JISC

Project Document Cover Sheet

Project Information			
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Lead Institution	The Arts University College at Bournemouth[1]		
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Partner Institutions	Plastics Historical Society and The UK Centre for Materials Education		
Project Web URL	http://www.aucb.ac.uk/aboutus/museumofdesigninplastics/modipdigitsationproject.aspx		
Programme Name (and number)	*Enriching Digital Resources*		
Programme Manager	Ben Showers		

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[1] The Arts University College at Bournemouth changed its name from the Arts Institute at Bournemouth during the course of the project.

JISC Final Report *(Public Report)*

Title Page

The MoDiP Digitisation Project

MoDiPDiP

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26 October 2009

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Acknowledgements

We should like to thank the JISC for funding the MoDiPDiP as part of the Enriching Digital Resources programme, a strand of the Digitisation Programme.

The Museum of Design in Plastics (MoDiP) was partnered in the project by the Plastics Historical Society (PHS) and the UK Centre for Materials Education (UKCME). We should like to thank in particular our contacts at these two institutions: Steve Akhurst, Chairman, PHS, and Adam Mannis, Project Manager and Subject Adviser, UKCME. They both also served on the MoDiPDiP Advisory Group and we should also like to thank the other members of this group: Jim Hunter, Vice Principal at the Arts University College at Bournemouth of which MoDiP is a part, for his guidance and watchful eye; Richard Langley, Services Manager at the Modes Users' Association, for his generous advice on web and data-base matters; Christian Mclening, Senior Lecturer in the School of Design, for his inspiration and advice on user needs; Marcia Pointon, Professor Emeritus of History of Art at the University of Manchester and Research Consultant to the AUCB, for considerable advice, both strategic and detailed, and especially in connection with the scholar's web requirements; Nick Poole, Chief Executive of the Collections Trust, for his strategic nudges and encouragement from start to finish; and Ben Showers, the project's Digitisation Programme Officer, for his brilliant support throughout the project. Each of them has supplied something of vital importance to the project's success.

Executive Summary

The Museum of Design in Plastic's Digitisation Project (MoDiPDiP) aimed to create the world's largest and highest quality digital record of plastic artefacts as a resource to support research into design in plastics and its cultural impact.

The modern world is made of plastics. The story of design in plastics is the story of the industrial and social development of the 20th and 21st century environment. Yet, plastic has become so ubiquitous in our society that it seldom receives the same attention as longer established materials except as a focus for current debates around sustainability. And contrary to popular belief, plastic is not stable. The project has thus enabled the capture of this knowledge crucial to an understanding of the modern world before it disappears for ever.

The MoDiPDiP was an application under 'the pilot and small-scale digitisation' heading and ran for a year from 1 October 2008. The Museum of Design in Plastics (MoDiP) was partnered by the Plastics Historical Society (PHS) and the UK Centre for Materials Education (UKCME). The PHS contributed 400+ artefacts to the resource and expertise in plastic materials and processes. The UKCME provided expertise in user needs, evaluation and dissemination. Of particular value to the project is its knowledge of where and to whom 'Plastic Materials' is taught at HE levels in the UK.

The project had five key objectives:

- creation of multiple digitised images of 1500+ artefacts.
- provision of new and enriched documentation of the artefacts.
- development of a functional web specification.
- building of relationships with humanities, arts and sciences research communities.
- dissemination of knowledge and expertise in plastics design.

Understanding design in plastics requires a multi-dimensional and inter-disciplinary approach. Previous projects in this area have been limited to a 2-dimensional record of the artefact. The unique value of MoDiPDiP is that it has created multiple (up to 12) views of each artefact, allowing for a much more comprehensive view, and hence more detailed interpretation.

The principal challenges of the project involved bringing our digitisation and documentation practices up to scratch. We have now adopted consistent approaches to image making and accompanying metadata which post-project will be applied to the remaining 5500 artefacts in the museum's collection. Of particular significance is our development of an object term list for 20th century and contemporary artefacts in everyday use, which we hope may also be of use to others. This development work has not only enabled us to work faster but also make a step-change in the long-term value of our records.

The resource is already available on the Arts University College at Bournemouth's website: www.aucb.ac.uk/aboutus/museumofdesigninplastics.aspx. It will also be hosted by the VADS: www.vads.ac.uk, the UKCME: www.materials.ac.uk, and on Jorum Open.

A high point of the project was the development with Adaptive Technologies Limited of a functioning HTML prototype that is the basis for the final website specification. Analysis of the cost benefits of the different functionalities has enabled us to establish exactly what we want and what it will cost, thus putting us in a strong position to raise the funds to create the site. Building the site is however vital if the value of the project is to be maximised.

Included in the project was a post-project commitment to create three learning packages a year for three years utilising the resource created during the project. Indeed the project has been as much about what the resource it has created will make possible in the future as it is about the resource as it now is. For this reason the project's launch has been delayed to enable the presentation of a number of these learning packages, already evaluated by a range of users, to be disseminated at its launch. This will take place in the second semester of the new academic year of 2009/10 and consist of a national 'Plastics Teaching Materials' daylong event co-hosted with the UKCME.

Background

MoDiP is the UK's leading accredited museum in design in plastics. It is part of the Arts University College at Bournemouth (AUCB), a specialist university college in art, design and media.

The museum is acknowledged as the UK's leading resource for the study and interpretation of design in plastics and as such is a major research resource. The museum supports academic study and research across the HE/FE sectors as well as providing a resource for professional curators throughout the UK and internationally.

MoDiPDiP built directly on the outcomes of an international project, funded by the AHRC in 2004, to provide an online record of just 650 plastic artefacts, in which MoDiP was partnered by the Bakelite Museum, the National Plastics Center, USA, and the PHS, a partner also in the current project. Since the end of the 2004 project and prior to the MoDiPDiP, MoDiP had been able to add digital images of a further 850 artefacts. The work achieved as a result of the AHRC funding and work achieved to date can currently be seen at www.aucb.ac.uk/aboutus/museumofdesigninplastics.aspx. This work is ongoing: the ultimate target is to have the complete collection of 7000 + plastic artefacts in MoDiP's collection and the 400+ PHS artefacts that are now at MoDiP on long-term loan available for study on line.

The project is important because:

- none of the advances in domestic, industrial, commercial or technological design could have been achieved without the properties of plastic (Lyungberg, 2007).
- plastics, since the 1970s, have been the material with the most uses in the world (Cascini and Rissone, 2004).
- contrary to popular belief plastics are not stable (Shashoua, 2008) and thus many artefacts made of plastic degenerate and will not be here forever.

It is, thus, only through such a resource that it will be possible to understand the evolution of design in plastics, which is fundamental to the development of any contemporary designer and to an understanding of the modern world. However, fundamental as plastic is, it seldom receives the same attention as more established materials. The resource will therefore also make the hidden visible in terms of intellectual awareness as well as of physical access.

Aims and Objectives

The MoDiPDiP's overall objective was 'to create a unique and lasting digital record of the development of design in plastics for use as a reference resource by academics, researchers, students, designers and the cultural heritage sector.'

Specific objectives were to:

- digitise more than 1500 artefacts from MoDiP's unique collection.
- provide enriched descriptive metadata for these resources.
- create more than 4500 high-resolution images of unique artefacts.
- develop the online presence of MoDiP to provide full online access to the research material.
- enable MoDiP to build on existing relationships with UK HE and FE providers.
- enable publication into JORUM as the central JISC-funded repository for research resources.
- provide opportunities for partnership and knowledge transfer across the JISC and cultural heritage communities.

The aims and objectives have remained the same throughout the project.

Methodology

The project was divided into 7 complementary work packages:

1. management
2. intellectual property rights

3. digitisation
4. enhanced descriptive metadata
5. new descriptive metadata
6. development of functional website requirement
7. dissemination and sustainability.

This approach was adopted in order to clarify the different aspects and within them, stages, of the project, to allocate responsibility for their delivery and to enable progress on each aspect to be monitored.

Standards
Standards were a major issue at the outset of the project and we soon realised that in terms of image digitisation our practice needed changing. All images have been taken using a Canon EOS 40D set at f13 at ¼ second with an ISO speed of 125 with either a 17-85mm or a 50mm compact macro lens as appropriate. The lighting has been a combination of overhead tungsten and a Bowens Espirit Gemini GM500 lighting set up compensated with the camera's auto white balance setting. All images are cropped as appropriate using PhotoShop CS3 along with minimal editing and the addition of the Museum's logo. Small images of medium quality are added to the catalogue for easy browsing. However, high quality images are available for educational or non-commercial purposes on request. The archive image size adopted and consistently applied is 3888 x 2590 pixels at 3.5 MB.

There was some discussion also about our use of Spectrum, the UK and international standard for collections management, in relation to the metadata accompanying the digital images. However once it was understood that we were in the main improving existing records already entered on MODES XML (which uses Spectrum) rather than starting from scratch, its use was sanctioned. We have however created our own simplified metadata guidelines derived from Spectrum which is attached as appendix B.

We have also developed an object term list attached as appendix C. After considerable consultation with the British Museum and others we found that a suitable object term list for 20th century and contemporary artefacts in everyday use was not in the public domain. We therefore developed our own. It will be made available on our website and hopefully others will find it of use. We have also made term lists for plastic materials, production methods, condition statements, acquisition methods and locations, and constants for recording dates, and IPR and reproduction details.

Image storage
Storage of the images was an issue at the outset of the project. These are now stored as Tiff files on an external hard drive backed up by a second hard drive. The hard drives are stored separately.

Intellectual Property Rights
We already had an established IPR procedure developed in 2004 in connection with an earlier project. In essence, we deem all artefacts produced before 1955 and those with no named designer or manufacturers produced since as low risk. In the case of all other artefacts, we write to all companies and individuals associated with them asking for permission to reproduce them for educational use explaining that if we have not heard from them within four weeks we will assume they have no objection until they tell us otherwise. All actions are recorded in the artefacts metadata. Each image is accompanied by a statement that 'In every instance the Museum of Design in Plastics has done its upmost to obtain clearance from all IPR holders before adding images to this catalogue. In some cases the rights holders could not be traced. If you believe that any image has been used without permission please contact us on modip@aucb.ac.uk.' For our procedure in detail please see appendix D.

Progress monitoring
We also realised that keeping track of progress of the different aspects of metadata collection and digitisation was vital and sought advice from those working on the John Johnson project at the Bodleian, Oxford. We decided however that their tool was more complicated than we required and instead developed our own simple log of the following tasks, sortable under each task:

- basic record

- full record
- naming standards checked
- photos taken
- images prepared
- copyright requested
- copyright granted
- image added to MODES
- additional image clearance (this relates to increasing clearance to encompass all educational use for those objects for which we already had clearance for AUCB use)
- record checked
- image checked
- re-packed and condition checked
- location record updated
- date completed

At any moment the log enabled us to see what had been done to each artefact and by whom and what remained to be done. We propose to continue to use this log post-project.

Implementation

The project team consisted of five people, 4 MoDiP team members and one PHS member, all of whom took an active part in its planning as well as its implementation. A weekly project meeting of the 4 MoDiP members of the team was held to talk over issues, air worries and monitor progress. The PHS member of the team made 6 visits (1 ½ days each) to MoDiP during the run of the project and played a major role in checking records for technical accuracy as well as providing the metadata for the PHS objects.

We were also supported by an Advisory Group, which operated virtually, with membership as specified in the Acknowledgements on page 4. It advised on, monitored and approved:

- the quality of the records (text and image) created in relation to target audiences
- the website specification
- the dissemination and sustainability programme.

The Advisory Group was reported to as a whole on a quarterly basis but individuals were consulted independently also in respect of their specialist expertise.

We explored user needs by consulting four members of the AUCB teaching staff about their needs and those of their students in respect of the resource. Their input affirmed our practices and fed into the specification of the website and will influence also the development of learning packages, a post-project commitment.

In respect of the website, we wrote a briefing paper in collaboration with four members of the AUCB IT and web staff which was submitted to internal and external comment, and amended. In consultation with members of the Advisory Group we decided it made good sense to appoint a web developer, as opposed to a consultant as originally intended, so that the initial work could contribute to the finished product were further funding to be forthcoming. With Ben Showers, our JISC Manager, we interviewed four firms selected on recommendations from the Museums Computer Group. Adaptive Technologies Limited won the contract and created a functioning HTML prototype that will be the basis for the final website specification. It can be seen at https://files.getdropbox.com/u/135578/MoDiPPrototype/index.html . It was especially helpful to be able to consider all possible functionalities and their costs separately from building the site. Analysis of the cost benefits of the different functionalities has enabled us to establish exactly what we want and what it will cost, thus putting us in a strong position to raise the funds to create the site.

The most time-consuming part of the project was the digitisation and metadata gathering. Reviewing practice was an important part of the project's set up and we quickly realised that we needed to adopt consistent standards in both these areas. The practice and outputs this led to are described under

Methodology (pp.6-7).Photography was carried out by the Assistant Curator as described and each image was checked for quality and orientation by someone else. Gathering the metadata was a collaborative process with the MoDiP team members learning about plastic materials and processes and the PHS team member about documentation procedures as the project ran. To begin with the MoDiP Digitisation Officer, taken on specifically for the project, entered the information she could glean by looking at the artefact. As time passed she was able to contribute more specialist information. Every artefact was examined by the PHS member of the team in the presence of a minimum of two MoDiP staff members leading to the building of considerable expertise. Every record was checked both for accuracy in terms of information and for compliance with the term lists by people other than the person who had contributed the record.

The project will be launched at a national 'Plastics Teaching Materials' daylong event co-hosted with the UKCME and will thus benefit from its considerable knowledge of the teaching of materials at undergraduate and post-graduate levels in the UK. It will be held in the second semester of the new academic year of 2009/10 to allow time for the development and testing of two of the three learning packages MoDiP is committed to produce yearly for three years post-project. The dissemination and sustainability plan is attached as appendix E.

The project is to be independently evaluated by Liverpool Evaluation Unit, Liverpool University. The intention is that the evaluation will be presented in such a way that its value for the wider JISC community is evident. It will address three distinct aspects:

- the processes followed during the project
- the outputs of the project, including the first two of the learning packages which are a post-project commitment.
- the dissemination event.

As significant parts of two aspects will happen post project it has been agreed that the evaluation document will be delivered in the second semester of the next academic year, 2009/10. A plan for the evaluation is attached as appendix F.

Outputs and Results

1500+ objects were recorded digitally with between 2 and 12 views depending on the intricacy and interest of the design. Over 6000 digital images have been created and made accessible on the web. The artefacts are beautifully lit and shown against a neutral background. The images are much clearer than those we produced hitherto.

The metadata on these artefacts was also improved. It is fuller, more consistent and better organised. The 400+ PHS objects have been documented for the first time.

Copyright clearance has been acquired for the use of images of 1500+ artefacts for non-commercial use.

The resource is currently available on the AUCB website: www.aucb.ac.uk/aboutus/museumofdesigninplastics.aspx. Arrangements have been made for it to be hosted also by the VADS, UKCME and Jorum Open websites by the end of 2009. It will also be made available on the Collections Link Plastics Subject Specialist website when it goes live. In addition we have a dissemination and sustainability plan, attached as appendix D. It will contribute dynamically to the use that is made of the resource.

It is a valuable resource freely available to anyone for non-commercial purposes as it stands. Its value will, however, be exponentially increased as the critical mass of recorded artefacts increases and when learning packages are developed from it.

A prototype for an improved MoDiP specific website with each functionality individually prices has been produced. The prototype can be accessed at https://files.getdropbox.com/u/135578/MoDiPPrototype/index.html. A written specification explaining

the prototype and the pricing document is available as appendix G. We are now in a strong position to find funding to build the site. It is only when this site is available that the value of the resource created will be maximised.

A daylong national 'Plastics Teaching Materials' day is planned for the second semester of the new academic year 2009/10 which will situate these outputs in the wider provision of such materials.

Substantial independent evaluation of current outputs and post-project commitments, organised to demonstrate the lessons learnt to the wider JISC community, is also planned (see appendix F).

Significant additional outputs for MoDiP are:

- improved practice for the future.
- improved expertise in the plastics subject area.
- improved contacts in the plastics industry and industrial design community.
- Improved understanding of the digital world.
- stronger relationships with a number of UK HE and FE providers, especially the UKCME, VADS and Jorum.
- better integration of the collection in learning and teaching at the AUCB.
- greater understanding of student needs, especially within subject areas not taught at the AUCB.
- the artefacts selected for the project have also been condition checked, re-boxed and provided with recorded locations.

Outputs for the PHS are:

- improved documentation procedures.
- fuller knowledge and understanding of its collection.
- availability of an additional resource for its members.
- an image resource for its journal, *Plastiquarian* and its website: http://www.plastiquarian.com/.

For a statement from the PHS please see appendix H.

Outputs for the UKCME are:

- access to a large material-related image bank.
- greater awareness of qualitative in contrast to quantitative aspects of plastic materials.
- increased knowledge of available plastics teaching and learning materials.

However, the project was as much about what the resource it has created will make possible in the future as it was about the resource as it stands at the closure of the project. There are two important strands here. It is only when we build the MoDiP specific website to the specification created as a result of the project that researchers will be able to make full use of the images and metadata we have created. And it is only when we create and disseminate the learning packages written into the project as a post-project commitment that the project will realise its considerable potential impact on teaching and learning.

Outcomes

MoDiPDiP has transformed the way in which the collection is used as a learning and teaching resource at the AUCB and will underpin and enable MoDiP's research strategy. However, as the resource it has created is freely available for non-commercial use on the web, its impact will not be restricted to the local. It will also transform the ease with which and the depth in which this subject, key to an understanding of the modern world, can explored and developed whether for learning and teaching or for research purposes through out the world.

Conclusions

MoDiPDiP was a simple project that involved us in core museum activities of researching, recording and providing access to artefacts in our care. Its great benefit has been the impact it has had on how we fulfil these tasks. It has transformed our understanding of how the collection can be used for learning and teaching, and enriched our network of contacts within the educational and academic worlds. It has also made a step change in the quality of our records, which will now be applied across the whole of the collection.

Implications

As already stated the project included some post-project commitments. In particular we are committed to producing three learning packages for three years. The first two of these will be disseminated at the Plastics Teaching Materials seminar that will launch the project in the second semester of the new academic year 2009/2010.

The increase in our understanding of the digital world that the project has led to means also that we wish to explore the use of Second Life as a teaching medium.

We also intend to raise the money to build the MoDiP specific website. It is only if this becomes a reality that the resource the project has created will be able to be searched to full capacity and thus fulfil its potential.

It is our intention, also, to re-photograph the 1500 artefacts that were accompanied by digitised images before MoDiPDiP to the same standard and also submit the rest of MoDiP's plastic collection, some 5500 more artefacts, to the same procedures at a rate of 500 artefacts a year.

The projects output will also provide a core resource on the Collections Link Plastics Subject Specialist Network website to which it is hoped others will add artefacts in the collections they curate.

There are three specific ways in which the work should be further developed. By the addition of:

- an orbital image viewing facility for selected complex artefacts
- contextualising stills and film clips of the artefacts.
- statements and reminiscences in relation to the artefacts.

We should also like to integrate the work we have done with Second Life teaching packages.

References

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Lyungberg LY (2007) Materials selection and design for development of sustainable products, *Materials and design*, 28 (2), 466-479.

Shashoua, Y (2007) *Conservation of plastics, materials science degradation and preservation*, Oxford: Butterworth-Heinemann, 151-190.

www.aucb.ac.uk/aboutus/museumofdesigninplastics.aspx.
www.vads.ac.uk
www.materials.ac.uk
//icanhaz.com/modip
www.plastiquarian.com/

Appendix A

JISC Project Final Reports Budget Template

Directly Incurred Staff	**TOTAL BUDGET £**	**Year 08-09 Actual Expenditure**	**Year 09-10 Actual Expenditure**	**Year N/A Actual Expenditure**	**TOTAL EXPENDITU £**
Pam Langdown Post, Grade	£10,732	£3,279	£7,639	£N/A	£10,918
Louise Dennis	£18,835	£9,928	£9,919	£N/A	£19,847
Karen Spendier	£26,150	£8,020	£12,114	£N/A	£20,134
Total Directly Incurred Staff (A)	**£55,717**	**£21,227**	**£29,672**	**£N/A**	**£50,899**
Non-Staff					
Travel and expenses	£1,000	£239	£580	£N/A	£819
Hardware/software	£2,000	£2,404	£1,200	£N/A	£3,604
Dissemination	£2,000	£0	£1,000	£N/A	£1,000
Evaluation	£2,000	£0	£1,000	£N/A	£1,000
Other	£9,500	£3,000	£9,075	£N/A	£12,075
Total Directly Incurred Non-Staff (B)	**£16,500**	**£5,643**	**£12,855**	**£N/A**	**£18,498**
Directly Incurred Total (A+B=C) (C)	**£72,217**	**£26,870**	**£42,527**	**£N/A**	**£69,397**
Directly Allocated					
Staff	£0	£0	£0	£N/A	£0
Estates	£12,551	£6,275	£6,276	£N/A	£12,551
Other	£0	£0	£0	£N/A	£0
Directly Allocated Total (D)	**£12,551**	**£6,275**	**£6,276**	**£N/A**	**£12,551**
Indirect Costs (E)	**£74,697**	**£37,349**	**£37,348**	**£N/A**	**£74,967**
Total Project Cost (C+D+E)	**£159,465**	**£70,494**	**£86,151**	**£N/A**	**£156,645**
Funds Received from JISC	**£79,733**	**£35,247**	**£43,076**	**£N/A**	**£78,323**

Institutional Contributions	**£79,732**	**£35,247**	**£43,075**	**£N/A**	**£78,322**

Nature of Institutional Contributions

Directly Incurred Staff					
Post, Grade & % FTE	£0	£0	£0	£N/A	£0
Directly Incurred Non Staff					
Hardware/Software etc.	£0	£0	£0	£N/A	£0
Directly Allocated					
Staff, Estates etc.	£5,035	£2,517	£2,518	£N/A	£5,035
Indirect Costs					
Indirect Costs	£74,697	£37,349	£37,348	£N/A	£74,697
Total Institutional Contributions	**£79,732**	**£39,866**	**£39,866**	**£N/A**	**£79,732**

It has been agreed that £2000 can be kept back for payment s towards the UK-wide plastics materials dissemination event.

APPENDIX B: METADATA GUIDELINES

This document looks at MoDiP cataloguing standards. The example below is based on the templates for new records. For old records edit the information to follow these guides, moving or removing elements as necessary.

Modes Element: the name of the element on Modes XML	**Termlist or constant available?**	**Description of element:** what kind of information is expected in this element?	**Example contents:** examples of the kinds or wording or phrases expected – if the text is **bold** the wording should already be in place or is part of a constant.
ObjectIdentity			
↳ Number		Accession or Loan number – for a new record this will appear automatically.	AIBDC: 005968 Or PHSL : 25
↳ Institution		AIBDC stands for Arts Institute at Bournemouth Design Collection and shows the record / object is part of the MoDiP system.	**AIBDC**
ObjectIdentity			
↳ Number		This number is part of the old category numbering system which is no longer used. This element is not part of the new template record. For all old records, if a value is here, leave it as some objects will be marked with this number and not the accession number.	
Identification	**C**	If the object fits in with more than one keyword it needs another Identification family. Use the 'Identification' constant to insert the relevant elements before this section below.	
↳ Classification			
↳ Keyword	**T**	Right mouse click and select 'show termlist' choose a suitable classification from the list	
↳ System		The above classification is part of the MoDiP - AIBDC system	**AIBDC**
↳ Type	**T** linked to the above	Right mouse click and select 'show termlist' choose a suitable type from the list	
↳ ObjectName			
↳ Keyword	**T** linked to the above	Right mouse click and select 'show termlist' choose a suitable object name from the list	
↳ Title		This is a free text field and can be left blank if required. This element should have capitals.	Sony Walkman F54623

BriefDescription		This free text field should be written in proper sentences as this is what the visitor sees online. If known, include the decade or date span as many students search for things by decade. If not known do not add anything. If any inscription is important and it here so that it shows on the website. The title of the object needs to be included in the brief description as it does not appear on the object's web page otherwise.	An electric kettle from the 1950s. This conical yellow Braun F37TU kettle with its rounded handle has the phrase Braun UK inscribed on the base. Or An electric kettle from circa 1950s – 1960s. This conical yellow Braun F37TU kettle with its rounded handle has the phrase Braun UK inscribed on the base. Or This conical yellow Braun F37TU electric kettle with its rounded handle has the phrase Braun UK inscribed on the base.
Classification		Some objects have a classification which is related to their website case study status, the system element following the keyword will read plasticsnetwok.org. Leave these but put them after the brief description to distinguish them from the MoDiP listing.	
Keyword			
System			plasticsnetwork.org
Production			
Organisation			
Role	**C**	This element family is for the manufacturer of the object.	**Manufacturer**
OrganisationName		Manufacturer's name	Houghton Butcher MFG. Co. Ltd Or Unknown
Organisation	**C**		
Role		This element family states who the object was made for.	**manufactured for**
OrganisationName		Retailer's name If unknown, remove elements.	Woolworths
Person	**C**		
Role		This element family is for the designer of the object.	**Designer**
PersonName		The designer's name entered surname, first name.	Capek, Jan Or

		If the designer is not known put ‘unknown’.	Unknown
Place			
Country		The website only recognizes the element ‘country’ as place.	Hong Kong Or Germany We need to decide whether we use Great Britain or UK or whatever how do we add the city if known?
Date	**C**	If the exact date is known add it here. If only a decade or possible span of dates is known use the ‘Date span with note’ constant	1953 Or Date Date begin 1950 Date end 1959 Note circa
Method	**T**	Right mouse click and select ‘show termlist’ choose a suitable production method from the list. If there are more than one production methods add in more Method elements with a note inside qualifying which part of the object has been made in this way.	
Description			
Material			
Keyword	**T**	For objects in the main plastics collection make sure ‘plastic’ is the first keyword	**Plastic**
Keyword	**T**	Follow this by the type of plastic along with the additions asked for in the termlist such as PS for polystyrene, and make sure all of these are included as keywords. To include qualifying notes such as the part of the object made of this material or the percentage insert a note inside the relevant keyword.	Unidentified Or Polystyrene Or PS
Keyword	**T**	Once the plastic is completed add in the other materials eg metal followed by keyword titanium	Metal
Condition			
Keyword	**T**	Right mouse click and select ‘show termlist’. Select the relevant	

		term – see the qualifications within the termlist description.	
↳ Colour	**T**	The termlist contains basic colour terms if you wish to qualify further add a note	purple Or ↳ Colour purple ↳ Note translucent Or ↳ Colour purple ↳ Note lilac
↳ Colour	**T**	Use up to four colours as separate keywords beyond this the object should be described as multi-coloured	↳ Colour multi-coloured Or ↳ Colour purple ↳ Note background ↳ Colour multi-coloured
↳ Aspect			
↳ Part		This element is for a loose label – either tie on or stick on but that is still an integral part of the object	**Label**
↳ SummaryText		What the label says- as it says it eg with capitals and punctuation	Made of polystyrene.
↳ Inscription	**C**	This element family is for wording that is part of the object	
↳ Method		How the writing is put onto the object.	embossed Or Moulded
↳ Transcription		What the wording says – as is says it eg with capitals and punctuation	Made in China
↳ Position		Where on the object the inscription is	base Or bottom left corner
↳ Type		What type of mark it is eg logo, kite mark	Logo
↳ Measurement			
↳ Dimension		All measurements	**Height**

		should be made in mm – change the dimensions as appropriate eg length etc.	
↳ Reading			
↳ Value			23
↳ Unit			**Mm**
Acquisition			
↳ Method	**T**	How the object become part of the collection. Choose the relevant term from the termlist.	gift
↳ Person	**C – person from**		
↳ Role		If it was given by or purchased from an individual use this family of elements	**From**
↳ PersonName		Surname, first name	Akhurst, Steve
↳ Address			PHS
↳ Organisation	**C – organisation from**		
↳ Role		Where the object was purchased or gifted from.	**From**
↳ OrganisationName		The shop or company name.	TKMaxx
↳ Address			Bournemouth
↳ Price		The amount of money the museum purchased the object for. If a reduced price was pay add this as a note.	£5.00 Or £0.50 ↳ Price £5.00 ↳ Note half retail price paid
↳ Date		Add the date the item was purchased or donated.	5.5.2009 Or 27.6.2009
Exhibition			
↳ ExhibitionNumber		This relates to loans and corresponds to relevant paperwork	L/2009/259
↳ ExhibitionName	**T**	The name of the exhibition that the object has been part	The Plastic invasion

		of.	
ObjectLocation			
Location	**C**	Whenever an object is moved to a new location within the store or outside of the museum, a new location needs to be added to the Modes record. Each new location needs to be part of a new location family, with the latest location first so that it comes up in the location grid.	
Keyword	**T**	This section includes a code relating to room and shelf. If the object is on loan or on display it is recorded here.	MS63 Or Loan – internal Or Display – L7
Type	**T**	This element refers to the box the object is in or if it is free standing on a shelf.	
Authority			
Date		The date the object was moved	23.8.2009
Initials		Who moved the object	
Recorder			
Initials		Who put the record together	**LD**
Date		The date the catalogue record was started	15.12.2007

Additional information to take into account

Adding rights – when an object has been cleared of copyright the element family for rights can be added using the various copyright constants, this should go after location.

Adding images – when adding images each separate image needs to go in its own reproduction family. This can be found as a constant.

Adding notes – if a note is inside an element it needs to have a space at the front of the note, if the note comes after the main element do not put a space.

APPENDIX C: METADATA NAMING STANDARDS

Classification/Keyword	Type	ObjectName/Keyword	use for
audio-visual	**audio equipment or component**	**cassette player**	cassette recorder
		if the device has record function make sure this is included in the brief description	cassette deck
			cassette recorder
		if device has a radio add as a	radio cassette recorder
		separate keyword	portable tape recorder
		personal cassette player	personal cassette player
		if the device has record function make sure this is included in the brief description	personal cassette recorder
			personal stereo
		if device has a radio add as a	personal stereo radio
		separate keyword	radio cassette recorder
			Walkman
		CD player	compact disc player
		if the device has record function make sure this is included in the brief description	
		if device has a radio add as a	
		separate keyword	
		personal CD player	
		if the device has record function make sure this is included in the brief description	
		if device has a radio add as a	
		separate keyword	
		mini disc player	mini disc player
		if the device has record function make sure this is included in the brief description	mini disc recorder
		if device has a radio add as a	
		separate keyword	
		personal mini disc player	
		if the device has record function make sure this is included in the brief description	
		if device has a radio add as a	
		separate keyword	
		mp3 player	mp3
		if the device has record function make sure this is included in the brief description	
		if device has a radio add as a	
		separate keyword	
		radio	radio teawaker
			receiver
			solar powered radio
			transistor radio
		clock radio	clock-radio
			digital clock radio
			radio alarm clock

		record player	turntable
		reel to reel tape recorder	
		editing equipment	audio mixing unit edit controller sound projector
		stereogram	
		synthesizer	electronic musical instrument stylophone synthesizer and keyboard
		amplifier	
		hi-fi system	hi-fi stereo
		valve	
		PA system	
		aerial	
	audio recording	**cassette tape**	cassette
		mini disc	
		CD	compact disc
		record	45 record 78 record album gramophone record picture disc record record album single
		piano roll	piano roll
	televisual equipment or component		
		aerial	
		editing equipment	edit controller
		television	colour television personal television portable television
		video player ***if the device has record function make sure this is included in the brief description***	video recorder
		DVD player ***if the device has record function make sure this is included in the brief description***	
		monitor	
	televisual recording	**video tape**	video
		DVD	
	audio visual accessory	**cassette tape storage**	cassette case cassette holder
		battery	
		CD storage	CD case
		record storage	
		DVD storage	DVD case
		headphones	
		microphone	
		remote control	

		record cleaner	
		CD cleaner	
		needle	
		audio visual accessory kit	
		pick up and volume control	
		video tape storage	video box

Classification/Keyword	Type	ObjectName/Keyword	use for
construction and building services	fixtures and fittings	tap	
		plug	
		light switch	complete unit
		light switch surround	
		door handle	door knob
		plug socket	
		tile	
		towel rail	
		bathroom storage	soap holder
		light fitting	
	plumbing services	pipe	
	building services	loft insulation	
		damp proofing	
	road and street furniture	cat's eye	

Classification/Keyword	Type	ObjectName/Keyword	use for
fashion and costume	dress	tea dress	
		day dress	
		summer dress	
		overdress	
		kaftan	
		pinafore dress	
	hosiery	socks	
		footless tights	
		tights	
		stockings	
	jacket	casual jacket	
		formal jacket	
		waistcoat	
		bolero	
	knitwear	jumper	sweater
		cardigan	
		bolero	
	outerwear	coat	
		jacket	
		cape	
		kimono	
		poncho	
	shirt	men's shirt	
		women's shirt	
		blouse	boob tube
		t-shirt	

	sweatshirt	
shorts	**men's shorts**	
	women's shorts	
skirt	**mini skirt**	
	kilt	
	A line skirt	
	pencil skirt	
suit	**women's suit**	trouser suit skirt suit dress suit
	men's suit	
	Punjabi suit	
trousers	**women's trousers**	leggings
	men's trousers	
underwear	**pants**	
	knickers	
	bra	
	petticoat	underskirt slip
	suspender belt	
	foundation garment	corset underbodice
	pilch	
	vest	camisole liberty bodice cami-suspender
nightwear	**pyjama suit**	
	bed jacket	
	night dress	
bodice	**boobtube**	
	liberty bodice	
ceremonial wear	**kimono**	
	wedding dress	
jewellery	**bracelet**	bangle
	brooch	
	earrings	
	necklace	
	ring	
	tie clip	
	tie pins	
	watch	digital watch wrist watch
fashion and costume accessory	**belt**	
	collar	lace collar shirt collar
	comb	side comb high back comb
	cummerbund	
	hand fan	
	gloves	
	scarf	head scarf
	shawl	wrap pashmina

		stole	
		glasses	
		tie	bow tie
			kipper tie
		mask	
		hat	cap
			bowler
			beret
			boater
			trilby
			feather hat
			fez
			rain hat
			pillbox
			baseball cap
		mantle	
		umbrella	parasol
			brolly
	footwear	**slipper**	indoor shoe
		boots	
		shoes	court shoes
			sandals
			flip flops
	bag	**wallet**	
		handbag	clutch bag
		if the bag has a shoulder strap add this to the description	
		purse	
		brief case	
		tote	
		waist pack	
		backpack	rucksack
		shoulder bag	courier bag
			messenger bag
			record bag
	clothing care	**clothes brush**	
		wardrobe bag	
		coat hanger	
		pomander	
		button hook	
		collar storage	
		studs box	
		glove stretcher	
		sleeve garter	
		sleeve protectors	
		jewellery cleaner	
		jewellery box	
		glasses case	
		stocking toe protectors	
		stocking dye	
		shoe tree	

Classification/Keyword	Type	ObjectName/Keyword	use for
health, care and grooming	**baby care**	**baby bath**	
		training cup	
		weaning set	
		feeding bottle	
		bottle warmer	
	personal hygiene	**toothbrush**	
		toothpick	
		toothpick dispenser	
		bath brush	
		body brush	
		sponge	
		nail brush	
		ear-cleaning set	
		feminine hygiene	
		toothbrush holder	
	physical wellbeing	**bathroom scale**	
		contraception	
		bed warmer	
		contact lens	
		eye protection	
		first aid	
		respiratory protection	
		therapy lamp	heat lamp sunlamp
		magnifying glass	hand lens
		hand warmer	
		hearing aid	
		manual aid	
		inhaler	
		massager	
		glasses	
		glasses case	
		thermometer	
	spiritual wellbeing	**meditation balls**	
	grooming	**comb**	
		electrolysis machine	
		brush	
		hair styling	
		compact	
		cosmetic case	
		manicure equipment	manicure machine nail file nail scissors
		nail embellishment	nail transfers
		men's grooming set	*prompt to put into travel as well*
		vanity set	*prompt to put into travel as well*
		dressing table set	
		powder bowl	
		shaver	
		razor	
		razor box	

		mirror	
		razor blade	
		razor blade dispenser	
	medical	**insulin pen**	
	death	**burial suit**	
		burial gift	
Classification/Keyword	**Type**	**ObjectName/Keyword**	**use for**
house and garden	**household hygiene**	**air freshener**	
		bin	pedal bin
		brush	carpet brush crumb brush hand brush banister brush dustpan brush washing up brush toilet brush scrubbing brush
		bucket	
		carpet sweeper	
		duster	
		dustpan	
		fly swat	
	laundry equipment	**clothes peg**	dolly peg
		clothes peg bag	
		iron	dry iron paraffin iron steam iron box iron
		ironing accessory	ironing aid pad
		ironing board	
		mangle	
		press	trouser press tie press
		tongs	
		wash boiler	
		washboard	
		washing machine	
	household appliance	**food processor**	hand blender food mixer food blender
		yoghurt maker	
		heater	convector heater electric fire electric heater convector/radiant heater
		cooker	stove
		deep fat fryer	
		appliance accessory	deep fat fryer filters
		fan	electric fan
		floor polisher	
		kettle	

		microwave oven	
		refrigerator	
		toaster	sandwich toaster
		vacuum cleaner	car vacuum cleaner upright vacuum cleaner cylinder vacuum cleaner
	garden and horticultural equipment	**soil sample collection box**	
		trowel	
		plant pot	
		plant pot holder	
		watering can	
		fork	
	tableware	**coasters**	
		doily	
		table decoration	
		hors d'oeuvres set	
		party pack	
		napkin ring	
		table mat	
		cruet	condiment container pepper caster pepper grinder pepper mill pepper pot salad oil container salt caster salt grinder salt mill salt shaker
		egg cup	egg cup set
		knife	carving knife table knife butter knife fish knife
		fork	fondue fork pasta fork
		spoon	dessert spoon teaspoon weaning spoon serving spoon
		plate	baby plate cake plate dinner plate sandwich plate tea plate serving plate side plate platter

		bowl	sundae dish party bowl ice cream bowl serving bowl sugar bowl
		cake stand	
		cheese board	
		chopsticks	
		jug	cream jug creamer milk jug
		serving dish	tureen
		food warmer	
		serving basket	bread basket fruit basket
		sauce server	sauce boat sauce bottle sauce pot
		serving utensil	cake slice salad server fish slice
		preserves dish	
		toast rack	
	furniture and furnishings	**chair**	
		stool	
		caster holder	furniture foot pad
		cushion	
		cushion cover	
		mirror	
		storage container	
		coat hook	
		doorstop	
		fireside companion set	
		umbrella stand	
		wall hook	
		stereogram	
		dressing table	
		tray	chair tray television tray
		magazine rack	
		table	coffee table
	lighting	**torch**	
		candle holder	
		fairy lights	
		lantern	multi-shapes lantern paper lantern
		lamp	lava lamp table lamp bedside lamp fibre optic lamp
		shade	
		lighting accessory	bed switch conversion set

		light bulb	
	ornament	**music box**	
		vase	bud vase window vase
		figurine	
		fridge magnet	
		dish	handkerchief dish
		bowl	lidded bowl trinket bowl
		box	lidded box trinket box
		pot	lidded pot trinket pot
		seasonal decoration	
		wall tile	
		money box	
		photograph frame	
		plate	
		snow globe	
		tray	trinket tray
		wall plaque	
	DIY	**power tool**	sander
		hand tool	
	beverage equipment	**beaker**	tumbler
		cup	breakfast cup coffee cup tea cup
		cup and saucer	cups and trays set breakfast cup and saucer
		saucer	
		coffee pot	gowah
		coffee maker	cafetiere coffee press coffee percolator espresso coffee maker
		coffee grinder	
		coffee set	
		beverage accessory	can cap ice bucket corkscrew wine cooler wine temperature indicator
		carafe	
		cocktail accessory	cocktail decorations swizzle stick cocktail sticks
		cocktail shaker	
		cocktail glass	
		cocktail glass set	

		wine glass	goblet
		soft drink maker	soda siphon
		soft drink maker accessory	sparklets
		beer glass	
		jug	milk jug water jug pitcher
		liqueur glass	
		mug	
		shot glass	spirit glass
		tea caddy	
		tea dispenser	
		tea maker	Teasmade ®
		teapot	
	clock	**alarm clock**	
		wall clock	
		mantel clock	
	food storage	**biscuit container**	
		bread bin	
		butter dish	
		cake container	
		cheese dish	
		food container	egg holder snack jar
		preserves pot	
		food basket	
		storage jar	
	household linen	**towel**	tea towel hand towel
		table cloth	
		lace cloths	
	kitchenware	**mould**	muffin tray pattie tin cake mould blancmange set jelly mould cake moulds
		icing utensil	icing ball icing syringe icing set
		ramekin	
		casserole dish	
		mixing equipment	mixing jar mixing bowl
		egg cooker	egg boiler egg poacher
		pressure cooker	
		mixing glass	
		measuring equipment	measuring cylinder measuring scoop measuring spoon measuring jug

		weighing scales
	dish	flan dish
	spice processor	flavour shaker
		spice mill
	food mill	baby food mill
		cheese mill
	bottle opener	
	can crusher	
	food slicer	cheese slicer
		bean slicer
		egg slicer
	colander	
	cream maker	
	egg separator	
	timer	
	sifter	flour sifter
		flour dredger
	food chopper	
	food grater	parmesan grater
		cheese grater
	food mincer	mincer
	food crusher	garlic crusher
	lighter	
	whisk	
	scoop	
	juicer	lemon juicer
		lemon squeezer
		orange juicer
		orange squeezer
	knife	
	ladle	
	meat mallet	
	nut cracker	
	oven mitt	
	pastry cutter	
	masher	potato masher
	peeler	vegetable peeler
		potato peeler
	pot menders	
	rolling pin	
	salad spinner	
	sieve	
	tin opener	can opener
	tongs	
	vegetable brush	
	yoghurt maker	
	ice-lolly set	
	tray	

Classification/Keyword	Type	ObjectName/Keyword	use for
office and workplace	**computer hardware**	**visual display unit**	monitor
		emailer	personal

			communication centre
		computer	CPU laptop
		web cam	
		keyboard	
		data cassette recorder	
		modem	
		hand-held computer	palmtop
		printer	colour printer dot matrix printer
		circuit board	
		external disk drive	zip drive
		external hard drive	
		memory stick	
		light pen	
		graphics pad	
	computer software	**floppy disk**	
		cassette tape	
		CD	compact disc
	computer accessory	**mouse mat**	
		joy stick	
		mouse	
	uniform and clothing	**graduation gown**	
		gaiters	
		shirt	
		trousers	
		jumper	
		jacket	
		safety clothing	hard hat florescent tabard safety boots
		hat	military cap
		skirt	
		blouse	
		tie	
		coat	
		uniform accessory	name badge
	writing and stationery	**typewriter**	portable typewriter electric typewriter
		ink well	
		pen *the type of pen should be included in the title and / or description*	ball point pen felt tip pen fountain pen rollerball pen
		pencil sharpener	
		pencil	
		notepad	
		hole punch	
		stapler	
		scissors	
		business card box	
		personal organiser	electronic

			organiser
			Filofax
		pencil case	
		eraser	electric erasing machine
	calculator	**adding machine**	
		decimal adder	
		pocket calculator	
		desk calculator	
	office equipment	**desk toy**	
		ink blotter	
		desk note pad holder	
		fax machine	
		dictation machine	Dictaphone tape recorder microcassette recorder
		drawing pins	
		desk lamp	
		clip board	
	retail equipment	**receipt roll**	
		till	
	military equipment	**ammunition**	
	design equipment	**ruler**	
		cutting board	
		textile printing block	
		drawing instruments	
	scientific equipment	**microscope**	
	postal equipment	**parcel scale**	
	food industry equipment	**cheese sampler**	

Classification/Keyword	Type	ObjectName/Keyword	use for
packaging and materials handling	**food and drink packaging** *the type of foodstuff should be included in the title and/or brief description*	**bag**	
		bottle	wine bottle
		box	
		can	
		carton	
		cup	
		jar	
		label	
		lid	
		packet	
		pot	
		tin	
		tub	
		tube	
		wrapper	
	confectionery packaging *the type of confectionery should be included in the title and/or brief description*	**bag**	
		bottle	
		box	
		can	
		carton	

		cup	
		jar	
		label	
		lid	
		packet	lucky bag
		pot	
		tin	
		tub	
		tube	
		wrapper	
	toiletry packaging *the type of toiletry should be included in the title and/or brief description*	**bag**	
		bottle	
		box	
		can	
		carton	
		cup	
		jar	
		label	
		lid	
		packet	
		pot	
		tin	
		tub	
		tube	
		wrapper	
	product packaging *to include all other types of packaging eg. washing up liquid bottle or gramophone needles box* *the type of product should be included in the title and/or brief description*	**bag**	
		bottle	
		box	
		can	
		carton	
		cup	
		jar	
		label	
		lid	
		packet	
		pot	
		tin	
		tub	
		tube	
		wrapper	
	cosmetic packaging *the type of cosmetic should be included in the title and/or brief description*	**bag**	
		bottle	
		box	
		can	
		carton	
		cup	
		jar	
		label	
		lid	
		packet	
		pot	
		tin	
		tub	

		tube	
		wrapper	
	materials handling *the type of material should be included in the title and/or brief description*	**bag**	carrier bag shopping bag
		box	
		crate	
		trolley	

Classification/Keyword	Type	ObjectName/Keyword	use for
photographic	**camera**	**film camera**	
		cine camera	
		digital camera	
		video camera	
		digital movie camera	
	photographic accessory	**camera case**	
		exposure meter	
		flash unit	
		flash bulb	
		lens	
		photographic plates box	
	photographic outcome	**film**	
		film storage album	
		plate	
		negative album	
		photograph	
		photograph album	
		transparency	slide
		super 8 film	
	darkroom equipment	**automatic dish siphon**	
		dark room lamp	
		developer bottle	
		developer tray	
		developing tank	
		negative carrier	
		enlarger	postcard enlarger
		negative masks	
	editing equipment	**film editor**	
		film joiner	
		film splicer	
		titling outfit	
	viewing equipment	**cine projector**	
		film projector	
		preview screen	
		transparency projector	slide projector
		transparency viewer	slide viewer View master

Classification/Keyword	Type	ObjectName/Keyword	use for
printed, written and drawn material	**newspaper**	**National newspaper**	
		local newspaper	
	magazine	**lifestyle magazine**	

		comic	
		fashion magazine	
		programme listing magazine	
		current affairs magazine	
		celebrity magazine	
		specialist interest magazine	
		entertainment magazine	
	book	**annual**	
		picture book	
		hardback book	
		paperback book	
		graphic novel	
		handbook	manual
	pattern	**crochet pattern**	
		knitting pattern	
		sewing pattern	
	ephemera	**greetings card**	
		booklet	
		calendar	
		flyer	
		wrapping paper	
		leaflet	
		balloon	
		label	
		programme	
		postage stamp	
		newsletter	
		menu	
		information pack	
		sticker	
		scrap book	
		envelope	
		cigarette card album	
		tea card album	
		invoice	
	travel material	**postcard**	
		map	
		tourist guide	
		holiday brochure	
	reports and catalogues	**catalogue**	
		brochure	
		year book	
		directory	
		strategic plan	
		report	
		prospectus	
	handmade material	**letter**	handwritten letter
		hand drawn material	
		illustration	
		sketch book	
	sheet music	**booklet**	
		book	

	poster	**travel poster**	
		advertising poster	

Classification/Keyword	Type	ObjectName/Keyword	use for
promotional material	**commemorative souvenir**	**pin badge**	
		stamp set	
		textile	
	seasonal	**pin badge**	covers
		Easter egg	
		pouch	
	advertising	**shop sign**	
		bar pump top	
		bag	paper carrier bag plastic carrier bag
	media related merchandise *objects relating to recognisable characters; eg TV, film, radio, comics*	**pencil case**	
		bottle	
		fridge magnet	
		pin badge	
		money box	
		cup	
		booklet	
		book	
		toy	spitting image
		magazine	
	company related merchandise *objects relating to recognisable company; eg Cadburys*	**pencil case**	
		bottle	
		cup	
		fridge magnet	
		pin badge	
		money box	
		booklet	
		book	
		toy	
		magazine	
	product related merchandise *objects relating to recognisable product; eg M&M, Smarties*	**calculator**	
		container	
		badge	
		money box	
	campaign related material	**leaflet**	
		poster	

Classification/Keyword	Type	ObjectName/Keyword	use for
plastics samples	**materials**	**recycled plastic samples**	
	tools	**mould**	
	processing		
	construction	**fasteners**	bighead bonding fasteners

Classification/Keyword	Type	ObjectName/Keyword	use for
smoking	**storage**	**cigarette container**	

		cigar container	
		tobacco container	
	smoking accessories	**ashtray**	
		lighter	
		pipe	
		pipe cleaner	
		hookah	
		cigarette holder	
		cigar cutter	
	smoking packaging	**cigarette packet**	
		cigar tin	
		tobacco pouch	

Classification/Keyword	Type	ObjectName/Keyword	use for
sports, leisure and hobbies	**sportswear**	**swimwear**	swimming suit bikini
		socks	ski socks running socks sports socks trekking socks fishing and hunting socks
		gloves	swimming gloves boxing gloves racing driver gloves cricket gloves goalkeeper gloves
		eyewear	cycling goggles glasses swimming goggles ski goggles
		headgear	horse riding hat cycling helmet skateboarding helmet
		vest	
		trousers	jodhpurs
		shirt	
		jumper	
		shorts	
		jacket	hacking jacket
		footwear	horse riding boots motorbike boots snowboard boots football boots
		cape	
		one-piece suit	ski suit wet suit cycling suit
		body armour	shin guards mouth guard knee pads

			elbow pads
			cricket box
	sports equipment	**racket**	tennis racket
			squash racket
		seat	horse riding saddle
			cycle saddle
			karting seat
		skis	
		ball	bowling ball
			therapy ball
			pool balls
			snooker balls
			football
		drinks container	
		fins	monofin
			split fins
		kite	
		board	surf board
			skate board
		riding crop	
		life jacket	
		training accessory	hand grip
			balance board
			skipping rope
		skates	ice skates
			inline skates
			roller skates
		bag	
	leisurewear	**swimwear**	
	leisure equipment	**snorkel**	
		playing cards	
		chess	
		draughts	
		dominoes	
		pump	li-lo pump
		ball	
		darts set	
		kite	
	hobby equipment	**model kit**	
		paint box	
		flower press	
	musical equipment	**musical instrument**	recorder
			Stylophone
			synthesiser

Classification/Keyword	Type	ObjectName/Keyword	use for
telecommunications	**telephone**	**landline telephone**	
		mobile phone	
		telephone answering machine	
		car phone	
	telephone accessory	**hands free kit**	

		phone card	telephone card
		mobile phone case	
		mobile phone charm	
		answer machine	
		telephone numbers book	

Classification/Keyword	Type	ObjectName/Keyword	use for
textiles	**knitting and crochet**	**crochet hook**	
		crochet publication	crochet magazine crochet book
		crochet pattern	
		knitting machine	
		knitting machine accessory	ribbing attachment
		knitting needles	
		knitting needles case	
		knitting publication	knitting magazine knitting book
		knitting pattern	
		yarn	
		yarn holder	
	dressmaking and needlework	**dress kit**	
		dress making guide	
		dressmakers mannequin	
		embroidery	ecclesiastical stole
		lace	
		sewing machine	
		sewing machine accessory	
		sewing machine case	
		sewing needles	
		sewing publication	sewing magazine sewing book
		sewing pattern	
		sewing thread	
	haberdashery	**automatic button attacher**	
		button	
		elbow protectors	
		trouser pockets	
		darning aid	
		ribbon	
		squared pattern paper	
		tracing paper	
		tracing wheel	
	fabric	**animal skin**	
		swatch book	
	millinery	**felt samples**	

Classification/Keyword	Type	ObjectName/Keyword	use for
Toys and games	**collectable**	**figurine**	
		designer toy	qee
		vehicle	

		model	
		give-away	
		media related toy	
		card	
	vehicle	**helicopter**	
		car	
		motorbike	
		lorry	refuse truck
		scooter	
	vehicle accessory	**garage**	
	doll	**action figure**	
		fashion doll	
		character doll	
		puppet	
		baby doll	
	doll accessory	**beauty kit**	
		tea set	
		clothing	
		house	
	construction	**blocks**	
		bricks	Lego
		kit	
		shaped pieces	
	puzzle	**3D puzzle**	
		jigsaw puzzle	
	activity	**yo-yo**	
		ball	
		pull-along toy	
		gun	water pistol cap gun
		frisbee	
		hobby horse	
		windmill	
		bath toy	
	game	**board game**	
		computer game	computer game computer software and games
		handheld game	
		walkie talkie	
	game accessory	**joy stick**	
	toy appliance	**cooker**	
		sewing machine	
		vacuum cleaner	
		tool	
	robot	**humanoid**	
		insectoid	
		interactive	
		animal	
	optical	**microscope**	
	creative play	**felt picture**	
		kit	
		paint box	

	animal	**soft toy**	
		model	
		interactive	

Classification/Keyword	Type	ObjectName/Keyword	use for
Travel and holiday	**food and drink**	**box**	
		bowl	
		cup	
		saucer	
		plate	
		cup and saucer	
		knife	
		fork	
		spoon	
		cutlery set	
		picnic set	
		picnic cooker	
		food container	
		cool box	
		ice pack	
		flask	vacuum flask insulated flask
		mug	insulated mug
		bottle	
		flask stopper	
		lunchbox	
		kettle	
	travel accessories	**vanity case**	
		cosmetics bag	
		clothes hanger	
		iron	
		wash kit	
		currency calculator	
		flight kit	
		radio	
		clock	
	disposable	**cup**	beaker mug
		plate	
		bowl	
		knife	
		fork	
		spoon	
		cutlery set	
	travel keepsake	**souvenir**	ostrich egg
		postcard	
		transparency viewer	
		transparency	
		ticket	
	transport	**motor vehicle part**	
		bicycle part	
	camping	**toilet**	

Appendix D: Intellectual Property Rights Procedures

When looking at copyright issues, first check the Copyright status file Q:\MoDiP\copyright and the hard copy files (A-Z lever–arch files on the shelf in the office L.13) to see if the company has been contacted in the past, and how successful the correspondence has been.

- Finding contact details

The main source for finding contact details for companies is the internet. Ideally an email contact is better than a postal address. It is important to carry out correspondence in writing so there is written evidence of attempts to contact the company in case a dispute occurs in the future. If a telephone call needs to be made, follow it up with an email or letter and encourage the company to follow suit.

- Making contact

If the company has not been contacted before send out an initial email as follows.

> *Dear [company]*
>
> *We at the Museum of Design in Plastics at The Arts University College at Bournemouth are currently working on a project to make available an online catalogue of the objects we hold in our collection.*
>
> *We have [a variety of objects- change as appropriate] relating to your company which we would like to include. I would be grateful to you if you could tell me the best contact within your organisation to discuss the granting of permission to allow us to take photographs of your products and make the images available for browsing online.*
>
> *Further information about the museum can be found at www.aib.ac.uk*
>
> *Thank you very much for your time.*

If this gets a reply with a named contact send the following email:

Dear [person]

We at the Museum of Design in Plastics at The Arts University College at Bournemouth are currently working on a project to make available an online catalogue of the objects we hold in our collection.

We have a small number of objects relating to your company in the collection, please see list attached, which we would like to photograph and make the images available for non-commercial educational use. We would like to request permission for these products and any future acquisitions, to be used for this purpose.

The images and catalogue information regarding these objects, including manufacturer and designer details, will be used on the www.plasticsnetwork.org website, our own online catalogue, along with other educational sites.

Plasticsnetwork.org was launched in 2005 and work is ongoing updating the site and its contents. This website is the result of a national and international partnership of museums and other organisations. It provides access to a unique collection relating to the design, history, technology and application of plastics in product design. I am sure you will agree that an image of an object will mean so much more to our online visitors than a mere description ever will.

The primary users of this website are our students, other researchers and museums, teaching staff from both our College and other educational establishments, as well as interested members of the public. Although the plasticsnetwork.org website concentrates on objects either solely made from plastic or containing plastic components it will provide access to information about all of the objects in the Museum's collection.

All images used will also be accompanied by a copyright notice prohibiting any form of reproduction. We are an Accredited Museum with an educational focus. The website uses low resolution images for easy browsing but the Museum will maintain a high resolution master copy which may be used for other educational purposes.

We would therefore be grateful if you could grant permission for images of your products to be used by informing us in writing either by email or by post. At the same time please inform us of any additional information you would like us to include in our records and / or online. The Museum can provide you with high quality images of these products if this would be of interest to you.

If we do not receive a reply concerning this issue within 4 weeks we will include images of the objects with a caveat stating that we have been unable to trace the rights holders.

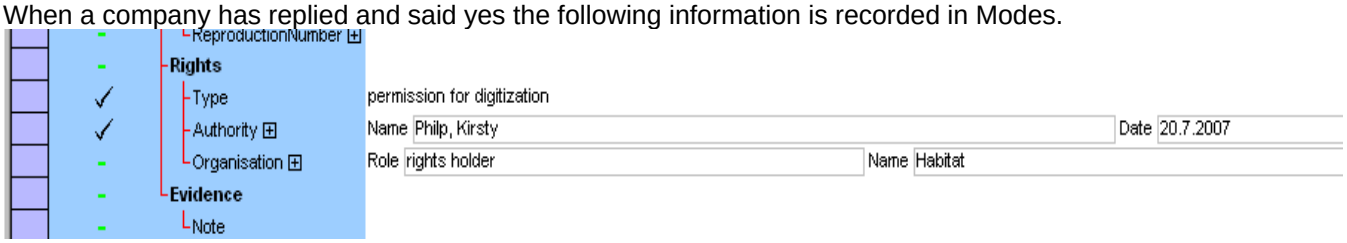
Thank you very much for your time and I look forward to hearing from you.

If this standard letter is not appropriate adjust as required. Alternatively, send a letter (see attached). A hard copy of all correspondence should be filed in the A-Z files (see above).

Update the electronic file on the Q drive.

- Getting a reply

When a company has replied and said yes the following information is recorded in Modes.



The information includes the name of the person who has given you permission and on what date, along with the name of the company who made or designed the object.

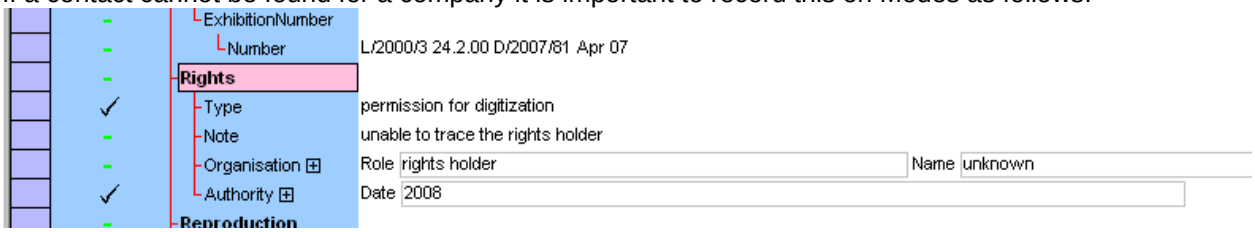
The paperwork should then be filed in the A-Z files (see above), under the company name. All cleared companies go at the back of the alphabetical section, leaving any on-going correspondence at the front of the section.

- Getting no reply

It is best to give companies a chance to reply, if necessary send another email or letter at a later date. If you feel this is inappropriate or this again gets no response record the information on Modes as follows:

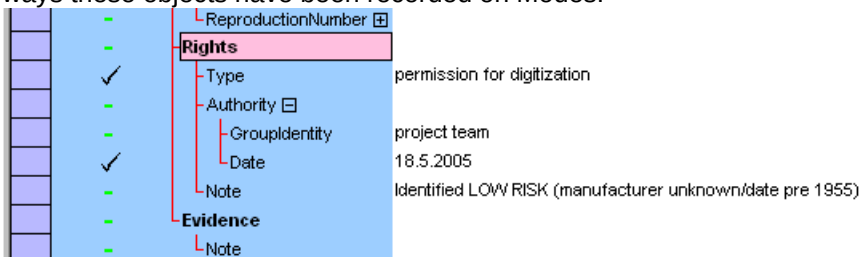
- Company cannot be traced

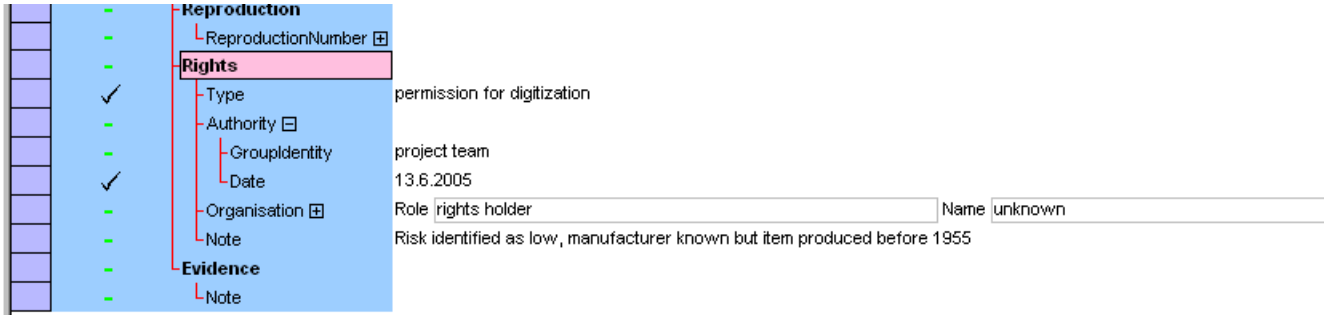
If a contact cannot be found for a company it is important to record this on Modes as follows:

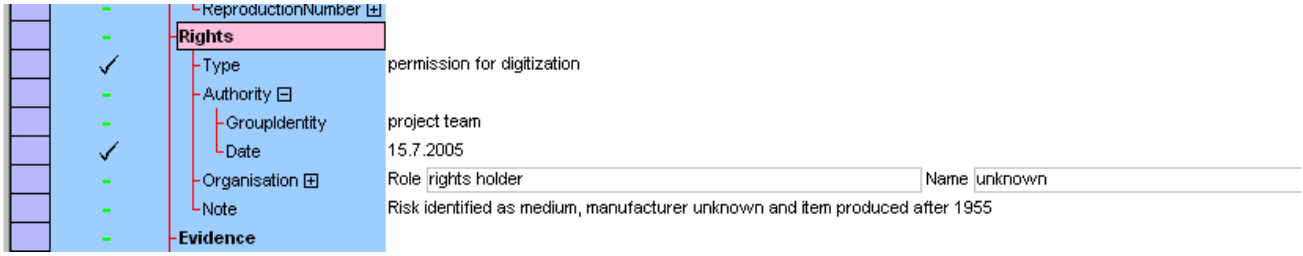


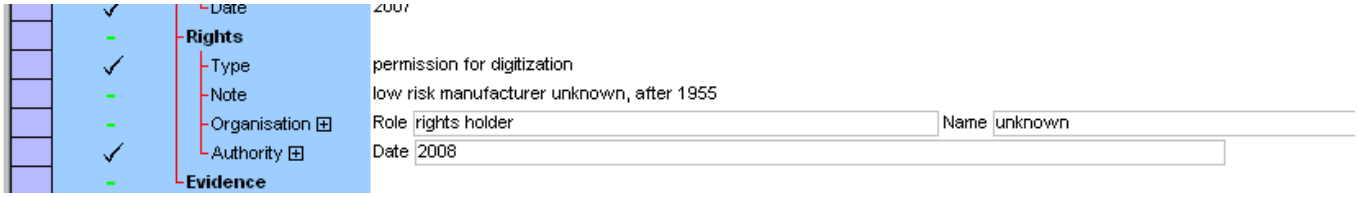
- Low risk objects

In 2005 at the beginning of an earlier digitization project the project team chose to deem some objects low risk, at the time this meant all objects produced before 1955. Those objects manufactured after 1955 but with unknown manufacturers were also seen as low risk. The following shows some of the ways these objects have been recorded on Modes:









Update the electronic file on the Q drive

APPENDIX E: Dissemination / Sustainability Strategy

Publication avenues

1. As the objects are documented and digitised they are made available on the AIB's website: www.aib.ac.uk.

2. Longer term the intention is to make them available on a new MoDiP specific website which is being scoped and specified as part of MoDiPDiP.

3. VADS has agreed to host on its site www.vads.ac.uk both images and learning packages made with them or to include a hyperlink to them on other websites depending on the technology used to build the latter. Loading of the first tranche of material will take place in October 2009.

4. UKCME is also happy to host on its site www.materials.ac.uk material developed as a result of MoDiPDiP and has expressed particular interest in learning packages on Plastics in Sport and Plastics, Sustainable Design and Recycling. A specific 'news' feature on the website will highlight to users these resources. In this way, the on-line learning packages will be made available in general release format. In terms of targeted use, UKCME will also make available these on-line learning resources for a range of specific Plastic modules in a number of institutions, both from the HE and FE sector.

5. The learning packages will also be made available through JORUM. We are currently discussing whether Jorum Open (worldwide) or Jorum Education UK would be the more effective venue.

Learning packages

MoDiPDIP commits MoDiP to the creation post project of three learning packages a year for three years.

Our proposal is that the learning packages will be object focussed and consist of between 20 and 40 objects a package. They will include an introductory text of about 500 words and a number of sections that will also be introduced with short texts. The principal focus will however be the investigation of the objects and what they tell us about or how they contribute to the theme.

Subjects for the packages will be drawn from the following:

- Plastics in sport
- Plastics, sustainable design and recycling
- The properties of plastics as an inspiration to creativity
- Historical look at the impact of plastics on making the world as we know it
- Plastics as substitutes e.g. fur, pearl and body parts
- Plastics and street culture
- Plastics: materials and their properties
- Plastics: processes of manufacture
- Plastics: degradation and preservation
- Plastics in medicine
- Decorative and protective finishing of plastics

- Plastics and product development – a number of packages looking at different products

These learning packages will be promoted by UKCME drawing on the findings of its recent analysis of how and wehrer the subject of materials, inclusive of plastics science and technology is taught at HE levels in the UK.

Collaboration with the national 'CORE-Materials' OER project

UKCME is leading a national Open Educational Resources (OER) project entitled 'CORE-Materials'. The primary aim is to release existing electronic learning resources made available by Consortium Partners for 'open' use; the secondary aim is to explore processes, issues and policies involved in the practices of releasing such content from the range of collaborating institutions.

In partnership with UKCME, the MoDiP Team will be associated indirectly with 'CORE-Materials'. During the academic year 2009/10 UKCME staff will advise MoDiP on how best to add value to electronic resources created by MoDiPDiP by:

- advising on aspects of Creative Commons licensing – extending the IPR work of MoDiPDiP

- exploring a range of Web 2.0 services with a view to incorporating added functionalities to the MoDiPDiP resources / collection.

Delivery of a UK-wide plastics materials dissemination event

In partnership with UKCME, a day-long event to look at available resources to support learning in the plastics subject area promoting especially resources developed as a result of the MoDiPDiP will be held in the second semester of the new academic year 2009/10.

APPENDIX F: EVALUATION PLAN
MoDiPDiP at AUCB: the Evaluation 'Road Map' – *dated August 2009*

A comprehensive evaluation of the MoDiPDiP project is to take place in three distinct phases, as outlined below. The work in all phases will be undertaken by an External Evaluator, appointed by the UK Centre for Materials Education (UKCME) – which is part of the national Subject Centre Network of the Higher Education Academy.

The output will be an evaluation report providing evidence of impact and documenting project lessons learned, for use by the funder, the JISC community and the ACUB.

Phase 1: Sep to Dec 2009 – Evaluation of MoDiPDiP Processes / Strategies

- *Methodology:* A series of face-to-face semi-structured interviews, held in London and at AUCB; with follow-up tasks of transcribing, analyses and report writing.
- *Sample:* The interviews will be conducted with both the Project Team and those involved in the Project Steering Group, as follows:
  - the four members of the MoDiPDiP Team based at AUCB (Director/Manager, Documentation Manager, Senior Project Officer, and Project Officer);
  - a representative from the Plastics Historical Society who provided artefacts;
  - four academic colleagues at AUCB who contributed to project developments;
  - a representative each from the Collections Trust, the Modes Users Association, the VADS consultancy, and the academic research / museum community;
  - a senior manager from AUCB as host institution for MoDiPDiP.
- *Deliverable:* An evaluation report addressing, amongst others, aspects of project context, methodology (e.g. digitised resources / collection, technical / legal factors, pedagogical / end-user issues), links and connections, benefits / outcomes, and future plans.

Phase 2: Jan to Mar 2010 – Evaluation of MoDiPDiP Products (learning packages)

- *Methodology:* Questionnaire surveys and participant observations with a range of focus groups using two of the MoDiPDiP learning packages constructed as project outputs (these ready for user testing at the end of Dec 2009); with follow-up tasks of data analyses from participant responses and report writing.
- *Sample:* The surveys will be conducted with cohorts of students and academic staff from a range of Materials subject-based programmes of study (the UKCME will visit these end-users at their institutions to ensure their participation in the evaluation).
- *Deliverable:* An evaluation report determining the useability, functionality, quality, relevance and applicability of the two learning packages to the range of end-users; with recommendations identified for shaping the development of other learning packages scheduled as a series of MoDiPDiP products.

Phase 3: Apr and May 2010 – Evaluation of MoDiPDiP Dissemination Day

- *Methodology:* Questionnaire surveys of delegates at a UK-wide Plastics Materials dissemination event publicised and organised by UKCME on behalf of MoDiPDiP.
- *Sample:* Delegates will be drawn from academics / researchers, students, museum professionals, product designers / manufacturers, all involved in plastics materials.
- *Deliverable:* An evaluation report of participant perceptions of MoDiPDiP outcomes, products and future plans in relation to the enhancement of design in plastics.

APPENDIX G: REVIEW OF PROJECT OUTCOMES FROM PHS VIEWPOINT

The Plastics Historical Society (PHS) has been a partner in the project and has been actively involved in it throughout. We have valued our relationship with AUCB for several years and our involvement in this project has confirmed the value of our links.

We believe that we have been able to help considerably in identifying and classifying all the items from both MoDiP and PHS collections. A large part of this work was carried out jointly and we are sure that much of the PHS expertise in materials and manufacturing processes was able to be transferred to MoDiP staff to supplement their own considerable museum expertise.

The collaboration between MoDiP and PHS during this JISC project has been very much a two-way process. The PHS has, as one of its main objectives, promotion of study, preservation and sharing of information on all historical aspects of plastics. The project has succeeded in helping to achieve these objectives in a number of ways.

- MoDiP staff have considerable experience of exhibiting plastics effectively to reach a wide audience ranging from specialists to lay people. Working in collaboration with MoDiP we have been able to get a clearer appreciation of the ways in which we could reach a wider audience more effectively as well as improving the service to our members.

- As the project progressed we recognised the value of detailed and standardised classification of artefacts and the application of these to our collection has greatly enhanced its accessibility. This systematic approach will undoubtedly help us in maintaining and extending our collection. We believe this an important outcome of the project which should be adopted universally.

- In addition to the written classification of the collections the photographic images will be a considerable asset to us. The multiple images produced for more complex mouldings will dramatically improve the accessibility of the collection to our membership, which extends right across the UK and includes a number of members from overseas, who would have difficult in seeing the objects ‘in the flesh’.

We feel privileged to have been a partner in this project and to have worked with such a dedicated group. We are sure that as the project reaches its conclusion and is hopefully followed by further initiatives we will discover many more aspects of value to us in promoting the Society’s objectives.

Steve Akhurst
Chairman
Plastics Historical Society

JISC Completion Report

Lessons Learned

Aims and Objectives

The project achieved its basic aims and objectives and these did not change. However its full value will only be realised if we build the website specified as a prototype as part of the project and when we make and promote the three learning packages for three years which we are committed to do post-project.

Overall Approach

We were slow to get going. This was partly because we did not understand what JISC requirements of us were. For example we thought JISC had certain standards of digitisation with which it wished us to comply rather than, as eventually emerged, that it was for us to decide on these standards. It was also because it was only when we reviewed our digitisation and metadata gathering processes at the outset of the project that we realised considerable development work in terms of guidelines and term lists was necessary. More time for developing and agreeing standards should have been written into the project.

We developed a plan of contact (as opposed to work) with one of our partners at the outset but not with the other. Another time we would draw up such a plan with all partners.

The development of the metadata and digitisation standards was done primarily by one member of the team who also took responsibility for the imaging aspects of the project. As a result a large amount of the metadata gathering and inputting fell to another member. Another time we would try to ensure that the tasks were more evenly shared and that staff had a better balanced programme of work. The fact that we now have standards agreed will make this easier to achieve in the future.

We would also try to ensure greater buy-in to the project on the part of the teaching staff and students at the AUCB. In particular we would hold a lecture theatre event at which we would show people our current practice and ask them how it could be improved. I do not think that this would have resulted in the development of a better resource but I do think it would have increased understanding about our work and what we can offer staff and students within the AUCB.

Project Outcomes

Project outcomes and impacts on the teaching, learning and research communities are the following freely available for any non-commercial use:

- 1500+ objects recorded digitally with between 2 and 12 views depending on the intricacy.
- new metadata uniquely associated with 400+ of these artefacts.
- improved metadata uniquely associated with 1100+ of these artefacts.

In addition the MoDiP team has:

- greater understanding of the needs of the teaching, learning and research communities.
- greater understanding of how the collection can be used for teaching and learning.
- improved practices relating to digitisation and the provision of metadata for use in the future.
- a functional prototype for an improved presence on line.
- enriched contacts within the education and academic communities.
- enriched contacts with the plastics and industrial design communities.

- concerted programme of engagement with the HE community, including dissemination through the VADS, UKCME and Jorum Open.

These will impact on the teaching, learning and research communities through our work in the future.

The main lessons we have learnt are:

- the importance of good quality equipment. The images taken during the project are better partly because we have been using a better camera.
- the importance of working to agreed standards.
- getting going takes longer than you expect.
- the importance of setting out time schedules with partners.
- the importance of getting buy-in from colleagues beyond the immediate team.

The most significant outcome of the project we did not expect at its outset was the impact it has had on how we will do things in the future.

Project Partners

Our collaboration with both the PHS and the UKCME has been constructive and productive for all parties. We have learnt only one lesson and that is that our partners, understandably, do not necessarily have the same priorities at the same moment as us and so it is important to map out contact dates and deadlines at the outset.

During the course of the project we also had contact with the JISC Digital Media, VADS and JORUM. The JISC Digital Media were involved in helping us agree imaging standards and did its best to help but there was an unbridgeable gap between our knowledge and the technical language used. Our communications with VADS and JORUM have been enabling and led to agreed shared outcomes.

Project Management

Breaking the project down into work packages proved very helpful. We had not done this before and will do it in the future. However, in planning the workflow we did not take account of the uneven flow of MoDiP's day to day work which is influenced by the needs of our students. As a result the project moved forward at an uneven pace.

We found our weekly catch up chats extremely helpful.

Programme Support

It was disappointing that when the project managers met at the beginning of the project the planned short informal presentations about each project were dropped. As a result it was not easy to see where the synergies were. However, the presentation by David Tomkins led us to visit the John Johnson project to look at how its workflow was monitored but we found its tool more complicated than we needed. Otherwise we have had little contact with other projects but we have developed an ongoing and mutually beneficial relationship with the VADS that has led to some further funding. I regret that we have not shared experiences more with other projects and expect our meeting in Belfast to be productive in this respect.

We had some difficulties with the management of our project at the outset. These were resolved when the out-going and in-going Project Managers visited us early in December but that was already two months into the project. From then on the Project Manager could not have supported us better. Especially important was his input to the selection of the firm to build the website specification. He provided expertise we did not have ourselves and proved the ideal person with whom to debate the pros and cons of the candidates. He was always quick to respond to any questions, always constructive and always enabling.

Future Work

The project was as much about what the resource it created would make possible in the future as it was about the resource as it stands at the closure of the project. There are two important strands here:

- It is only when we build the MoDiP specific website to the specification created as a result of the project that researchers will be able to make full use of the images and metadata we have created. Currently we do not have the funding to do this.
- it is only when we create and disseminate the learning packages written into the project as a post-project commitment that the project will realise its considerable potential impact on teaching and learning. This work is in the MoDiP Future Plan.

It is our intention, also, to re-photograph the 1500 artefacts that were accompanied by digitised images before MoDiPDiP to the same standard and also submit the rest of MoDiP's plastic collection, some 5500 more artefacts, to the same procedures at a rate of 750 artefacts a year.

The projects output will also provide a core resource on the Collections Link Plastics Subject Specialist Network website to which it is hoped others will add artefacts in the collections they curate.

There are three specific ways in which the work should be further developed. By the addition of:

- an orbital image viewing facility for selected complex artefacts. .
- contextualising stills and film clips of the artefacts.
- statements and reminiscences in relation to the artefacts.

Support from JISC or another organisation to facilitate these proposed future developments would be most welcome.

Sustainability Plan

As part of the project we committed to creating post-project three learning packages for three years. This work will be taken forward by the MoDiP Team: Susan Lambert (Head), Pam Langdown (Collections Manager), and Louise Dennis (Assistant Curator) with evaluation services provided by Adam Mannis, UKCME.

The resource will also be placed on the VADS, the UKCME and Jorum Open websites. This work will be taken forward by Susan Lambert.

Susan Lambert will also work with Adam Mannis at the UKCME to add value to the resource and to promote its use including co-hosting with UKCME a national daylong seminar of Plastic materials at which MoDiPDiP will be launched.

A Dissemination and Sustainability business plan has been written.

APPENDIX A: Budget

See Appendix A to Final report.

FSWC Final Report Appendix H 090305.pdf. Final Report. NASA Study on Flight Software Complexity. Commissioned by the NASA Office of Chief Engineer Technical Excellence Program Adam West, Program Manager. â€œThe demand for complex hardware/software systems has increased more rapidly than the ability to design, implement, test, and maintain them. â€¦ It is the integrating potential of software that has allowed designers to contemplate more ambitious systems encompassing a broader and more multidisciplinary scope, and it is the growth in utilization of software components that is largely responsible