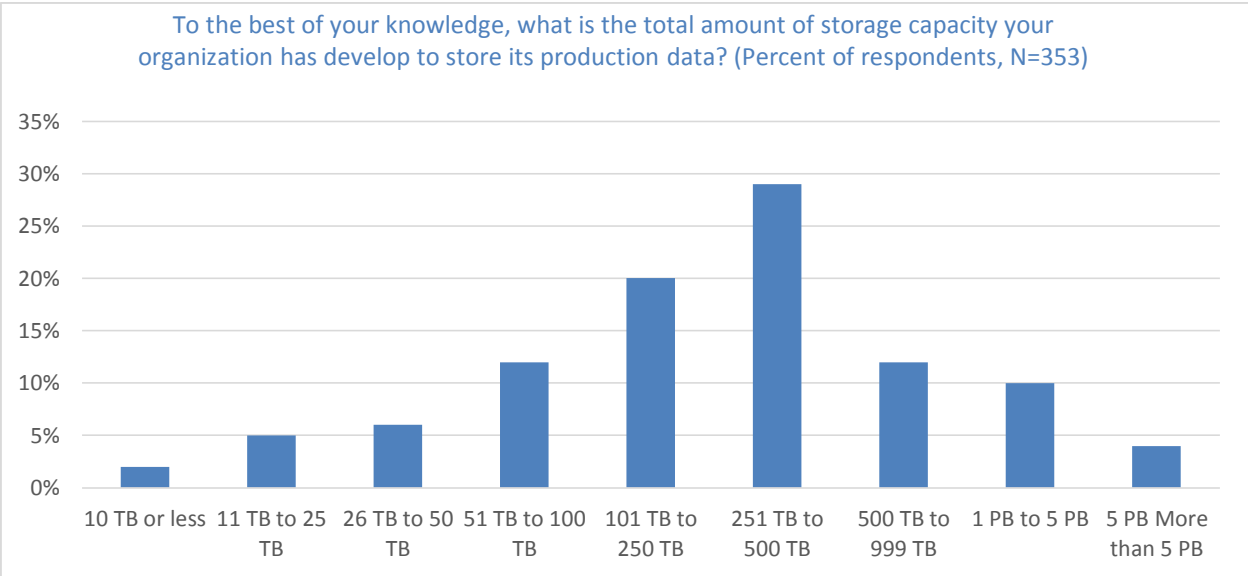
Source: IDC's Digital Universe Study, sponsored by EMC, December 2012

However, the CIOs, data scientists, digital entrepreneurs, etc. already know the value that can be found in this ever-expanding collection of digital bits. Hence, there is excitement about Big Data technologies, automatic tagging algorithms, real-time analytics, social media data mining, and myriad new storage technologies.

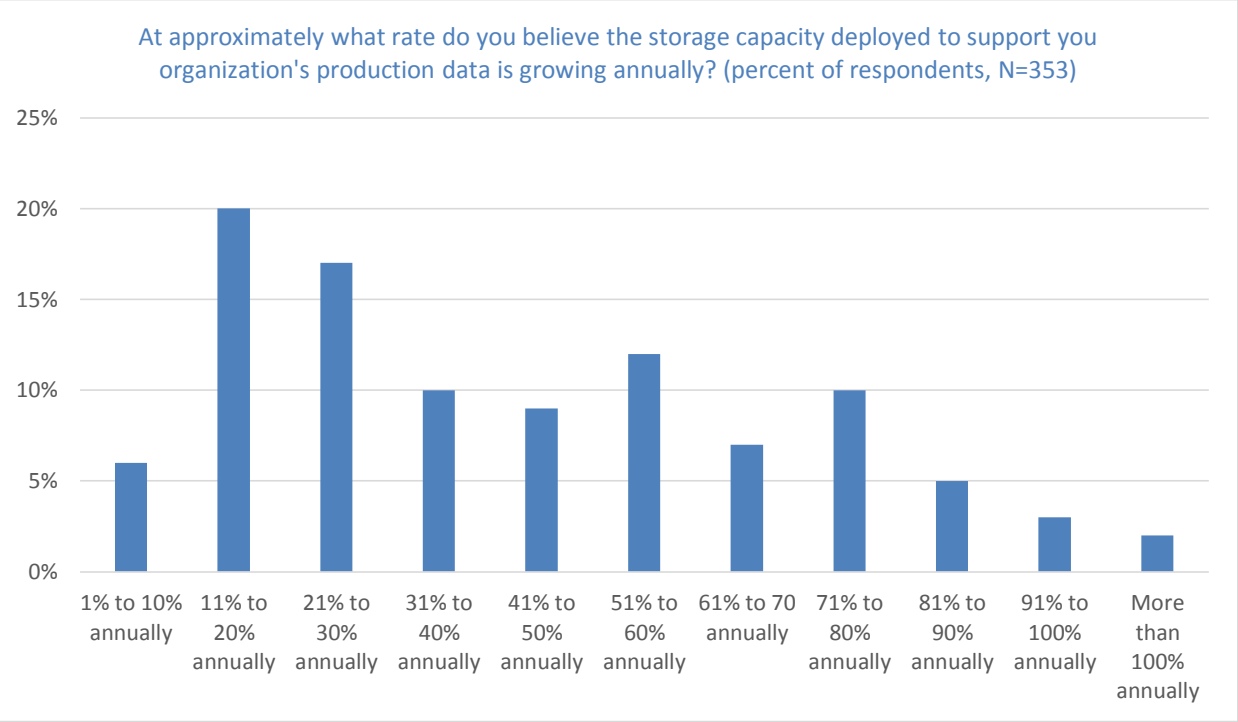


Source: IDC's Digital Universe Study, sponsored by EMC, December 2012

Finally, an ESG Report 2014 reveals the current amount of storage capacity in terms of archiving for enterprises as well as its expected annually growth. ESG also states that a growing number of people are beginning to realize that while archives and backups are different, they are complementary with both having a reasonable place of consideration within one's overall data protection strategy.



Source: Enterprise Strategy Group, 2014.

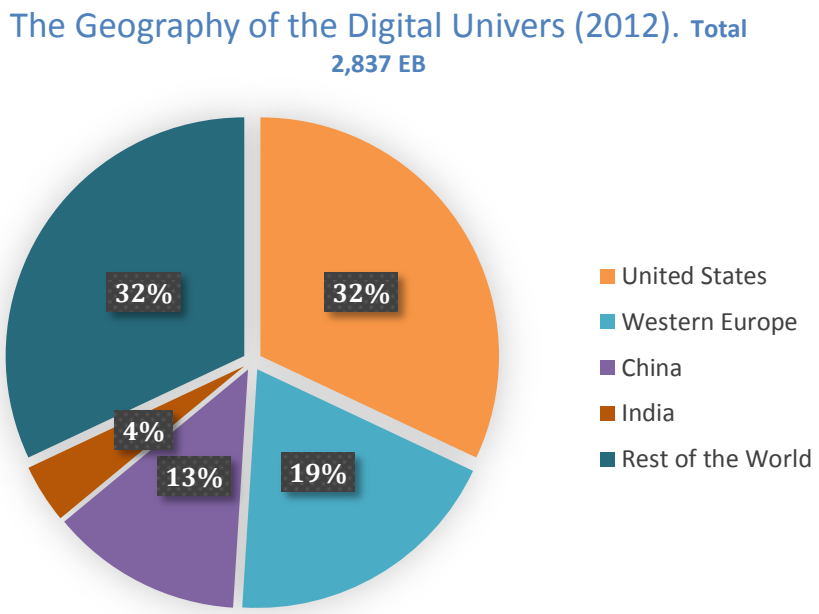


Source: Enterprise Strategy Group, 2014.

3.2 Market Segmentation

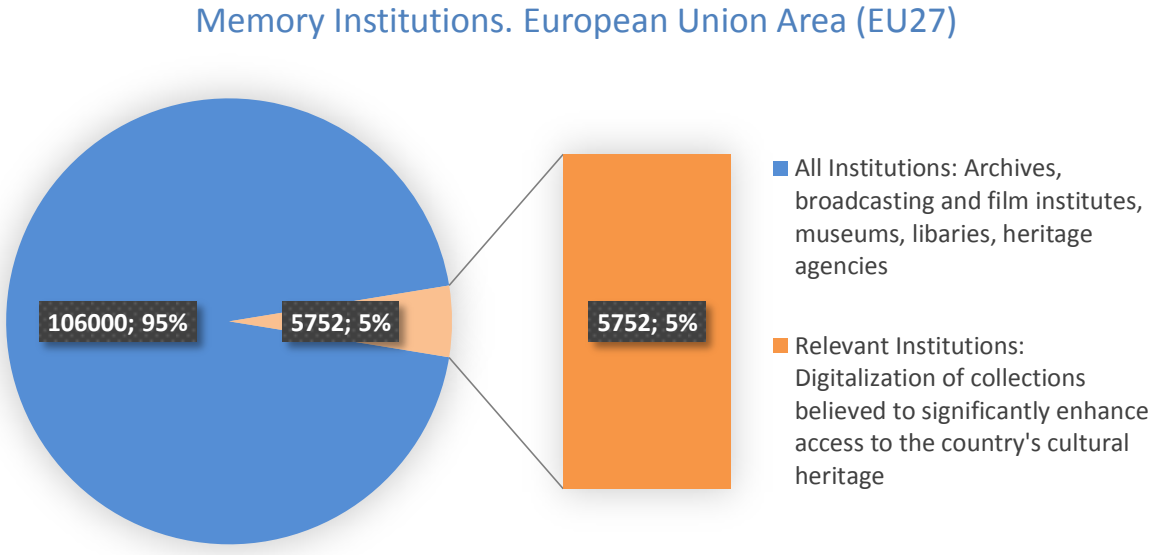
Although the bits of the digital universe may travel at Internet speeds around the globe, it is possible to assign a place of origin to them and chart the map of the digital universe.

In the early days, the digital universe was a developed world phenomenon, with 48% of the digital universe in 2005 springing forth from just the United States and Western Europe. Emerging markets accounted for less than 20%. However, the share of the digital universe attributable to emerging markets is up to 36% in 2012 and will be 62% by 2020. By then, China alone will generate 21% of the bit stream entering the digital universe.



Source: IDC's Digital Universe Study, sponsored by EMC, December 2012

Focusing in Europe as an example of the DPF Manager Market segment, it is shown in the next figure that within the 106,000 Institutions found in the EU27 area, around 6,000 relevant institutions[1] are culturally predisposed to retaining information and see inherent long-term value in Digital Preservation:



Source: NUMERIC's FP7 Project. 2009

[1] NUMERIC's FP7 Project. Developing a statistical framework for measuring the progress made in the digitisation of cultural materials and content. Study deliverable № 8. 2009.

The number of estimated relevant institutions by cultural domain and by country are shown in the next table.

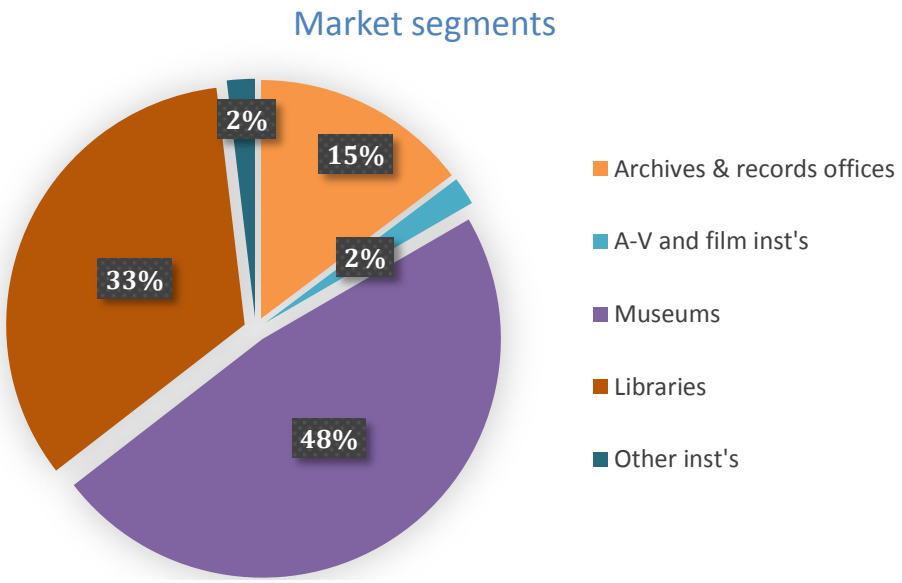
Source: NUMERIC's FP7 Project. 2009

Country/ Type of Institution	Archives and records offices	A-V & film inst's	Museums	Libraries	Other inst's	All domains
Austria	15	7	33	14	2	**71**
Belgium	24	9	54	15	18	**120**
Bulgaria	3	4	15	14	1	**37**
Cyprus	1	6	37	60	4	**108**
Czech Republic	29	1	162	41	4	**237**
Denmark	1	3	8	2	-	**14**
Estonia	1	2	21	5	-	**29**
Finland	17	2	60	15	1	**95**
France	154	27	101	156	39	**477**
Germany	17	3	528	249	4	**801**
Greece	11	8	15	6	8	**48**
Hungary	85	4	184	156	1	**430**
Ireland	3	3	31	49	-	**86**
Italy	100	3	424	48	3	**578**
Lithuania	2	1	6	6	-	**15**
Luxembourg	2	1	5	1	3	**12**
Latvia	2	3	110	27	-	**142**
Malta	1	-	2	2	-	**5**
Netherlands	50	5	73	32	6	**166**
Poland	8	3	18	88	2	**119**
Portugal	10	2	50	22	2	**86**
Romania	20	1	230	312	2	**565**
Slovakia	47	2	63	14	3	**129**
Slovenia	7	2	102	68	1	**180**
Spain ‡	55	2	104	101	3	**265**
Sweden	56	4	91	60	1	**212**
United Kingdom	119	1	227	360	1	**708**
EU27	**840**	**109**	**2754**	**1923**	**109**	**5735**

†In most countries these 'other types' comprised specialist organisations, where the principal activity did not fall conveniently under any of the main institutional headings. In France, the 'Services du patrimoine' (archéologie et inventaire) accounted for the number shown. In Belgium, these other types tended to be heritage centres, theatres and technical or administrative organisations.

‡ In Spain, the identified sample omitted archives, and therefore, the study team have estimated the number of such relevant institutions.

Memory and heritage institutions that need to preserve content such as museums, libraries and archives are the main target of the DPF Manager. So our first market strategy will be focused on being a "go-to resource" for them. Notwithstanding, other Institutions such as Universities or Municipalities are considered potential users of the conformance checker solution.



To reach this wide market we will actively search for stakeholders (memory institutions) and service providers and developers to join the community with the aim to deploy the DPF Manager services worldwide.

3.3 Competition

File format validation tools are used to determine the level of compliance of a digital object to the specification for its pretended format. This is very important to ensure that these files will be compatible with future viewers and therefore guarantee its preservation.
On the one hand, some of the reference tools on file format validation are:

- **JHOVE** (http://jhove.sourceforge.net/) [OS]. JHOVE provides functions to perform format-specific identification, validation, and characterization of digital objects.
- **JHOVE2** (https://bitbucket.org/jhove2/main/wiki/Home) [OS]. With respect to JHOVE, JHOVE2 project generalizes the concept of format characterization to include identification, validation, feature extraction, and policy-based assessment. The target of this characterization is not a simple digital file, but a (potentially) complex digital object that may be instantiated in multiple files.

It can be seen in the respective project websites that JHOVE and JHOVE2 software it has not been updated since 2013 and the communities are not showing an active activity.

On the other hand, CECO (Centre de coordination pour l'archivage à long terme de documents électroniques), a community of state archives from Switzerland, has develop a tool that validate TIFF files:

- **KOST-Val** (http://kost-ceco.ch/cms/index.php?id=250,436,0,0,1,0) [OS]. KOST-Val is a java application which validate TIFF, SIARD, PDF/A and JP2 files. The tool integrates JHOVE for TIFF validation.

3.4 Pricing

DPF Manager will be an open platform with a high modularity that will allow memory institutions to easily add, modify and adapt specialized modules in order to personalize TIFF file analysis to their processes. DPF Manager will become the reference project for memory institutions to validate the conformance of their TIFF files for long-term preservation.

In order to be able to cater to all of our target markets**, we intend to initially monetize DPF Manager in the following different ways**:

1. **Cloud-based/SaaS preservation platform**
2. **On premise deployments**
3. **Technical support and maintenance contracts**
4. **Market place**
5. **Certification for service providers**
6. **Consultancy services: customization, maintenance and technical support**
7. **Training courses**

As we have explained in the section *3.2.2 DPF Manager Services*, the DPFM will be offered as a Cloud-based/SaaS and on premise service. On the one hand, we will offer **Cloud-based/SaaS services** to those clients that want to simplify DPF Manager's adoption process and maintenance. We will offer different packages accordingly to the volume of files to be processed in the PDF Manager. An annual fee of 1,500 Euros will be charged to the customer to cover the costs of the VPS server and technical staff costs. Moreover, consultancy services and training courses will be offered to the institutions.

On the other hand, we will offer **on premise deployments** to those clients that want to keep the full control of content, so we will charge them for the service of installing the platform in their institution. Depending on the complexity of the required implementation, we will charge between 5,000 and 9,000 Euros for the installation on premise of the platform.

And then an annual fee of 2,000 Euros will be applied to those who subscribe the maintenance service.

Furthermore, the **open framework** will allow 3rd parties to develop and include their own modules in the **Market place**. The platform is open to software developers and integrators which can add their modules to the platform, e.g. a module for correcting TIFF files formats. Basically, any company could offer the same service than the DPF Manager developer team, but since we are the ones who have the knowledge we will be able to validate the correct functionality of the new modules and administrate the Market place. As far as we will manage the community and the social media channels, leads will be generated to our market place. For that reason, we will charge a commissions (30% of goods sold) to the 3rd parties' sellers.

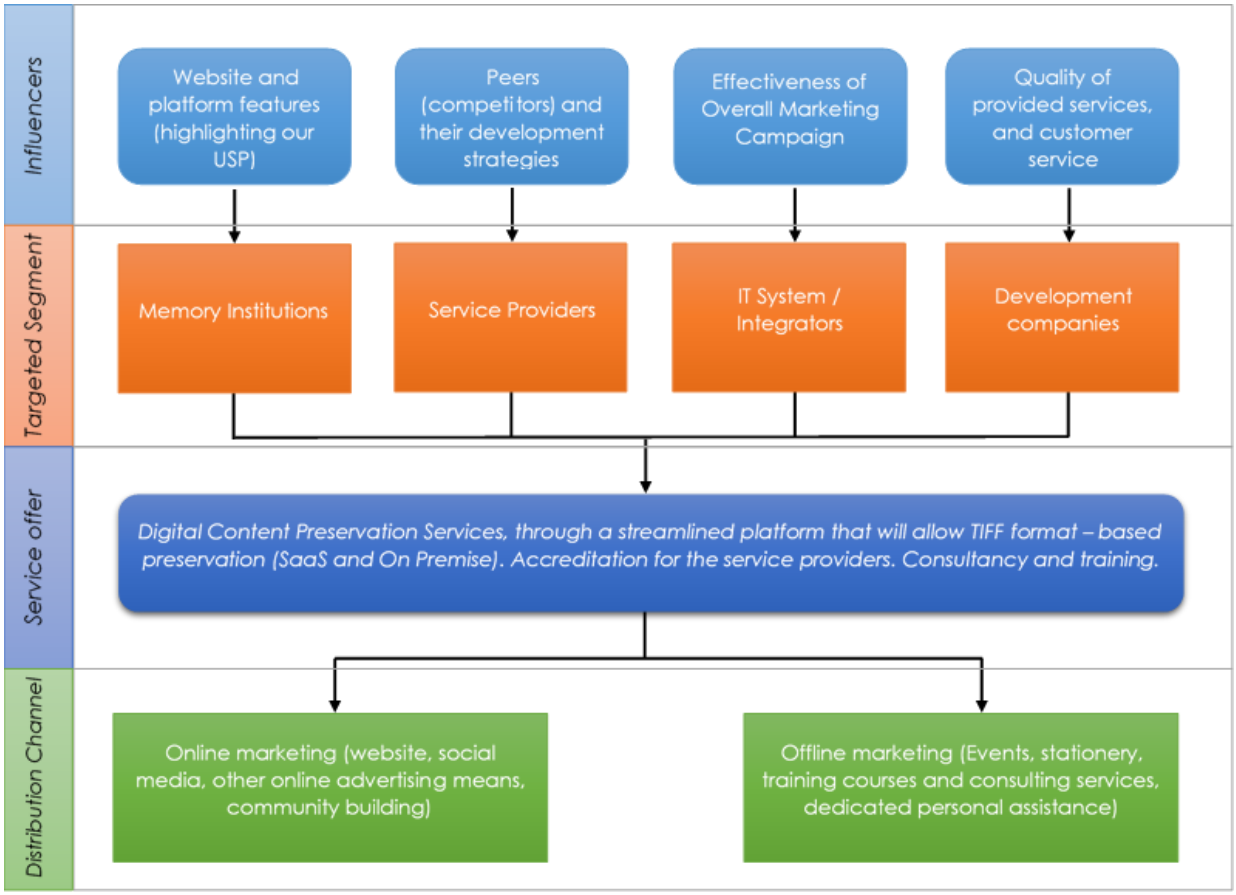
Moreover, we will offer **certifications to providers** that want to offer the service of installing the software on premise or SaaS to the institutions. As we are the ones who have the knowledge of the DPF Manager we will be able to create "a certification for the providers" being interested in deploying the DPF Manager. As certified providers, they will receive training, technical support and publicity, allowing them to spread the platform in their countries. The best we achieve this is by certify and allow them to make money offering the platform. As a result, we will monetize the DPF Manager charging them a certification fee of 6,000 Euros (which includes 25 hours of technical support). If more support is needed we will offer packages of hours. We aim to reach 50 certified providers of our platform by year 3 of our analysis, growing from 10 accredited providers during our first year.

Finally, we will offer consultancy services and/or training courses to our clients and to 3rd parties interested on offering our services. Different types of training courses will be defined to cover need of different profiles. So we will offer Training courses for developers and integrators with a fee of 500 euros per person for a 2 days training course, and for end-users with a fee of 1,200 euros per Institution without limit of participants.

Service	Pricing (VAT excl.)	
Cloud-based SaaS service	1.500 €	annually
On premise deployment	5,000 / 9,000 €	
Technical support and maintenance contracts	2,000 €	annually
Market place (3rd parties modules)	30%	Of good sold
Certification for service providers	6,000 €	
Consultancy services	75 €	Hourly rate
Training courses to developers & integrators	500 €	Per person
Training courses to end-users	1,200 €	Per institution

3.5 Marketing Strategy

The market where we activate is constantly growing, and as a result, additional competitors can always enter the market. However, entry barriers are considerable, due to the amount of capital required for the successful design and implementation of similar platforms.
Considering the market we activate in, we have established the following general business model to guide our activities:



Our main focus will be on Memory institutions, especially on those who see inherent long-term value in Digital Preservation. Their need to preserve data digitally is constantly growing, and as such, so is our market potential. We will identify them and reach out via online and offline marketing strategies.
So, following as example the figures showed in the Market Segmentation section we estimate being able to reach the 5,26% of total target market during the first three years, using this strategy. Nevertheless, we will not be focusing only in the European market but worldwide.
In parallel, we are also planning to work with service providers interested on offering our services and certificate them to do that.
Our business model is based on the typical operating model and attempts to consider buyer behaviour patterns. In Europe and in this market in particular, competition for such services is generally encouraged. For every service and product there will be substitutable options to select

from online and in physical locations. We benefit from the fact that our platform is operational and we can thus apply targeted marketing campaigns in order to generate a high number of potential clients for our online, open-source platform.
The market is best described as an oligopoly. Within this situation, there are several agents of supply, identified as our competitors, and many agents for demand (i.e. the target market that we are addressing).
Consumers within the market assess that there are non-price differences between competitors, for example deliverability of the platform, as well as flexibility in the sense that the platform can pertain to their specific needs. As such, they are willing to pay for additional services, should those services be provided in a streamlined manner, and without any kind of disruption.
The fact that the market is oligopolistic means that each competitor pays attention to the development patterns of its rival companies. As a consequence, it adapts its own strategy based on the actions and strategies of similar companies. The DPF Manager team will do the same, i.e. constantly monitor its competitors, in order to observe and counteract to any of their sales and marketing strategies.
Since our platform is open source and ready for launch, it can be improved by any willing user with a passion for technology and data preservation. Obviously, we will encourage the implementation of our platform within memory institutions via online purchases (with the approach of cloud-based/SaaS services), as they are faster, more reliable, and at the moment, more economical (in terms of price), than any of our competitors.
In attempting to persuade potential clients to make online purchases for implementing the platform within their memory institution, we will emphasize on characteristics of the DFP Manager platform. Such an implementation is faster, more flexible and dynamic, and also reduces maintenance costs for the buyer.

3.5.1 Marketing Strategy Highlights

The primary objective of our marketing strategy will be to build a strong online community, interlinked with various aspects of the DPF Manager, ranging from features development to functionality, testing or other various users. We aim to grow the platform in a durable manner, and we can only achieve this through the development of a strong online community, involving developers, integrators, researchers, consultants, standardization bodies and memory institutions. To achieve so, several free training courses and events will be offered for selected members of the communities, together with some free access to some premium services.
Our marketing strategy will be based on cost – effectiveness, in the sense that DPF Manager will seek expansion through social networks and 'word-to-mouth' marketing, along with participating in related events or conferences that discuss the digital preservation challenges and trends. All these elements are discussed in thorough details below.

3.5.2 Key Staff

In order to achieve this, we will hire a 'Community Manager'. The manager will have important tasks and metrics to monitor and objectives to achieve, in order to grow our network and build a strong community. Within DPF Manager, the Community Manager will have the following attributions:

- Will ensure the implementation of the current strategy and will design operational targets for DPF Manager's client engagement,
- Will guarantee optimal engagement from DPF Manager, in addressing all inquiries via social networks, website or any other means of communication,
- Will measure social impact and ensure the establishment of a proper reputation for DPF Manager,
- Will design and implement creative communication and field management engagement techniques that will drive a growing number of users towards our website and to join our network,
- Will manage all the company's social network pages, ranging from LinkedIn to Facebook and Twitter,
- Will identify, develop and foster relationships with key institutions within DPF Manager's areas of interest,
- Will cultivate relationships that drive impact through support of organizations' social missions, particularly valid for memory institutions that we are targeting, such as libraries, archives, museums and galleries, but also other institutions, such as city councils or universities,
- Will provide consultation and technical support to the company's leadership in the establishment of community relations goals, objectives, and strategies and develops/ communicates plans to meet established goals to the company's management on a monthly basis,

The Community Manager will create tracking strategies to monitor and evaluate impact of programs in market; in addition, s/he will develop reports on the general effectiveness of the marketing strategy in reaching out to our target market, and will make recommendations for strategy enhancements and improvements, should the targets be below the expected levels.
Given the fact that the Community Manager will receive a budget, s/he will ensure that all expenditures are within established parameters, emphasizing cost efficiencies.
DPF Manager will establish several activities aimed at helping it achieve its goals and generate both relevant traffic to our website, as well as leads for the company. These activities are detailed below:

- Community building
- Consulting and support services
- Implementation of a thorough SMM strategy
- CRM usage
- Sales team management

Our advertising and promotional strategy will consist of a properly designated marketing campaign, including, but not limited to having an interactive website, the use of email marketing, newsletters, SEO optimization, social media, Google Ads, but also price sheets, portfolios and dedicated sales force. As offline means of promotion, we will participate in digital preservation conferences. Our activities will include the following:

Marketing action	Expected result	Completion date
Community building	Reach at least 1,000 Facebook and LinkedIn friends by the end of our first year of operations	1st year of operations,
Consulting and support services	Implementing the platform to at least 200 clients within our first year of operations,	1st year of operations, then continuing for the 2nd and 3rd year,
Implementation of a thorough SMM strategy	SMM strategy with clear goals and monthly objectives in terms of website and social media visits, and inquiries via each of our communications channels,	First 2 months of operations,
Sales Team Management	Draft sales team. Sales team begins operating and uses CRM for client management	First 2 months of operations, after which the sales team will have a continuous activity, monitored on a monthly basis,

3.5.3 Strategy Elements

We will build pages on all relevant social networks, and communicate with our clients via LinkedIn, Facebook, Google Plus, Twitter and Youtube (demo videos, tutorials, highlights of our DPF Manager platform), amongst others. All these channels of communication will benefit from care and will have our logo visible and noticeably placed within the page or video.
The primary approach will be to identify and befriend at least 1,000 museums, libraries, archives and galleries within the first year with which to become connected on social networks. Through cold calling, contact will be established with each of these institutions on a continuous basis. A monthly target for contract establishments will be set. Emphasis will be put on building a strong community, through social media sites such as Facebook and Twitter.

Note: Based on input from the Community Manager, we will decide on each of these websites and budgets for ads and if we should use them or not, given our budget constraints. All budgets will be reviewed on a monthly basis, in order to keep them in line with our development strategy.

3.5.3.1 Website

DPF Manager will develop, own and operate a new website that will have low management and maintenance costs. The website will be advertised as the DPF Manager Project and will integrate specific tools to facilitate the collaboration of the community. The website will be used as a landing page for all our visitors and clients, and will be available in several languages, including English, German, Spanish and French for start. Clients will be able to view and browse all the information about the project and the unique features of the DFP.
The website will have links towards our social media pages (Facebook, Twitter, etc) and will have flexible design, based on highlighting the functionality of the platform.
In time, as our portfolio grows, we will have a 'Portfolio' or 'Impressum' section built, where visitors can see our most important partners, i.e. museums, libraries, galleries or archives from each country in particular, along with links towards their respective pages. Additionally, we will

add a few words from each representative of these memory institutions, in order for visitors to understand WHY and HOW DPF Manager is the best option for them, in terms of data file preservation management.
A SEO (Search Engine Optimization) and SEM (Search Engine Marketing) strategy will be designed and implemented by the Community Manager, in order to grow our number of visitors and boost our exposure via social networks. The goal would be to increase the community and expand our market exposure and reach as many potential clients as possible. The website will have a blog linked (with at least 1 blog posting per week), where members and clients can subscribe to receive news and updates about DPF Manager features.
We are considering promoting ourselves online through:

3.5.3.2 Community development programmes

We are a community – based company, and we can grow and develop only if we benefit from the support of a very strong online community, consisting of developers, integrators, researchers, consultants and users. We will seek to befriend each member working on the platform, via social networks, and attempt to gain feedback on the platform's functionality, in order to constantly improve it and grow the community.
DPF Manager will advertise several **community development programmes** aimed at turning all the members of our community into active participants to the enrichment of the platform and its evolution.
Some activities to be performed are:

- **Demonstrations:** several demonstrations will be performed during the first month of operations.
- **Working days:** organizing working days periodically with the purpose of training developers and adopters.
- **Virtual hackatons:** to empower the community over the social networks and get more developers and stakeholders.

3.5.3.3 Social Media Marketing

We will actively **build social network communities** and monitor the company's LinkedIn, Facebook and Twitter pages, amongst others. The main emphasis of using social media will be to target and maintain a positive relation with our clients and get leads via our online communication channels. We will contact with opinion leaders and bloggers and will find experts and stakeholders, **creating a set of diffusion channels** to inform about the platform, its capabilities, news or updates.
We will contact with **Standardization Organizations**, one of the most important stakeholders for the DFP Manager. Also, **3rd parties** such as other platforms (e.g. JHOVE), communities (e.g. Open Planets Foundation), or big companies (e.g. PDFTools AG) with the aim to establish communication links and create collaboration channels.
Also, we are keen on growing our 'friends' network, but we will also attempt to highlight our services and promotions. Exposure and quality content will be a key element for our strategy.

If needed, in the future, we will use Facebook Ads and Twitter Ads in to target specific users from various memory institutions, based on the market segmentation that we've conducted above.

3.5.3.4 Word-of-Mouth, traditional media and Presentation Folders

DPF Manager will be present in specialised forums and fairs. Presentation folders will be printed and handed out at the conferences where we will be participating, throughout the first and second years of our operations. C. 2,000 presentation folders will be printed and given out to potential clients. All these folders will contain graphically enticing design, clear contact information on Performa, along with our features and functionality benefits.

Examples of the conferences where we will aim to be present include, but are not limited to:

- Conference of the International Council on Archives
- ESA's PV Annual Conference,
- The IFDO Conference,
- The Data@MLibrary Conference,
- Other related events,

3.5.3.5 Discount Schemes

All discount schemes that DPF Manager will offer will be advertised through our online communication means and social media pages, as soon as we will reach a number of at least 1,000 friends on social networks.

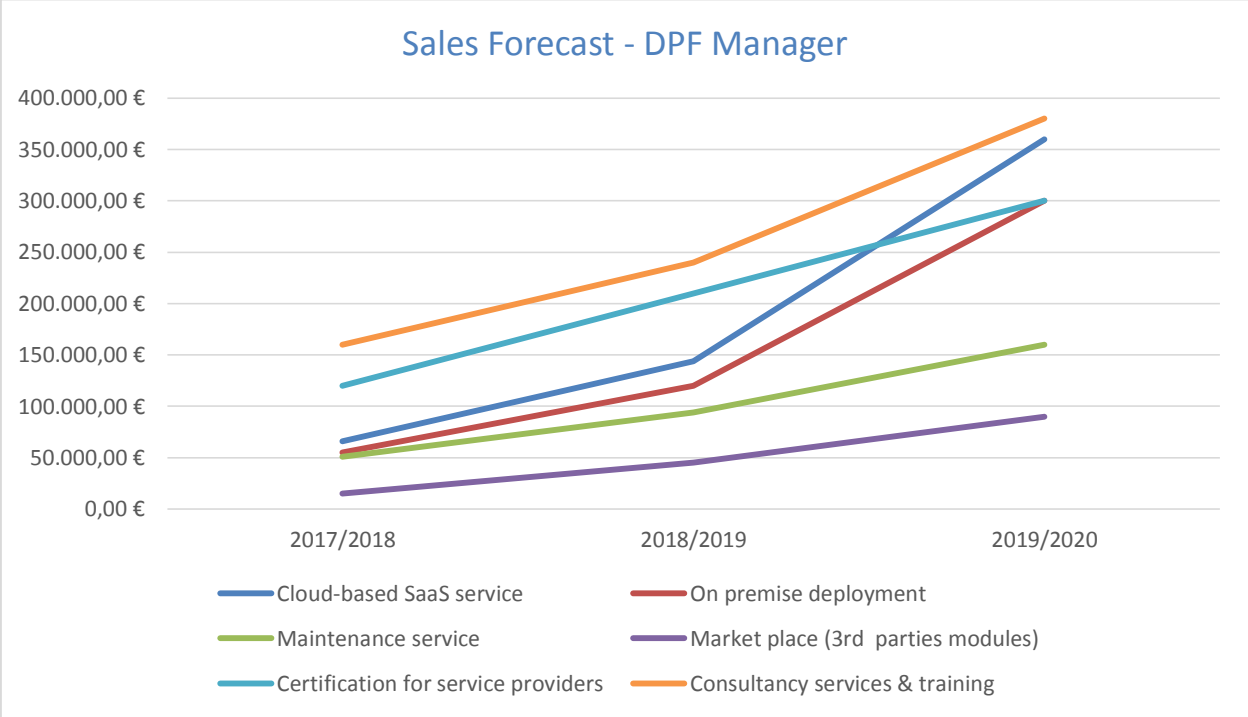
However, we will continuously study the market, and our competitors, in order to observe any discounts or promotions that they themselves are offering. This will allow us to develop our own strategies, so as to counteract these measures.

4 Financial Projections

4.1 Sales Forecast

Gross sales come from sales directly made to our stakeholder and also to service providers and integrators. Worth of note is the fact that the results are very promising. As it can be seen in the table and the figure of this section, on the one hand, most of the income is expected to come from consultancy services and from the certification and maintenance offered to the service providers. On the other hand, and important income can be foreseen from offering both approaches of the DPF Manager cloud-based and on premise.

Net Sales	*2017/2018*	*2018/2019*	*2019/2020*
Cloud-based SaaS service	66.000,00 €	144.000,00 €	360.000,00 €
On premise deployment	55.000,00 €	120.000,00 €	300.000,00 €
% Target captured	0,96%	2,11%	5,26%
Technical support and maintenance contracts	51.000,00 €	94.000,00 €	160.000,00 €
Market place (3rd parties modules)	15.000,00 €	45.000,00 €	90.000,00 €
Certification for providers	120.000,00 €	210.000,00 €	300.000,00 €
Number of certifications	20	35	50
Consultancy services & training	160.000,00 €	240.000,00 €	380.000,00 €
Gross Sales	***467.000,00 €***	***853.000,00 €***	***1.590.000,00 €***



4.2 Operational and Marketing cost estimation

In order to provide Cloud/SaaS services, our main costs will be the VPS servers where the DPF Manager will be installed and also the technicians that will give support to the adopters:

	2017/2018	2018/2019	2019/2020
VPS Servers	10.000 €	20.000 €	30.000 €
Maintenance Technicians (FTE)	2	3	4
Maintenance Technicians (Cost)	60.000 €	90.000 €	120.000 €

On the other hand, to provide on premise services, our main costs will be the consultants and technicians in charge to deal with the design and implementation of the DPF Manager deployments in-memory institutions:

	2017/2018	2018/2019	2019/2020
Consultants (FTE)	2	4	6
Consultants (Cost)	80.000€	160.000€	240.000€
Technicians (FTE)	4	6	10
Technicians (Cost)	120.000€	180.000€	300.000€

Finally, the main Marketing costs will be mainly the cost of the community manager, who will be the responsible for boosting the DPF Manager community. Agent sales will be hired to attend on-demand orders and to promote the DPF Manger services.

	2017/2018	2018/2019	2019/2020
Community manager (FTE)	1	1	2
Community manager (Cost)	30.000€	30.000€	60.000€
Business agents (FTE)	2	3	4
Business agents (Cost)	80.000€	120.000€	160.000€

4.3 Finance

From this point and taking into account previous information, our expected estimations during the first three years of commercial exploitation are the following:

Net Sales	***2017/2018***	***2018/2019***	***2019/2020***
Cloud-based SaaS service	66.000,00 €	144.000,00 €	360.000,00 €
On premise deployment	55.000,00 €	120.000,00 €	300.000,00 €
Technical support and maintenance contracts	51.000,00 €	94.000,00 €	160.000,00 €
Market place (3rd parties modules)	15.000,00 €	45.000,00 €	90.000,00 €
Certification for providers	120.000,00 €	210.000,00 €	300.000,00 €
Consultancy services & training	160.000,00 €	240.000,00 €	380.000,00 €
Gross Sales	**467.000,00 €**	**853.000,00 €**	**1.590.000,00 €**

COGS (Cost of Goods Sold	***2017/2018***	***2018/2019***	***2019/2020***
Fixed Costs	40.000,00 €	50.000,00 €	90.000,00 €
Variable Costs	60.000,00 €	90.000,00 €	120.000,00 €
Customer Support Costs	200.000,00 €	340.000,00 €	540.000,00 €
Gross Costs	300.000,00 €	480.000,00 €	750.000,00 €
Inflation Rate	0,50%	1,00%	1,30%
COGS	**301.500,00 €**	**484.800,00 €**	**759.750,00 €**

Operations and Product Dev	***2017/2018***	***2018/2019***	***2019/2020***
General / Admin Costs	15.000,00 €	30.000,00 €	55.000,00 €

Sales and Marketing	80.000,00 €	120.000,00 €	160.000,00 €
Product Engineering	15.000,00 €	25.000,00 €	40.000,00 €
Operating Costs - Total	***110.000,00 €***	***175.000,00 €***	***255.000,00 €***

Summary	***2017/2018***	***2018/2019***	***2019/2020***
Gross Sales	467.000,00 €	853.000,00 €	1.590.000,00 €
COGS	301.500,00 €	484.800,00 €	759.750,00 €
Gross Profit	**165.500,00 €**	**368.200,00 €**	**830.250,00 €**
Operations and Product Dev	110.000,00 €	175.000,00 €	255.000,00 €
Funding	100.000,00 €		
Net impact to Operating Cash	**-44.500,00 €**	**193.200,00 €**	**575.250,00 €**

NPV	***2017/2018***	***2018/2019***	***2019/2020***
Cash Flow	165.500,00 €	368.200,00 €	830.250,00 €
Actualized CF	137.916,67 €	255.694,44 €	480.468,75 €
NPV	***874.079,86 €***		
IRR	***218,60%***		

The overall conclusion of the financial analysis done in this chapter is that DPF Manager is in fact an attractive project for its exploitation. The income statement registers promising earnings of 1,590,000€ in the third year, which represents a fast growth and deployment of the DPF Manager. Easy Innova can afford initial cost of operation due to the fact that the DPF Manager will be developed and ready for operating and the fact that will ensure that all expenditures are within established parameters, emphasizing cost efficiencies. With this approach we expect a NPV of 874,079.86€ by the end of the third year and an IRR of 218.60% taking into account and initial investment of 100,000 to cover the initial operational costs.

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March 12th, 2015

Dear Dr. Montaner,

As you know Hewlett-Packard CDS is a service-oriented business with a strong focus on quality of service and customer satisfaction.

After your presentation and looking at the documentation and business plan of DPF Manager we would like to express our interest in the project. We believe that there are potential sources of revenue that are worth exploring together.

We think that your proposal to establish a commercial partnership between Easy Innova and Hewlett-Packard CDS merits further discussion, and we will follow with interest the development of the project.

Sincerely,

Miquel Tarragona,
Service & Delivery manager
Hewlett-Packard CDS

hp