

POSTER PRINTING GUIDE

Print Services 2020

Introduction to Print Services

- Print Services are based in Northcote House and located behind the main reception area. Opening hours are 08:30 - 16:45 Monday to Friday.
- Posters, flyers, dissertations, stationery and other products can be ordered from Print Services either by email or through our online portal. However, we generally recommend sending large format posters via the portal due to their file size.
- The online portal can be found at: <https://pod.ex.ac.uk>. You will need to log in with your University credentials. You can then select large format poster printing, where you are given the opportunity to upload the poster as well as choose the required size and material.
- We do not proof-read or amend content; consequently, you will be asked to verify whether you are happy for us to print the poster before proceeding.
- Upon poster completion a notification email is sent informing that the poster is now ready and can be collected from Print Services. Delivery to St Luke's can also be arranged if requested.

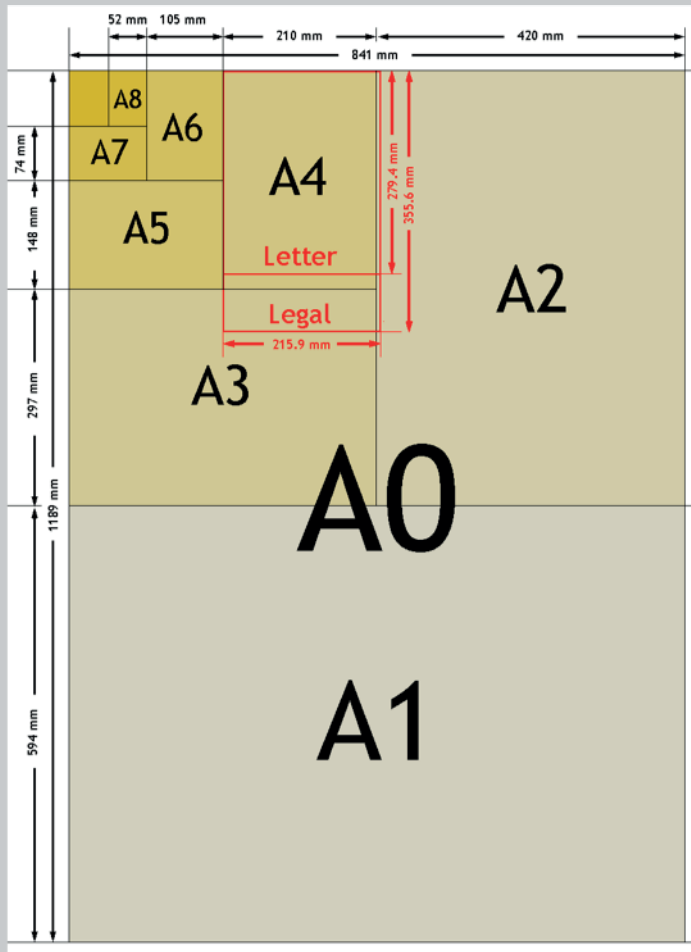
Email: printservices@exeter.ac.uk

Telephone: 01392 723068

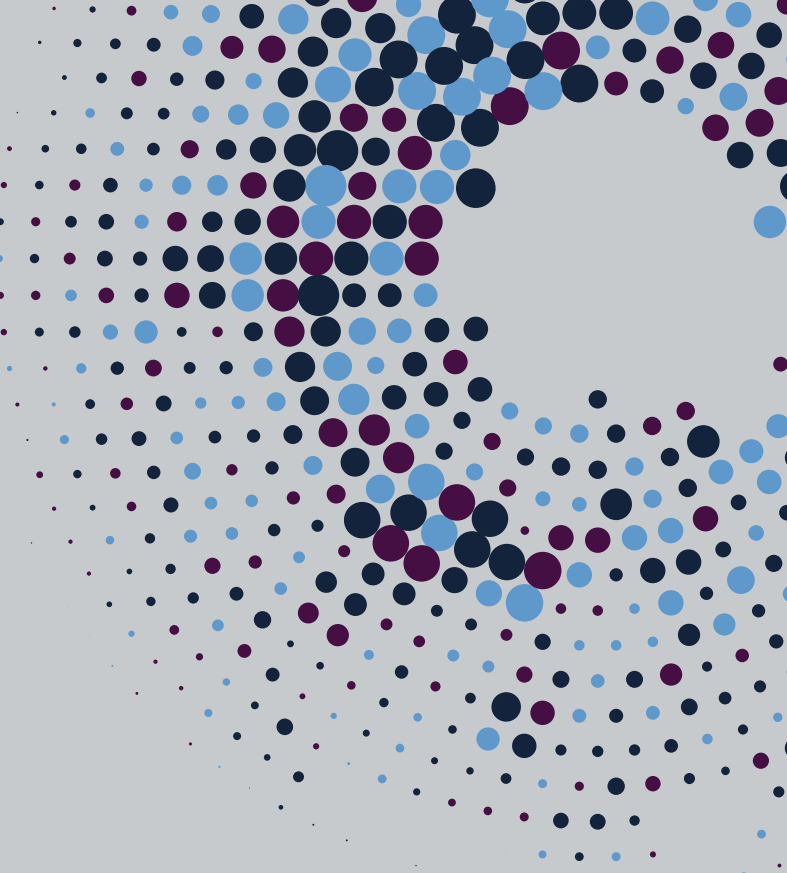
Web: <https://pod.ex.ac.uk>



Sizing and materials



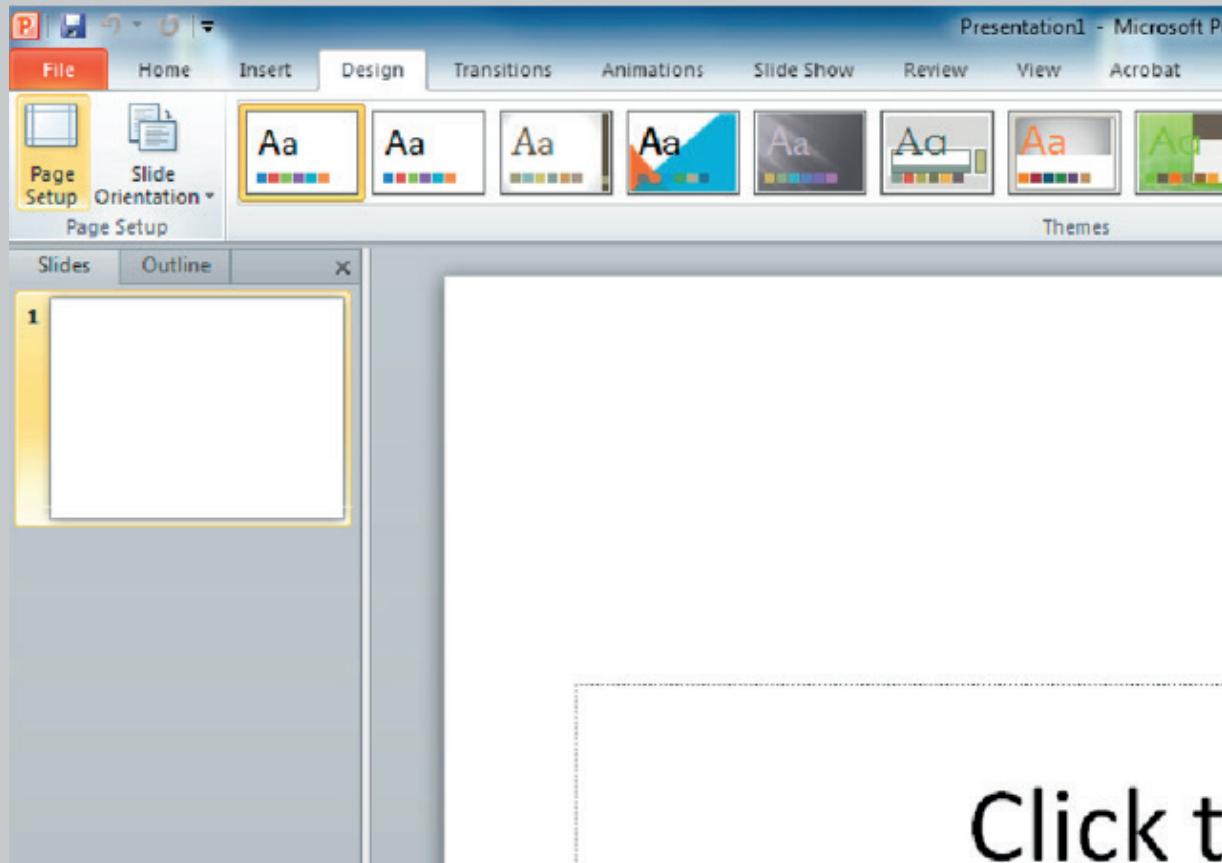
- Large format posters can be printed to a maximum of 1,050mm x 1,450mm. However, most academic posters are printed to the A-series of sizes.
- A-series sizes are proportionate – i.e. A3 is twice the size of A4, A2 twice that of A3 and so on, with the aspect ratio (the difference between the short and long edges).
- A4 can therefore be scaled to any other A-series size.
- Note that enlarging from an original A4 size can distort the quality of images. It is therefore important to set up artwork at the correct finished size. Also, please be aware that images taken from the web, although looking satisfactory on screen, normally have a low resolution, e.g. 70dpi. All images should have a minimum of 300dpi.



- Large format posters are printed on gloss, satin or canvas.
- Canvas is more durable and recommended if the poster is continually used and/or for travelling purposes as they can be folded and put into a suitcase.

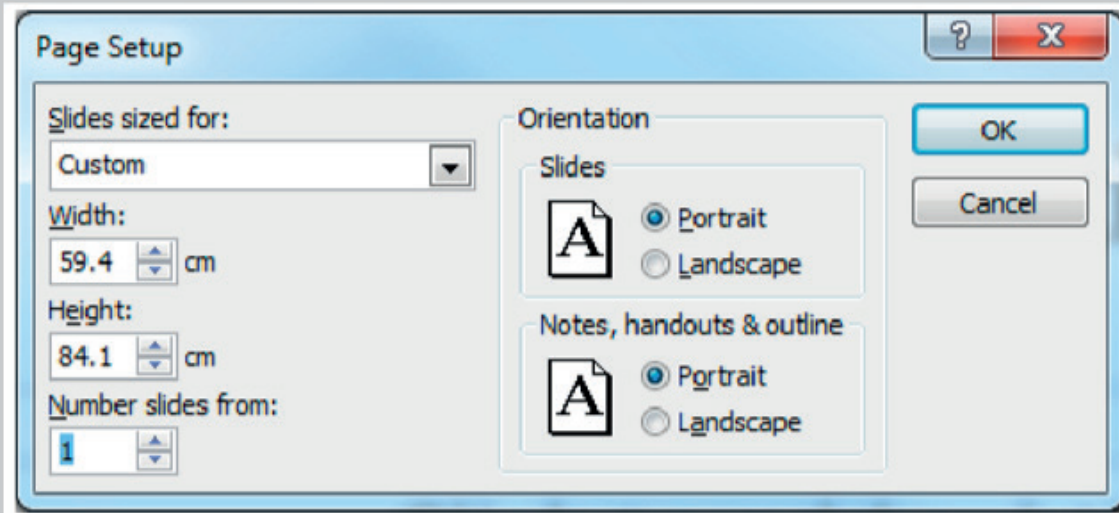
Poster design

- For best results, use a dedicated desktop publishing program e.g. InDesign or Photoshop. Otherwise, Powerpoint is acceptable. Microsoft Word and Publisher are not advised.
- Powerpoint allows you to set up the page size to the correct dimensions. This will ensure that images will print well and space is used effectively.
- To change the page size in Powerpoint, select 'Page Setup' from the 'Design' tab.



Poster design contd.

In this example, we have selected A1 size.

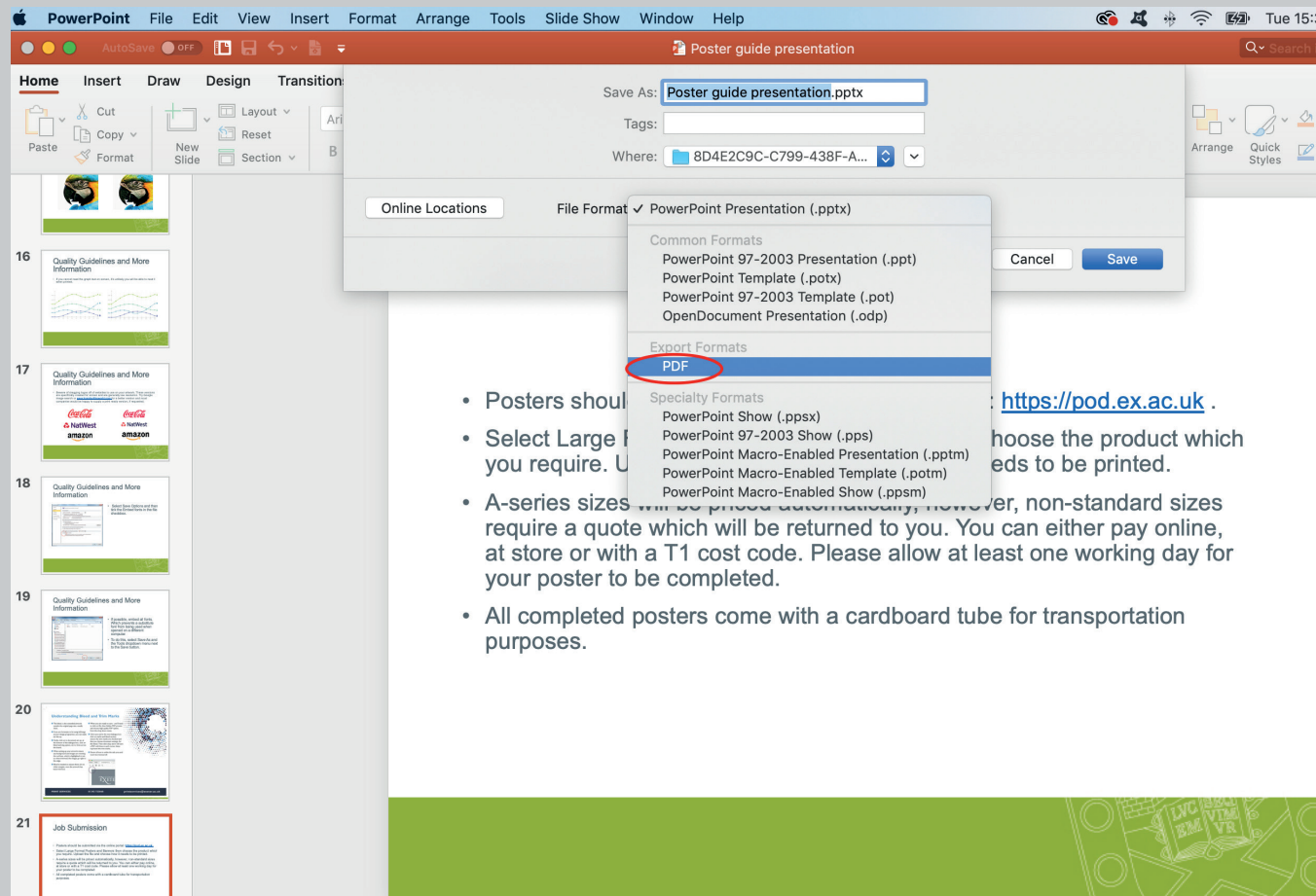


- Enter the required height and width.
- Powerpoint normally defaults to a page size designed to be used for overhead projectors. However, this will not allow scaling to the A-series sizes correctly. It is therefore important that you set up the page as an A-series size first.
- It is possible to change the page size at a later time, but this will alter the layout of any images and text boxes which have already been set up.



Poster design contd.

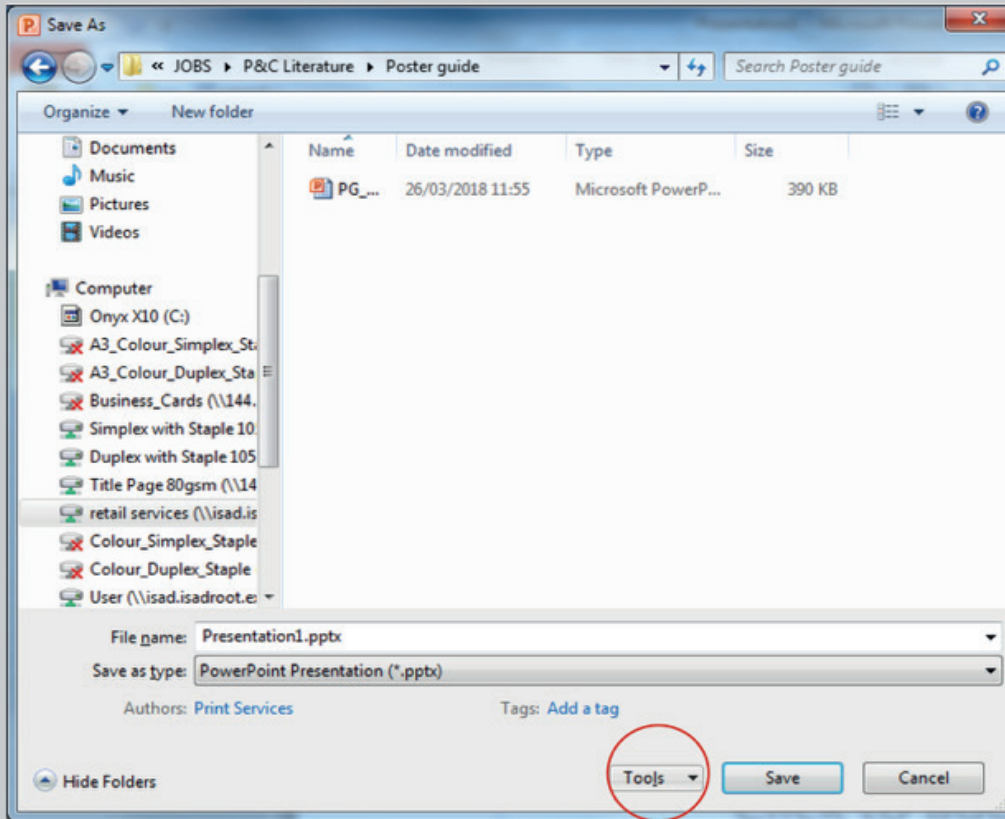
- Once you have completed your design, save/export the file to a PDF and check that it has converted correctly. Our online system will do this automatically but it is good practice to save it yourself as a PDF initially.
- You can check the size of a PDF document by hovering the mouse cursor over the bottom left corner of the page.



The screenshot shows the Microsoft PowerPoint interface with the 'Save As' dialog box open. The 'Save As' field contains 'Poster guide presentation.pptx'. The 'Where' field shows a local drive path. The 'File Format' dropdown is set to 'PowerPoint Presentation (.pptx)'. The 'Export Formats' section is expanded, and the 'PDF' option is highlighted with a red circle. The background shows a slide titled 'Poster guide presentation' with a green footer containing a logo and the text 'LVC 1830 VIM VR'.

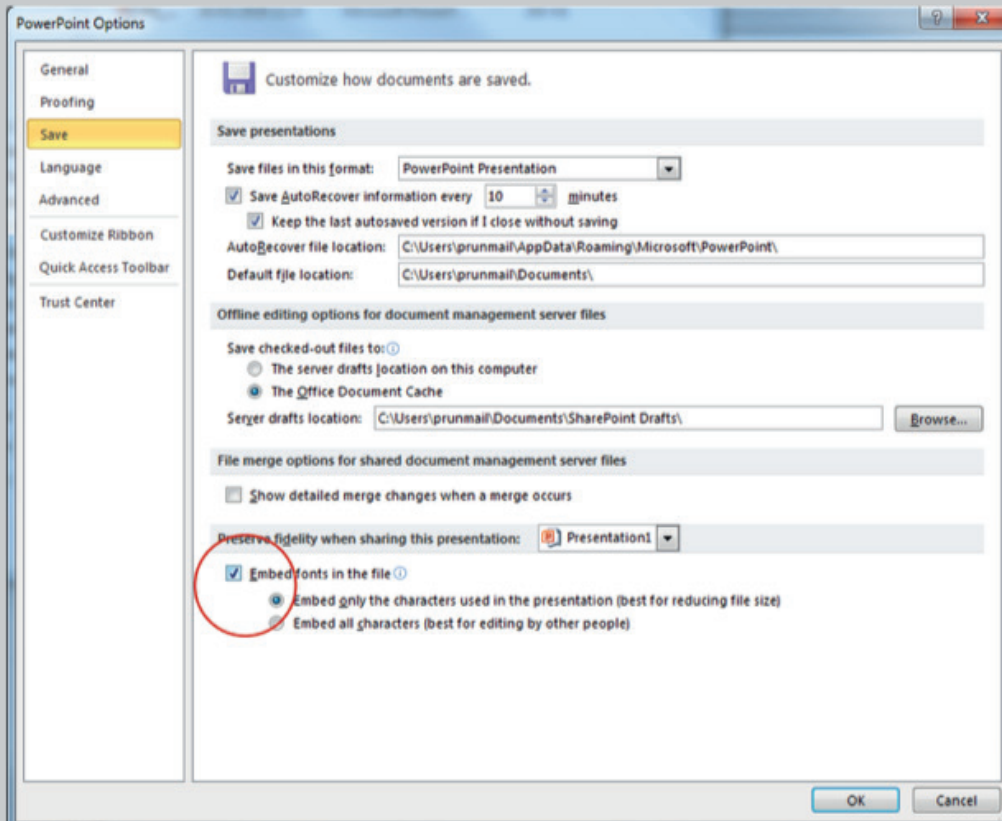
- Posters should be printed on A-series sizes. Choose the product which you require. Use the link <https://pod.ex.ac.uk> to choose the product which you require.
- A-series sizes will be produced automatically however, non-standard sizes require a quote which will be returned to you. You can either pay online, at store or with a T1 cost code. Please allow at least one working day for your poster to be completed.
- All completed posters come with a cardboard tube for transportation purposes.

Poster design contd.



- From the Save As window, use the Tools dropdown menu next to the Save button to ensure the picture compression is set to the highest quality option.
- Use the Save Options button to embed all fonts. This will prevent a substitute font from being used when opened on a different computer.

Poster design contd.



- The Advanced tab on the left hand side of this window shows another place to set the image size and print quality. Ensure that highest quality settings are selected.

Poster examples

Poor example:

Economic impact of tourism in Shanghai

Economic contribution of tourism

Total expenditure: 160.43 billion RMB

The total tourism expenditure of 160.43 billion in Shanghai generated overall 314.31 billion (direct, indirect and induced) output in all tourism sectors.

Unit: 100 million RMB

Sector	Direct	Indirect	Induced	Total
Transportation	277.83891	254.88901	138.9942	671.72212
Retail	79.227	55.2701	27.3402	161.837
Accommodation	214.276	183.888	111.051	509.215
Hospitality	217.035	191.533	111.901	520.47
Sports, entertainment, art	49.406	41.8966	40.838	132.14
Agency	4.82034	6.5659	2.0409	13.427
Other*	468.8328	379.8113	357.1231	1205.7674
Total	1505.038	1288.79	749.29	3543.12

* ICT, rental, communal facility service, other shopping areas

Income effect

The total spending of 160.43 billion by both international and national visitors brought about the collection of direct, indirect and induced income of 857 billion RMB in 2010 in Shanghai.

Employment effect

It is calculated that the spending of 160.43 billion RMB could generate additional 2.492 million employees in response to the increased demand of tourism in 2010 in Shanghai.

Sector	Direct	Indirect	Induced	Total
Transportation/ warehousing	13.55703	13.01981	7.28289	33.85973
Retail	0.907913	2.732918	1.880813	5.521644
Accommodation	29.392217	7.290484	7.82633	44.51903
Hospitality	4.852348	12.107504	7.63144	24.59129
Sports, entertainment, art	3.279207	2.078484	2.78811	8.145702
Agency	0.393333	0.302397	0.123301	0.819031
Other*	59.247588	38.813489	27.816895	125.878972
Total	118.40563	76.543366	54.64289	249.59188

Unit: 10 thousands / 100 million RMB

Reliability and validity of data

visitors in Shanghai, which is a relatively large and open area with mixture of various types of travellers (White & Stynes, 2006, pp.3-5).
Time of survey are likely to produce problems in accuracy of spending data. Anticipating the spending in the rest of travel is hard due to discretionary purchases. While mail-back survey lead to recall bias for visitors cannot recall all the items of expenditure on the trip (White & Stynes, 2006, p2).

Ignoring negative impact

It is unrealistic to consider tourism as purely beneficial. The investment in tourism must be accompanied with:

- Opportunity cost**—if the same amount of funding which has been invested in tourism is now put into other economic sectors, will the local community can receive more return on investment?
- Displacement cost**—the investment of new facilities in Shanghai just moves visitors away from old facilities to those new facilities, so the tourist demand may have no or only partial increase (Vanhove, 2005).

Difficulties in accessing contribution

There is no simple measure to accurately collect information about how much money tourists spend. The actual procedures of collecting data, which usually involve visitor survey, are easily to be trapped in various errors (Nickerson & Wilton, 2006), including:

- Unrepresentative sample of the population** can result in inaccurate representing averages. However, it is difficult to obtain representative samples from all

Policy & Conclusion

Since we have no access to exploring how data are collected and how economic effect is measured, the reliability and validity of data can not be guaranteed. But tourism in Shanghai does has great potential. In 2015, Shanghai government has made strategic plans for tourism development: positioning the image of Shanghai as "City of Fantasy" for tourism; Developing Shanghai as "International tourism center" in the future.

Increasing total tourist expenditure by including:

- Local people
- Time-switcher
- Casuals

Increasing employment effect by:

- Full time
- Part-time
- Seasonal workers

References:

Bureau of Statistics of Shanghai (2011) Shanghai tourism statistics. Retrieved from http://data.stats.gov.cn/servlet/getTable.do?_lang=en

Compton, J. (2006) Economic impact of tourism: understanding the national development of tourism. *Journal of Travel Research* 45, 57-62.

Stynes, D.L., & White, S.M. (2006) Reflections on measuring recreation and travel spending. *Journal of Travel Research* 45, 9-14.

Nickerson, J., & Wilton, M. (2006) Collecting and using visitor spending data. *Journal of Travel Research* 45, 17-26.

- Original file set up at 275.2mm x 190.5mm, needed at A2 size (594mm x 420mm). This file would need to be scaled up to over twice the original size.
- Wrong aspect ratio.
- Stretched, low resolution images.
- Small text and text too close to edges of the page.

Poster examples contd.

Poor example:

When scaled up to A2 size, there is a white border on the top and bottom of image. This is due to the non A-series size of the original and would be prevented if the page set up had been set to A2 originally.

Economic impact of tourism in Shanghai

Economic contribution of tourism
 The major source of tourism revenue is coming from the domestic tourists with 130.841 billion RMB, accounting for 62% of overall 160.43 billion RMB tourism expenditure in 2010.

Income effect
 The total spending of 160.43 billion by both international and national visitors brought about the addition of direct, indirect and induced expenditure of 455.855 billion RMB in 2010 in Shanghai.

Employment effect
 It is calculated that the spending of 160.43 billion RMB could generate additional 2.492 million employees in response to the increased demand of tourism in 2010 in Shanghai.

Output effect
 The total tourism expenditure of 160.43 billion in Shanghai generated overall 314.31 billion (direct, indirect and induced) output in all tourism sectors.

Reliability and validity of data
 visitors in Shanghai, which is a relatively large and open areas with mixture of various types of travelers (White & Stynes, 2006, pp.3-5).
 Time of survey are likely to produce problems in accuracy of spending data. Anticipating the spending in the rest of travel is hard due to discretionary purchases. While mail-back survey lead to recall bias for visitors cannot recall all the items of expenditure on the trip (White & Stynes, 2006, p2).

Ignoring negative impact
 It is unrealistic to consider tourism as purely beneficial. The investment in tourism must be accompanied with:
 > **Opportunity cost**—if the same amount of funding which has been invested in tourism is now put into other economic sectors, will the local community can receive more return on investment?
 > **Displacement cost**—the investment of new facilities in Shanghai just moves visitors away from old facilities to those new facilities, so the tourist demand may have no or only partial increase (Vanhove, 2005).

Difficulties in accessing contribution
 There is no simple measure to accurately collect information about how much money tourists spend. The actual procedures of collecting data, which usually involve visitor survey, are easily to be trapped in various errors (Nickerson & Wilton, 2006), including:
 > **Unrepresentative sample of the population** can result in inaccurate spending averages. However, it is difficult to obtain representative samples from all

Policy & Conclusion
 Since we have no access to exploring how data are collected and how economic effect is measured, the reliability and validity of data can not be guaranteed. But tourism in Shanghai does has great potential. In 2015, Shanghai government has made strategic plans for tourism development: positioning the image of Shanghai as "City of Fantasy" for tourism; Developing Shanghai as "International tourism center" in the future.

Reliability?
 Multilateral effect on job and income
 Local residents
 Government
 Investment in tourism
 Visitors
 Tourism expenditure

Increasing total tourist expenditure by including:
 Local people + Time-switcher + Casuals = ↑

Increasing employment effect by:
 Full time + Part-time + Seasonal workers = ↑

Tables:

Section	Direct	Indirect	Induced	Total
Transportation/ warehousing	13,557025	13,015981	7,382969	33,956000
Retail	9,907913	2,732918	1,890613	14,531444
Accommodation	29,392137	7,290444	7,639633	44,322214
Hospitality	4,852346	12,107904	7,63144	24,591694
Sports, entertainment, art	3,279307	2,079884	2,78951	8,148742
Agency	0,333151	0,303397	0,121901	0,758449
Other*	59,347586	38,813489	27,319495	125,481570
Total	138,439543	76,543396	54,842880	269,825819

Section	Direct	Indirect	Induced	Total
Transportation	273,63991	254,88991	136,9942	675,52312
Retail	75,227	51,3901	27,0482	153,6653
Accommodation	214,275	363,886	151,051	729,212
Hospitality	217,035	391,531	111,901	720,467
Sports, entertainment, art	49,406	41,4966	40,838	131,74
Agency	4,82034	6,5459	2,0409	13,4072
Other*	468,8328	379,8113	317,1233	1165,7674
Total	1385,038	1088,73	749,29	3222,06

Section	Direct	Indirect	Induced	Total
Transportation	52,44226	25,8677	19,7928	98,10276
Retail	9,19554	4,1714	3,8584	17,22535
Accommodation	44,9524	17,7535	15,745	78,451
Hospitality	40,406	22,4043	15,683	78,4937
Sports, entertainment, art	17,8473	5,1317	5,7697	28,7487
Agency	0,33941	0,6796	0,292	1,31107
Other*	79,8329	49,4296	34,9429	164,2054
Total	244,8441	117,4349	86,545	448,8245

Poster examples contd.

Good example:


EUROPEAN UNION
Investing in Your Future
European Regional
Development Fund 2007-13


UNIVERSITY OF
EXETER

Centre for Alternative Materials
and Remanufacturing Technologies

CALMARE (Centre for Alternative Materials and Remanufacturing Technologies) is an exciting new initiative that has been established to provide South West Businesses with the expertise, advice and support to optimise the use of alternative materials, including thermosets, thermoplastics and composites, and improve remanufacturing technologies.

Areas of Expertise

- Material Performance and Testing
- Recycling
- Remanufacturing / Reprocessing
- Manufacturing Methods
- Plastics / composite production, 3D Prototyping (ALM)
- Business Innovation / Product Strategy

Funded by the ERDF, with additional match funding from its partners, the £1.8m Centre offers the South West's businesses a competitive advantage, and not only provides individual companies with the support they need, but also brings businesses together to deliver collaborative commercial ventures.

Opportunities for Businesses

R&D Support

- Access to facilities / experts
- Material / product testing and selection
- Research studies

Knowledge Transfer / Access to Experts

Collaborative Projects

- Implementation of cross network recycling solutions
- Development of new sustainable materials and processes

Business Process Analysis and Support

- Legislation
- Waste audits / Recycling and reprocessing recommendations
- Manufacturing process improvement

    
www.exeter.ac.uk/calmare

- Original file set up at the correct size – A1 (594mm x 841mm).
- High resolution images.
- No text on the edge of the page.

Quality guidelines and more information

- University branding guidelines and logos can be found here:
[www.exeter.ac.uk/departments/communication/mark-ops/design/downloads/Visual Guidelines](http://www.exeter.ac.uk/departments/communication/mark-ops/design/downloads/Visual%20Guidelines)
www.exeter.ac.uk/departments/communication/mark-ops/design/university_of_exeter_visual_guidelines.pdf
- University of Exeter Writing and Style Guide:
www.exeter.ac.uk/staff/web/writing/styleguide/atoz/
- Do not alter the proportions of the University of Exeter logo.
- If possible, set any colour values to CMYK.
- It is best to avoid font sizes below 9pt. It is also a good idea to ensure that there is a contrast between the text and background colours, so,that it can be read easily.



Quality guidelines and more information contd.

- Try to ensure that you use high quality images. Ideally any images should be at least 300 dpi. Look for high resolution versions of any images you would like to use. Although the size of the file doesn't guarantee its quality, try to look for large file sizes. These will generally contain more pixels and be a higher resolution.
- If the JPEG is less than 250kb, it will only be suitable for use on screen.
- 250kb-500kb might be usable as a small thumbnail
- 500kb-1mb is usable up to A7 (one eighth of an A4 sheet)
- 1mb-1.5mb is usable up to A6 (one quarter of A4)
- 1.5mb-2mb is usable up to A5 (half A4)
- 3.5mb, is usable up to A4
- 6mb+ is usable at A3 or over



Quality guidelines and more information contd.

- Some programs will default to US letter size which has a different aspect ratio from A-series sizes, thereby creating scaling errors and white borders around the edges of pages. Always check the required size before designing your poster.
- Just because an image looks good on screen, doesn't mean that it will necessarily print well. As long as the file has been set up at the correct size you can view the part of the poster containing your image at 100% size to get a better idea of how it would look when printed.
- You can see in the example overleaf that the low resolution image on the left is pixelated which makes the edges look jagged.



Quality guidelines and more information contd.

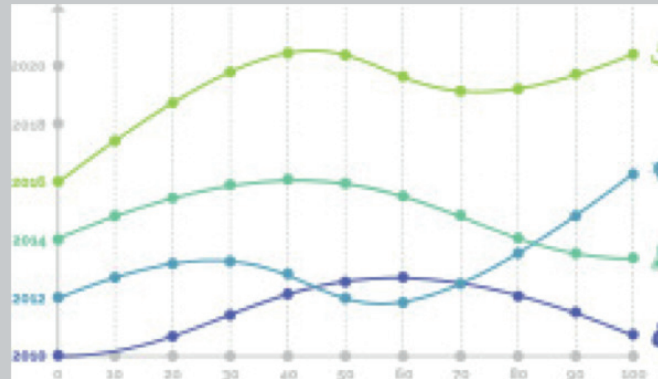
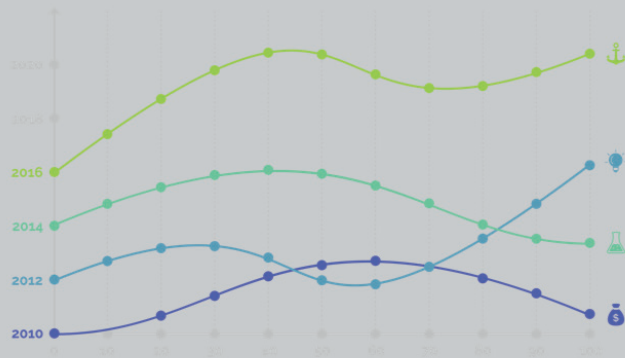
Low resolution image viewed at 100%



High resolution image viewed at 100%



Quality guidelines and more information contd.



- If you cannot read the graph text on screen, it's unlikely that you will be able to read it when printed.

Quality guidelines and more information contd.

- Beware of taking logos from websites to use on your artwork. These versions are specifically created for screen and are generally low resolution. Try Google image search or www.brandsoftheworld.com for a better version or most companies would be happy to supply a print ready version, if requested.

Low resolution:

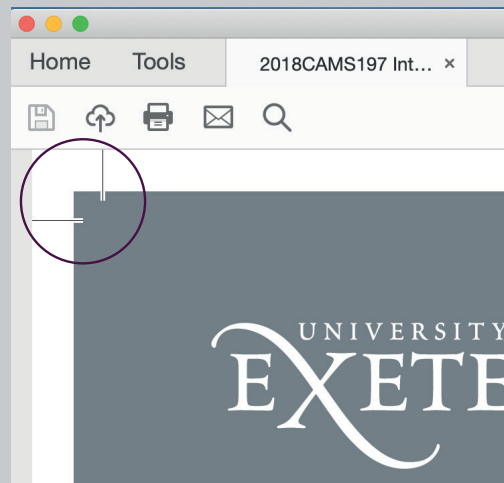
The Coca-Cola logo in a low-resolution, pixelated red script font.The NatWest logo in a low-resolution, pixelated dark blue font with a red recycling symbol icon.The Amazon logo in a low-resolution, pixelated black font with an orange smile arrow.

High resolution:

The Coca-Cola logo in a high-resolution, smooth red script font.The NatWest logo in a high-resolution, sharp dark blue font with a red recycling symbol icon.The Amazon logo in a high-resolution, sharp black font with a smooth orange smile arrow.

Understanding bleed and trim marks

- The bleed is the extended artwork outside the original page size, usually 3mm.
- If you are using InDesign as your design program, you can easily set this up.
- In InDesign go to 'File', 'Document Set Up'. At the bottom of this dialogue box, click on 'Bleed and Slug' and set to 3mm across the board.
- When setting up your artwork ensure that any background and images are meeting the red lines, so when it's trimmed the images will go right to the edge of the page and bleed off.
- Bleed is needed to ensure there are no white margins once the artwork has been trimmed.
- When you are ready to save – you will need to click on 'File', then 'Adobe PDF Presets' and choose 'High Quality Print' from the drop down menu.
- Click save and in the next dialogue box click on 'Marks and Bleed' to ensure that the 'Crop Marks' are checked and that you choose 'Use Document Bleed Settings'. When you click export it will save a PDF with lines in each corner, these represent the trim marks.
- Ensure all text is within the safe area and won't be trimmed off.



Job submission

- Posters should be submitted via our online portal:
<https://pod.ex.ac.uk>.
- Select Large Format Posters and Banners then choose the product which you require. Upload the file and choose how it needs to be printed.
- A-series sizes will be priced automatically, however, non-standard sizes require a quote which will be returned to you.
- You can either pay online, at store or with a T I cost code. Please allow at least one working day for your poster to be completed.
- All completed posters come with a cardboard tube for transport.
- Posters that have been paid for (through a cost code or online) can be delivered to specific buildings or other campuses. Please allow one working day for deliveries to Streatham or St Luke's Campus. Deliveries to Cornwall are made twice a week during term time and once a week during holidays.

