

Search the Past Web with Arquivo.pt

Forum on the archiving of the Polish Internet resources

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Who are we?



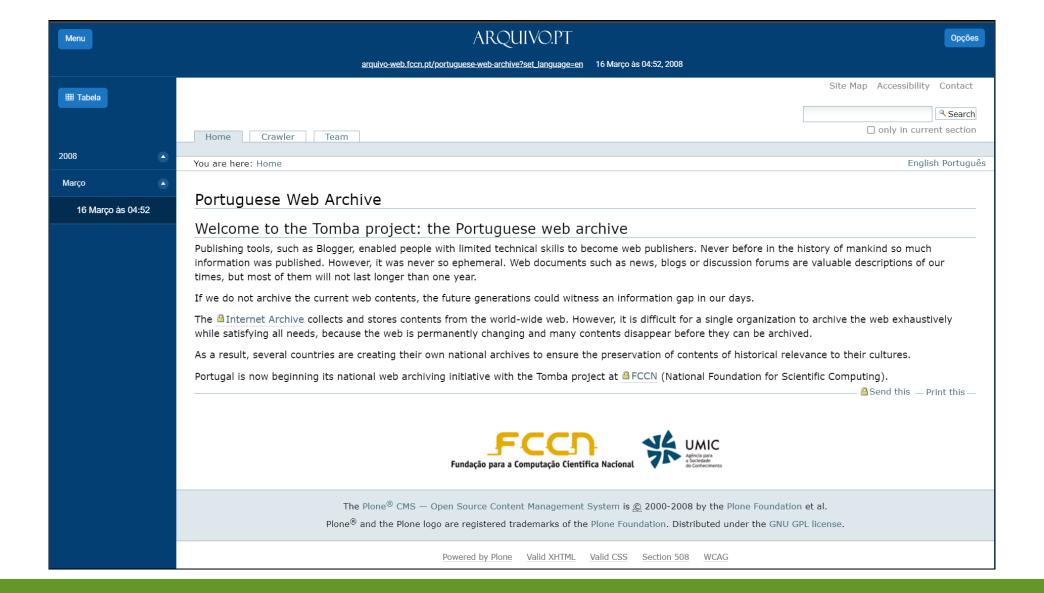
Free online service to research the Past Web Preserves **publicly accessible** information related with:

- Portugal
- Research and Education (international)

Governmental service provided by Foundation for Science and Technology (Portugal)

A digital research infrastructure

Arquivo.pt begun in 2007



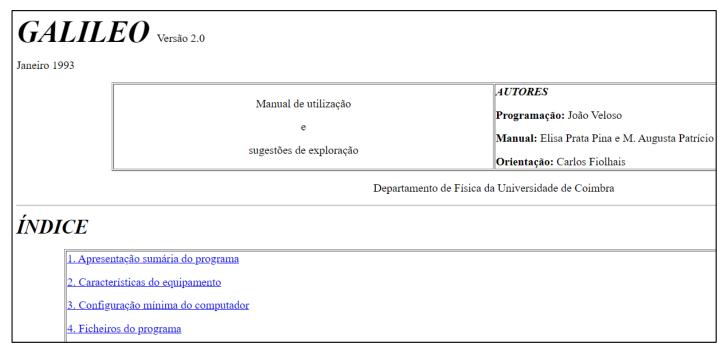
Arquivo.pt is used word-wide



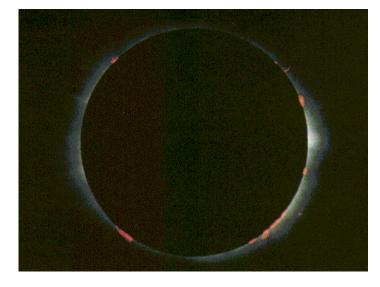
Country	Users % Users
1. Portugal	46,891 46.56%
2. Substitution United States	26,373 26.19%
3. Brazil	2,266 2.25%
4. Russia	2,234 2.22%
5. Image United Kingdom	2,231 2.22%
6. Japan	2,172 2.16%
7. [◆] Canada	1,237 1.23%
8. Mozambique	1,213 1.20%
9. India	902 0.90%
10. Germany	894 0.89%

- 53% of users are international
- User Interfaces and documentation also in English
- Combined with Google Translate enables cross-lingual access to preserved content

Arquivo.pt preserves national and international historical web content



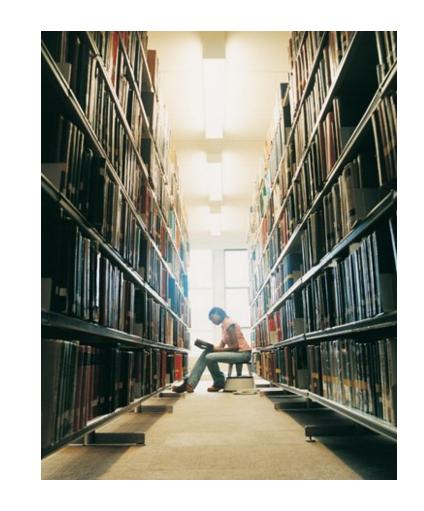
nautilus.fis.uc.pt - 1993 (oldest page)



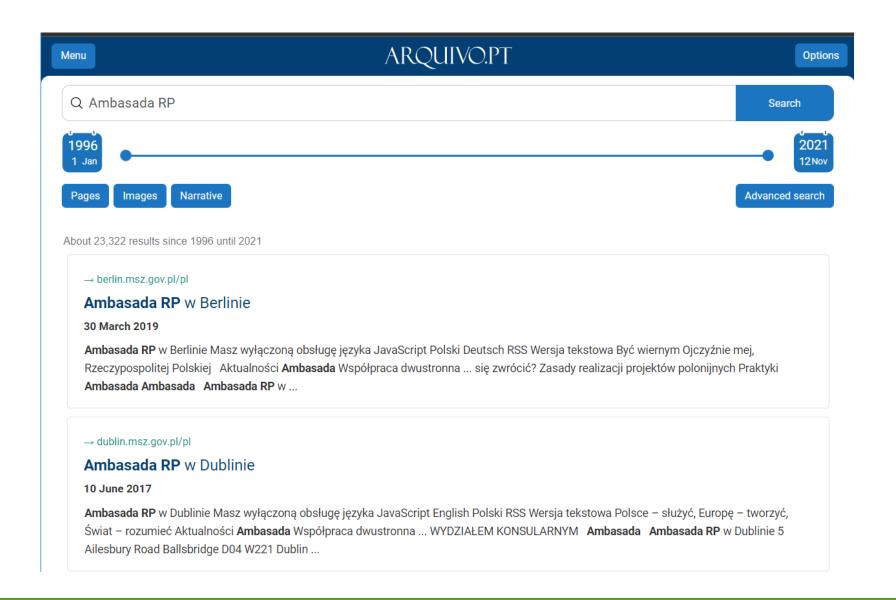
spacelink.nasa.gov - 1992
(oldest image)



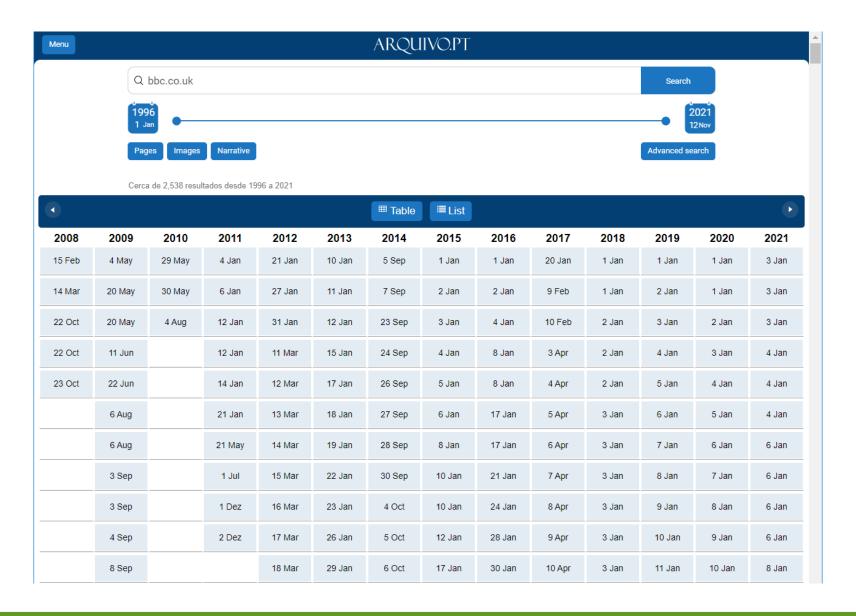
How to **search** and **access** the preserved information?



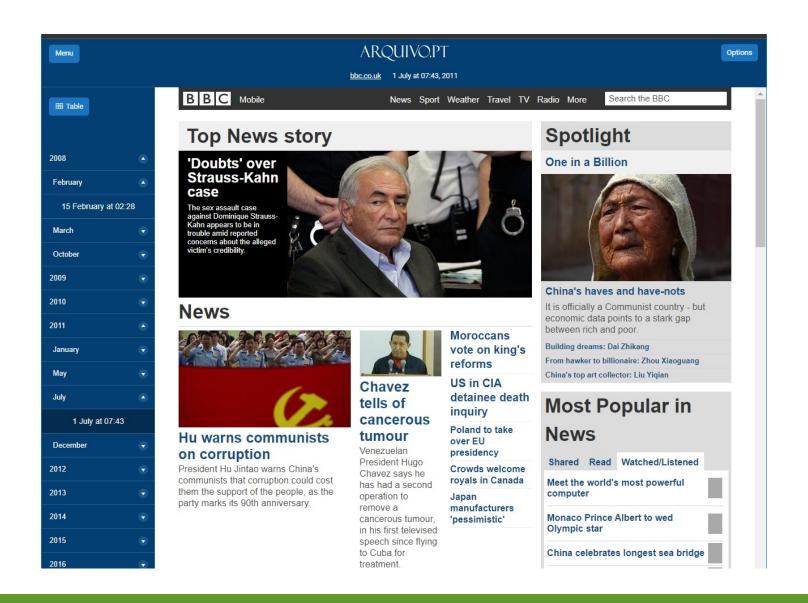
Search texts from the past in any language



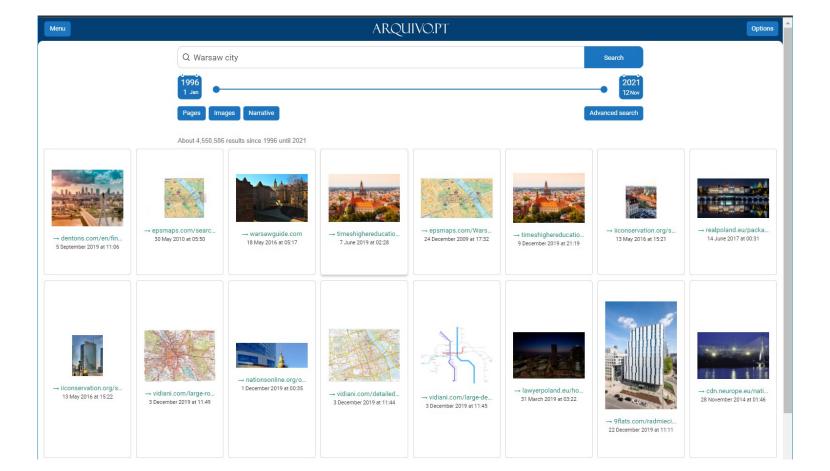
Search the **history** of a web address



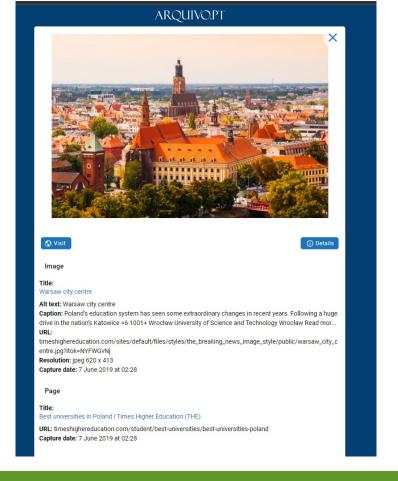
Browse bbc.co.uk 10 years ago











Application Programming Interfaces to develop new applications

Your new app











Arquivo.pt APIs

APIs

Daniel Gomes edited this page 11 days ago · 33 revisions

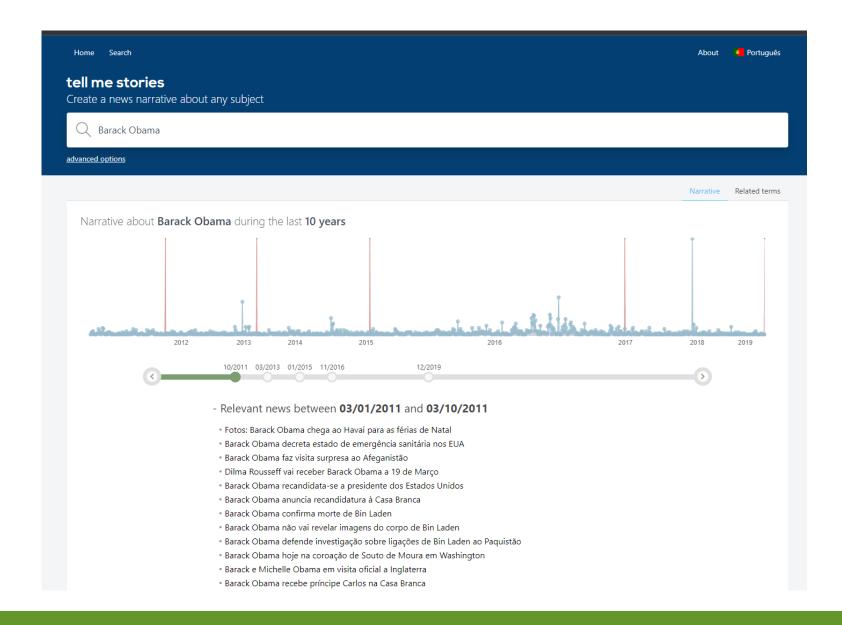
APIs specific to Arquivo.pt that enable the full exploration of its functions

- Arquivo.pt API (Full-text & URL search)
- Image Search API v1.1 (beta version)

APIs based on international standards to enable interoperability among web archives and code reuse

- CDX-server API (URL search)
- Memento API (URL search)

Arquivo.pt API in action: TellMeStories.pt



Automatically generates **narratives** about any subject based on online news from the Past.

Winners of the Arquivo.pt Award 2018.



Collections and automatic selection

Public list of Arquivo.pt collections

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2	- fX = IMPORTRANGE("https://docs.google.com/spreadsheets/d/1hfLyq9N2ZJEd1hra2V0OPI24jTy42ByR6M667rG-oHo/edit", "Summary!A2:G")								
	А	В	С	D	E	F	G	Н	
1	Collection ID	Description	Collection Start date	Collection End date	Total files (Number of URLs collected)	Total seeds (Preserved sites)	Total volume of WARCS files (TB)	Collection in Production? (URL, Page and Image indexed)	
2	AWP1	1st Complete crawl of the Portuguese web, mainly from the .PT domain, in 2008.	2008-02-12	2008-03-06	56,046,288	154,787	1.60	hildrightarrow	
3	AWP2	2nd Complete crawl of the Portuguese web, mainly from the .PT domain, in 2008.	2008-03-11	2008-05-30	48,718,404	-	1.60	$ \mathbf{Z} $	
4	AWP3	3rd Complete crawl of the Portuguese web, mainly from the .PT domain, in 2008.	2008-10-21	2008-12-10	51,863,006	193,294	2.00	\mathbf{Z}	
5	AWP4	4th Complete crawl of the Portuguese web, mainly from the .PT domain, in 2009.	2009-05-01	2009-05-31	68,776,707	366,880	2.50	ightharpoons	
6	AWP5	5th Complete crawl of the Portuguese web, mainly from the .PT domain, in 2009.	2009-10-01	2009-10-31	119,135,566	373,323	3.80		
7	AWP6	6th Complete crawl of the Portuguese web, mainly from the .PT domain, in 2009.	2009-12-01	2009-12-31	118,810,364	340,018	3.50		
8	AWP7	7th Complete crawl of the Portuguese web, mainly from the .PT domain, in 2010.	2010-05-01	2010-05-31	87,988,812	389,957	2.90	☑	
9	AWP8	Incremental crawl of the Portuguese web web, mainly from the .PT domain, in 2010. The AWP8 crawl is incremental because it was performed using DeDuplicator (http://landsbokasafn.github.io/DeDuplicator/) taking the content of AWP7 as baseline. Thus, the files that remained unchanged from the AWP7 complete crawl were not archived (duplicated) on the AWP8 incremental crawl.	2010-08-01	2010-08-31	75,771,317	411.562	1.90	✓	

arquivo.pt/collections

Developed a low-cost methodology to automatically **select** and preserve online information about given topics

Preserving Websites Of Research & Development Projects

International Conference on Digital Preservation 2016, available at arquivo.pt/publications

Experiments to preserve European Union web content







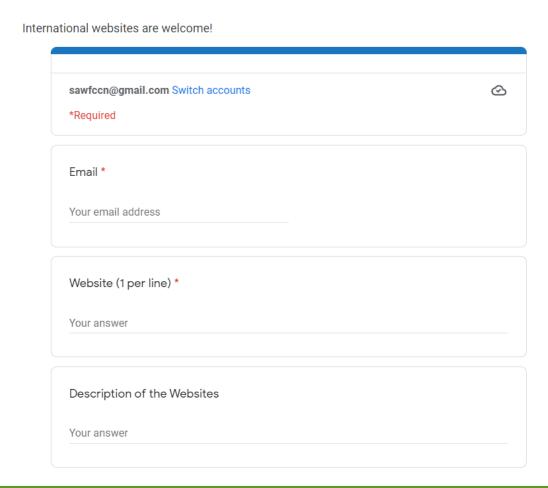


Tools to support web preservation

Suggest websites to be preserved

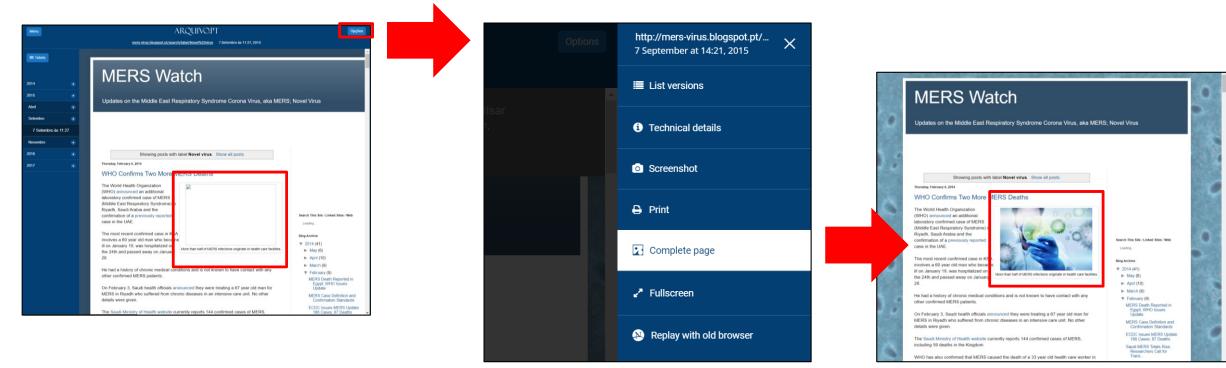
- Public form
- Any domain
- Any language
- Submit home page
- > arquivo.pt/suggest

Suggest websites to be preserved



Missing content? Complete the page!

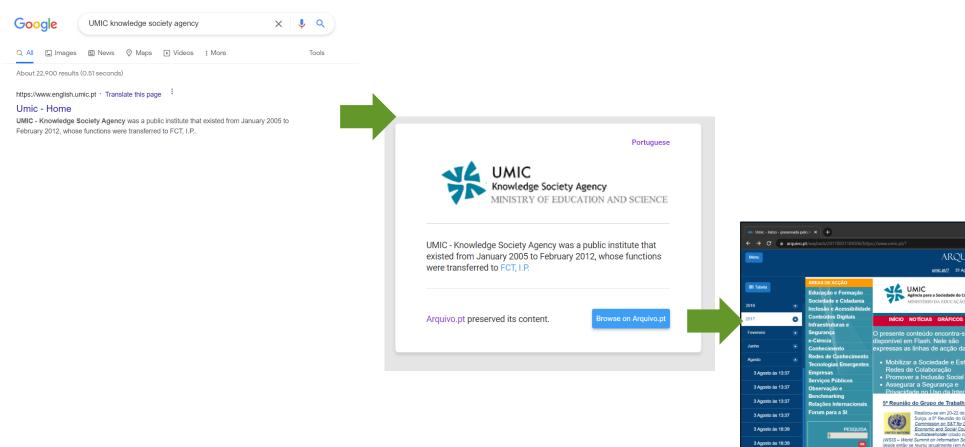




Missing files obtained from the live-web/archives are then integrated to improve the quality of the archived page

Collaborative curation: Give it a try!

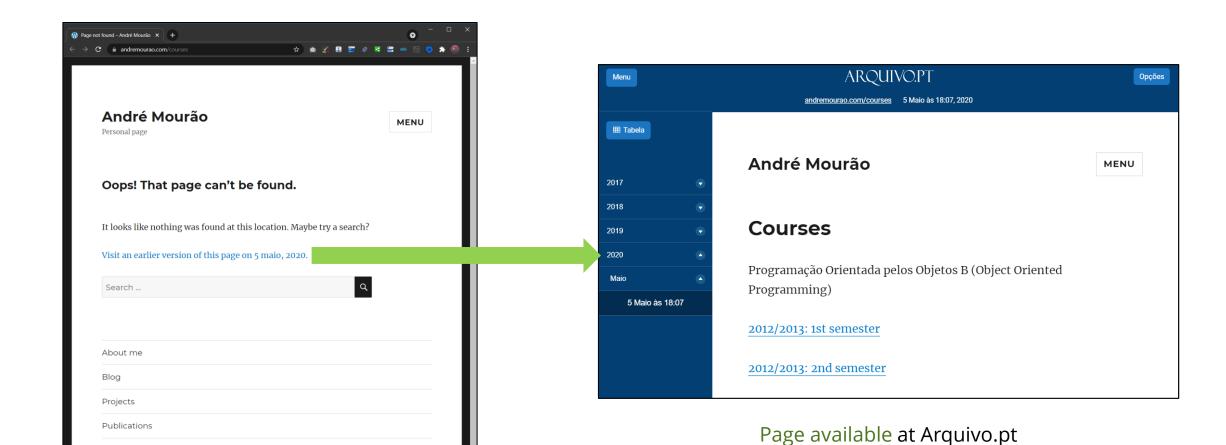
Don't kill your historical website! Preserve it in the **Arquivo.pt Memorial**: arquivo.pt/memorial





arquivo.pt/arquivo404

fix the broken links in your website!



Page not found at live website

André Mourão / Proudly powered by WordPress



Explore the Past Web

Meet the Winners of the Arquivo.pt **Annual** Awards

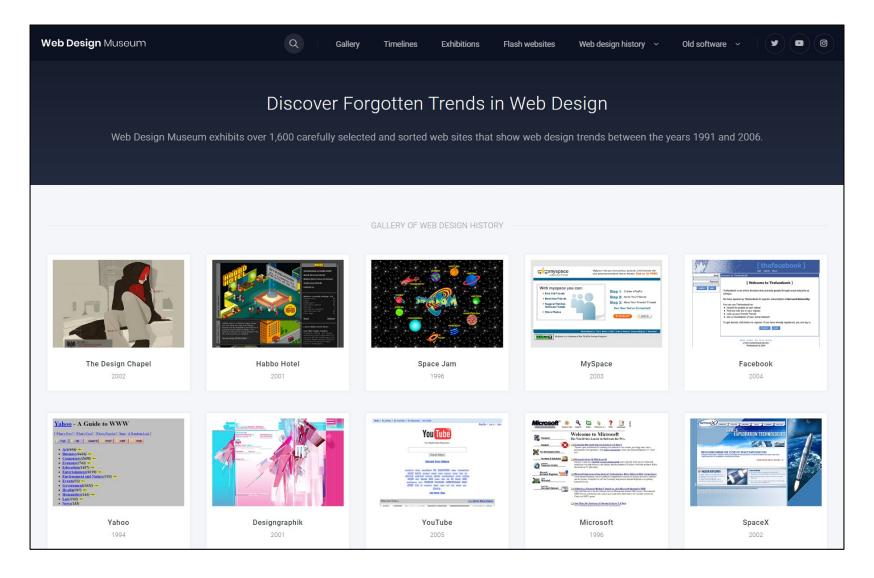




Support of the President of the Republic of Portugal

arquivo.pt/awards

Create Web Design museums



Attend Training courses about web preservation and research

New ways of searching the past (module A)

Any Internet user

Publish preservable information on the web (B)

Web authors

Automatic processing of information preserved from the Web (C)

Developers, Researchers

Do-it-yourself web archiving (D)

Researchers, Librarians, Archivists

Videos in English also available!



arquivo.pt/training



Challenges and recommendations to start a web archive

Challenges

Hire and maintain skilled human resources

- Web archiving requires specialists but is not taught at any course
- Web Archiving is Big Data, must compete with the Internet giants (e.g. Google, Facebook) to hire

Costs of dissemination

Difficult "to sell" something for free in the attention economy

Lack of awareness about the value of online information

- Information that rules our current World is published exclusively online
- "Information is power", "Data is the new oil", "Look into the past to see the future", ...
- However, societies passively lose most of their online information



Lack of awareness about the value of online information

Let's measure the value of preserving online information or

the waste of not doing it.

Investment made on creating the online information preserved in Arquivo.pt

Design/development: 27 Msites x 5 600€/website = 151 000 M€ Content: 8 000 Mpages x 68€/page = 544 000 M€

Value of the preserved heritage = 695 000 M€

Gross Domestic Product of Portugal in 2020 = **202 000 M€**



Can we afford to waste all this investment?

Recommendations to start a web archive

No part-time web archivists

- Web archiving is complex, requires full dedication
- Start with a small but autonomous web archiving team so that it does not have to permanently compete for resources

Use existing tools and services

• Webrecorder.net, Archive-it

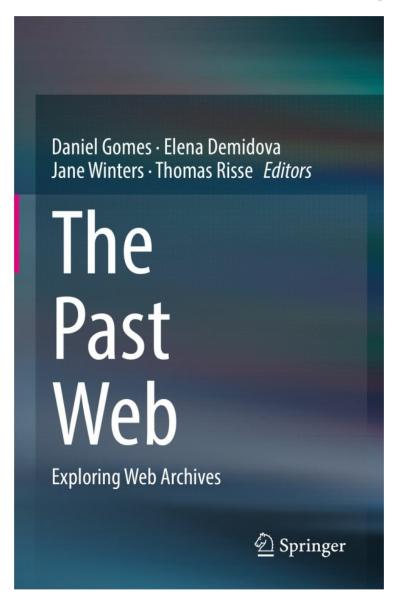
Listen to your users

Don't guess what they need, hire User Experience researchers

Start small but perform the full worklow

- Short list of websites and perform the full preservation cycle: collect, store, provide access and disseminate service
- Doing a little is infinitevely more than to do nothing

Read this book ©



Preprint version available in open access at:

arquivo.pt/book

Part 6: The future of web archiving

A Look into the Future

Front Matter

Pages 283-283

The Past Web: A Look into the Future

Julien Masanès, Daniela Major, Daniel Gomes

Pages 285-291

- ✓ ☐ The Past Web: A Look into the Future
 - ☐ 1 Evolution of the Web
 - 2 Operation of Web Archives
 - 3 Sustainability of Web Archives
 - 4 The Future of the Past Web
 - ☐ 5 Final Thoughts



Julien Masanès: the "father" of web archiving in Europe

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