FORMAT			
1. Name of resource	SILKNOW		
2. Location	https://silknow.eu/index.php		
3. Alternative location			
4. Author[s]	SILKNOW		
5. Publisher/producer/	SILKNOW		
host			
6. Year	2020		
7. Suggested citation	SILKNOW, https://silknow.eu/index.pl	np	
8. Languages in which available	English, Spanish, Italian, French		
9. Geographic area resource relates to	Europe (mainly Spain, England, France, Italy), USA		
10. Does the resource relate to a specific time frame?			
11. Type	Report	Yes	
	Toolkit/Framework/Roadmap	Yes	
	Sign-post to other resource (database) Yes	
	Case studies	Yes	
	Other	Yes (interactive	
		virtual loom,	
	videos)		
12. If this is part of an	This project has received funding from the European		
initiative, what is the	Union's Horizon 2020 research and innovation programme		
initiative?	under grant agreement No 769504.		
COLLECTIONS AND COLLECTIONS-BASED INSTITUTIONS			
	Yes		
collections			
14. Explicit links to	Yes		
museums/libraries/a			
rchives			
15. Types of institutions	Museums	X	
the resource covers	Archives	X	
	Libraries	X	
	Other	X	
16. Types of	Arts, humanities and social X		
collections/disciplin	sciences: philosophy,		
es the resource	psychology, religion, social		
covers	sciences, law, politics,		
	language, arts and		
	recreation, architecture,		
	literature, history,		
	geography and ethnology,		

	anthropology, archaeology	
	Science, natural history,	X
	technology, medicine,	
	engineering, manufacturing	
17. If no explicit links to		
collections,		
justification for		
inclusion	CTAINIADI E DEVELODATAIT	
HOW IT CONTRIBUTES TO SU		(mark all that apply)
	tivities the resource relates to t and safeguard wider cultural	
	vely, for example by targeting	and A
_	s of heritage in strategic ways	
Use collections to promote le		X
•	e to sustainable development r	
	ation for sustainable developm	
and sustainable lifestyles, hur		
promotion of a culture of pea		
•	of cultural diversity and of cultu	re's
	evelopment and/or skills develo	
relating to collections	•	
Use collections to promote co	ultural participation/social incl	usion
more effectively, for example	pation,	
to ensure no-one is 'left behir		
Use collections to promote s	ively, X	
for example by developing ne	ural	
	the rights of stakeholder groups	s in
relation to collections		
Use collections to support re		X
sustainable development (inc		
directed research at all levels		
more effectively, for example	,	
collections and information to	abla	
Make decisions around collect development more effectively	able	
	4	
i. employment (recr	()	
reduction, monito	on, greenhouse gas emissions,	
	nt and reduction of waste	
	f transport, energy use)	
	ies including copyright and IP	X
vi. governance and m		, , , , , , , , , , , , , , , , , , ,
	reparedness and risk reduction	
	artnerships and collaborations	X
	ment more effectively, for example and the more effectively.	
to trail at two taillable actions		

by developing impactful partnerships			
19. Does the resource relate clearly to any international conventions (mark all that			
apply)?			
Culture conventions:			
1952, 71 Protection of Copyright and Neighbouring Rights	X		
1954 Protection of Cultural Property in the Event of Armed Conflict			
1970 Fighting Against the Illicit Trafficking of Cultural Property			
1972 Protection of the World Cultural and Natural Heritage	X		
2001 Protection of the Underwater Cultural Heritage			
2003 Safeguarding of the Intangible Cultural Heritage	X		
2005 Protection and Promotion of the Diversity of Cultural			
Expressions			
Rio Conventions:			
Convention on Biological Diversity (CBD), Convention to Combat			
Desertification (UNCCD), Framework Convention on Climate			
Change (UNFCCC)			

AIMS AND CONTENT

20. What issues does the resource aim to address?

"SILKNOW is a research project that improves the understanding, conservation and dissemination of European silk heritage from the 15th to the 19th century. It applies next-generation computing research to the needs of diverse users (museums, education, tourism, creative industries, media...), and preserves the tangible and intangible heritage associated with silk.

Based on records from existing catalogues, it aims to produce digital modelling of weaving techniques (a "Virtual Loom"), through automatic visual recognition, advanced spatio-temporal visualization, multilingual and semantically enriched access to digital data. Its research activities and output have a direct impact in computer science and big data management, focusing on searching digital content throughout heterogeneous, multilingual and multimodal databases.

Throughout our past and present, few materials have had as important a presence as silk: economic, technical, functional, cultural and symbolic. From flags to canopies, tapestries to furniture, fans to sword sheathes, wedding gowns to traditional costumes, we can find silk in countless contexts, over the last millennia. Many people experience vivid, personal and social connections to this heritage, linked to so many life stories and collective narratives. Luxury, craftsmanship, beauty and comfort have been -and still are- associated with it. Additionally, silk trade also allowed for exchange of ideas and innovations. Punched cards were first used in Jacquard silk looms, long before modern computers were even imagined.

Nowadays, however, silk textiles are a seriously endangered heritage. There is also an associated intangible heritage -artisanal weaving techniques- at risk of disappearing. Countering those threats and making use of state-of-the-art technology, SILKNOW

	wants to showcase the splendor of silk, in Europe and worldwide, in the past and for the future.		
	What are our main goals?		
	 Semantically relating digitized European silk heritage, enabling data interoperability across different collections, for advanced searching abilities. Building a "Virtual Loom" to clone weaving techniques. This will allow users to discover the complexity, artistic and artisanal values of ancient silk textiles, while preserving them for future generations. Improving the understanding of the European silk heritage, thanks to visual tools that show the spatiotemporal relationships of data, including an open-access, multilingual thesaurus." (About) 		
21. Intended audience of resource	"This project is intended for everyone who cares for silk heritage or simply wants to know more about it." Museums and collections, education sector, ICT sector and tourism marketers.		
22. Process of development	"SILKNOW is made possible through the close cooperation of a multidisciplinary team, including areas as ICT, text analytics, image processing, semantics, big data, 3D printing, art history, terminology, textile fabrication and conservation. It is based on digital information about historical silk textiles provided by a number of museums and collections."		
23. Organisation/structure/contents	About us Partners and stakeholders Team members Work packages Target audiences Museums and collections Creative industries Education ICT sector Tourism marketers Results Our tools Publications Deliverables Conferences and events Other results Resources Downloads Other resources Evaluation		

	Net actions
	News
	Contact us
	The SILKNOW tools currently consists of 4 web-based
	applications:
	1. ADASilk (Exploratory Search Engine with STMaps)
	2. Virtual Loom
	3. Silk Thesaurus
	4. Educational Materials for learning Spanish through silk
	heritage]
FRAMEWORKS	
24. Framework	
structure	
25. Relevant policy	Yes
considerations	
26. Resources for	Yes
implementation	
identified	
27. Specific assessment	Yes
points/indicators/mi	
lestones/action plan	
for monitoring	
	ABILITY COVERED BY RESOURCE (mark all that apply)
People (social sustainability)	X
Planet (environmental	
sustainability)	
Prosperity (economic	Х
sustainability)	
Peace	
Partnerships	X
•	SIDERATIONS COVERED BY RESOURCE (mark all that apply)
Gender perspectives	, , , , , , , , , , , , , , , , , , , ,
North and South	
perspectives	
	IBUTES TO AGENDA 2030 AND THE SDGs
	E SDGs FEATURE IN THE RESOURCE
30. SDGs and Agenda	No
2030 specifically	
mentioned?	
31. SDGs specifically	No
mentioned?	
32. SDG targets	No
specifically	
mentioned?	
33. SDG indicators	No
specifically	

mentioned?

SDGs AND SDG TARGETS AND LINKAGES

34. Comments on SDG linkages

The SDGs are not mentioned explicitly, but SILKNOW can help support several SDG targets, including strengthening efforts to protect cultural and natural heritage (SDG 11.4), fostering skills for work (SDG 4.4), supporting innovation (SDG 8.2) and sustainable tourism (SDG 8.9). The resource can support scientific research on cultural heritage (SDG 9.5). The resource can support Education for Sustainable Development (SDG 4.7). Partnerships with traditional industries can support enterprise and job creation (8.3 and 8.5). Ensuring those involved in traditional crafts can benefit from sustainable development supports SDG 10.2 (universal social, economic and political inclusion). SILKNOW supports open access to information on silk heritage and technology, supporting SDG 16.10 (access to information and protecting fundamental freedoms).

35. SDGs and SDG targets the resource helps advance

SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Number of young people and adults in skills-development activities and programmes drawing on collections, for employment, decent jobs and entrepreneurship

Increase in number of young people and adults in such programmes

Number and proportion of staff who have received training in the last year, to better support their contribution to the SDGs.

Programs and processes in place to ensure the availability of a skilled workforce.

SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles,

Numbers of people in each type of programme drawing on collections from different demographic groups.

Increases in numbers of people in each type of programme from different demographic groups.

Proportion of people involved in such programmes in relation to overall audience size.

Evidence that learners have acquired knowledge and skills to promote sustainable development.

human rights, gender equality, promotion of a	
culture of peace and non-	
•	
violence, global citizenship	
and appreciation of cultural	
diversity and of culture's	
contribution to sustainable	
development	
SDG 8. Promote sustained,	
inclusive and sustainable	Number of innovation-driven projects that aim to enhance
economic growth, full and	or add to the range of activities drawing on collections.
productive employment	or dad to the range or detivities drawing on concessions.
and decent work for all	Staff training initiatives aimed at innovation, skills for
8.2 Achieve higher levels of	enterprise.
economic productivity	
through diversification,	Number of public-facing activities that make use of new or
technological upgrading and	emerging technologies, involving collections.
innovation, including	and an area of the state of the
through a focus on high-	
value added and labour-	
intensive sectors	
Intensive sectors	
SDG 8. Promote sustained,	
inclusive and sustainable	Development-oriented policies in place for the range of
economic growth, full and	activities, or development-oriented considerations are
productive employment	included in other policies.
and decent work for all	included in other policies.
• •	included in other policies. Number of micro-, small- and medium-sized enterprises
and decent work for all	·
and decent work for all 8.3 Promote development-	Number of micro-, small- and medium-sized enterprises
and decent work for all 8.3 Promote development- oriented policies that	Number of micro-, small- and medium-sized enterprises
and decent work for all 8.3 Promote development- oriented policies that support productive	Number of micro-, small- and medium-sized enterprises supported.
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship,	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation,	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises.
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support
and decent work for all 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support
and decent work for all 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and mediumsized enterprises, including	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support
and decent work for all 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and mediumsized enterprises, including through access to financial services	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium- sized enterprises, including through access to financial services SDG 8. Promote sustained,	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support provided to micro-, small and medium-sized enterprises.
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium- sized enterprises, including through access to financial services SDG 8. Promote sustained, inclusive and sustainable	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support provided to micro-, small and medium-sized enterprises. Increase in number of people in full and productive
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium- sized enterprises, including through access to financial services SDG 8. Promote sustained, inclusive and sustainable economic growth, full and	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support provided to micro-, small and medium-sized enterprises. Increase in number of people in full and productive employment relating to collections, through job creation
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium- sized enterprises, including through access to financial services SDG 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support provided to micro-, small and medium-sized enterprises. Increase in number of people in full and productive
and decent work for all 8.3 Promote development- oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium- sized enterprises, including through access to financial services SDG 8. Promote sustained, inclusive and sustainable economic growth, full and	Number of micro-, small- and medium-sized enterprises supported. Number and proportion of formalised arrangements with micro-, small- and medium-sized enterprises. Total value of financial services or financial support provided to micro-, small and medium-sized enterprises. Increase in number of people in full and productive employment relating to collections, through job creation

and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value collections in productive employment.

Increase in number of men, women, young people and persons with disabilities in development and training programmes drawing on collections that support them in employment.

Removal of pay disparities by gender and/or other status for those working with collections.

Policies and plans in place to ensure that all suppliers and others in the supply chain are in decent and productive work.

SDG 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all 8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

Numbers of jobs created or supported that relate to sustainable tourism drawing on local products (e.g. craft producers).

Develop and implement plans to reduce and remove negative impacts of tourism.

Numbers of activities and/or products drawing on local culture.

Value to artisans and source communities of activities and products drawing on local culture.

SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization

9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

Number and proportion of collections facilities that effectively support research and researchers.

Number and proportion of staff who are appropriately skilled to undertake and support collections-based research.

Expenditure on initiatives to enhance and upgrade collections facilities.

Numbers of staff engaged in supporting and developing research use based on collections.

Number of initiatives to encourage innovation drawing on collections.

Increase in number of research and development workers per 1 million people.

Increase in public and private research and development spending being used to develop and make use of collections.

SDG 10. Reduce inequality within and between countries

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

Collections development to ensure that collections effectively meet the needs of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

Numbers and proportions of people making use of collections in relation to the demographic of the local population.

Numbers and proportions of people involved in focused programmes aimed at promoting social, economic and political inclusion.

Numbers and proportions of people from different demographic groups involved in decision-making processes relating to collections and collections-based institutions.

Number and types of partnerships that build relationships with marginalized groups, individuals and communities.

SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage

11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage

Plans, policies and procedures in place for the safe use of collections for a variety of purposes, protecting and safeguarding both collections and those who use them.

Plans, policies and procedures in place for the identification, safeguarding and protection of cultural and natural heritage at risk.

Collecting programmes in place to protect, safeguard and make use of cultural and natural heritage, addressing the needs of communities and stakeholders, and ensuring that collections can be an effective resource for sustainable development.

Number and diversity of educational, awareness-raising, research programmes, and partnerships that aim to

	strengthen protection of cultural and natural heritage.			
SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	Adopt and implement constitutional, statutory and/or policy guarantees for public access to information. Plans in place, and plans implemented to enhance public access to information relating to collections. Plans in place, and plans implemented to support fundamental freedoms, in line with human rights, national and international agreements and legislation. Plans and procedures in place for public access to information relating to the operation and management of collections-based institutions. Complaint mechanism in place for public to use where public access to information and fundamental freedoms not supported or fulfilled.			
1 2	3	<mark>4</mark>	5	6
7 <mark>8</mark>	<mark>9</mark>	<mark>10</mark>	<mark>11</mark>	12
13 14	15	<mark>16</mark>	17	