

@CWCHAMPIONS

Coventry and Warwickshire

Champions



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www.coventry-warwickshire.co.uk





Adam Dent, Advent Communications

@CWCHAMPIONS

Georgina Forsythe - Warwick Castle

Warwick Castle- Coventry and Warwickshire Champions



Georgina Forsythe- Corporate Sales Manager

WARWICK
+ CASTLE +

History of Warwick Castle

- 914- First part of the Castle built- celebrated our 1,100th birthday last year
- 1068- William the Conqueror re build new and exciting motte and bailey Castle
- 1300s- The Earls of Warwick constructed a mighty Mediaeval Castle to symbolise the power of the Earls in Mediaeval England
- 1469- Richard Neville, Kingmaker, takes 2 Royal prisoners during the War of the Roses, symbolising how powerful Warwick Castle had become
- 1600's- 1800's- House Greville re fashioned Warwick Castle into a modern Country House, landscaping the gardens and re building the house to ensure it was fit for a life of leisure and pleasure
- 1978- present- Rising costs of living forced David Greville to sell Warwick Castle to Madame Tausauds for a measley £1.5million
- 2007- Merlin entertainments took over

Mediaeval
Glamping
+WARWICK CASTLE+




TOWER SUITES
+WARWICK CASTLE+



HORRIBLE HISTORIES

**Mediaeval
Mayhem**

WARWICK
+CASTLE+

Not just a Visitor Attraction....

Formal Dinners and Receptions

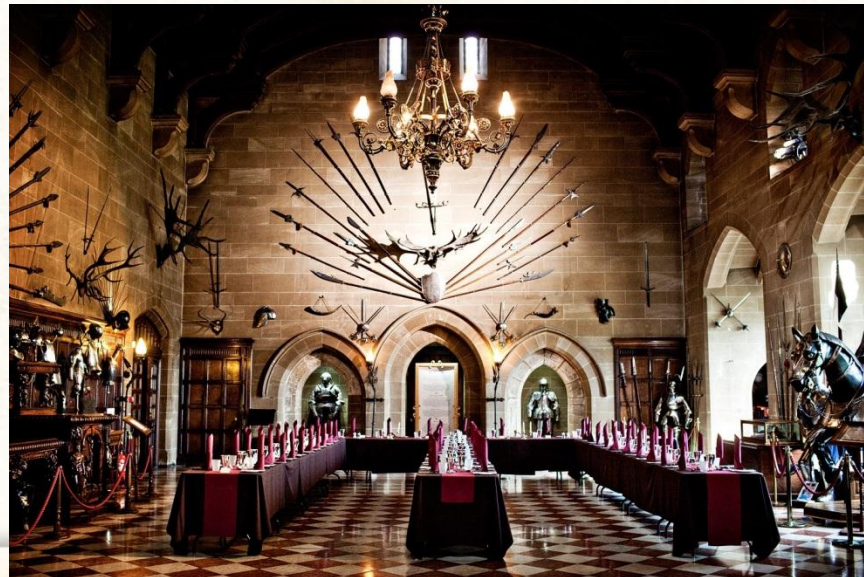
Themed Dinners

Conferences

Team building

Company and Family Fundays

Bespoke Events



WARWICK
+ CASTLE +

01 EMPLOYMENT IMPACTS



147 Jobs

Permanent Employment

[includes 70 FTE and 70 part-time staff employed by Warwick Castle]



350 Jobs

Seasonal Employees

[Permanent employees are complemented by 350 seasonal employees including 42 employees directly linked to 'glamping' activities]



70 Jobs

Visitor Related Employment

[annual jobs (FTE) supported by visitor spending in local shops, hotels, restaurants and other service facilities]

02 VISITOR IMPACTS



£50m

Annual Visitor Spending

[estimated visitor expenditure on goods and services both at the Castle and elsewhere in Warwick]



14,000

Overnight Visitors

[average number of overnight visitors accommodated by the glamping facilities per annum]



£7m

Spending on Restoration

[spending on restoration works at Warwick Castle over the past 10 years]



£23m

Economic Value of Investment

[in the historic environment at Warwick Castle to the benefit of the local and wider economy]



£2.15m

Planned Heritage Restoration

[Scale of investment planned in the short term]

03 HERITAGE IMPACTS

Key Priorities

Increase Revenue YOY
Increase Visitor Volume YOY
Become a Resort



Thank you. Any questions?

WARWICK
+ CASTLE +

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Dr Clive Hickman - MTC

mtc

Manufacturing
Technology Centre

**INSPIRING
GREAT BRITISH
MANUFACTURING**

mtc
Manufacturing
Technology Centre



MANUFACTURING TECHNOLOGY CENTRE

▶ **FOUNDED IN 2010**

Independent RTO

Company limited by guarantee
(non profit making)

Purpose built facility (12,000m²) -
to allow industry & academia to perform
industrial scale projects

▶ **FOUNDED BY LEADING RESEARCH ORGANISATIONS:**

University of Birmingham

Loughborough University

University of Nottingham

TWI

With support of industry

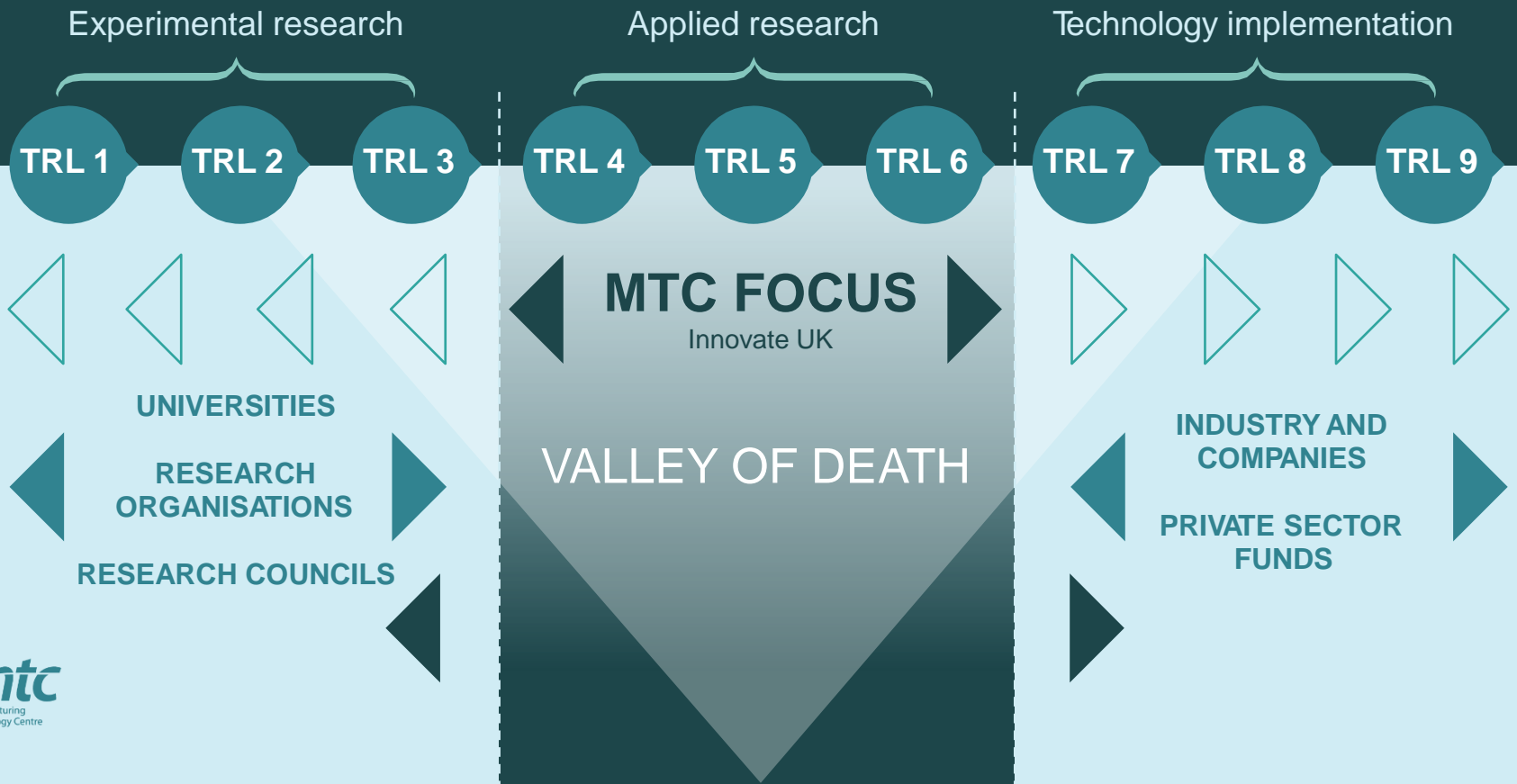
BRIDGING THE VALLEY OF DEATH



BRIDGING THE VALLEY OF DEATH



BRIDGING THE VALLEY OF DEATH



MTC STRATEGY

VISION

Inspiring
Great British
manufacturing on
the global stage

MISSION

Generate rapid
and sustainable
growth by
delivering
integrated
manufacturing
systems solutions

STRATEGIC IMPERATIVES

- ▶ Accelerate industrial growth
- ▶ Deliver innovation
- ▶ Change the way businesses compete
- ▶ Create and embed skills
- ▶ Maximise synergies

MANUFACTURING SYSTEM SOLUTIONS

ASSEMBLY SYSTEMS

Advanced Tooling & Fixturing

Electronics

Intelligent Automation

High Integrity Fabrication

COMPONENT MANUFACTURING SYSTEMS

Net Shape & Additive

Non-Conventional Machining

MANUFACTURING DATA SYSTEMS

Simulation

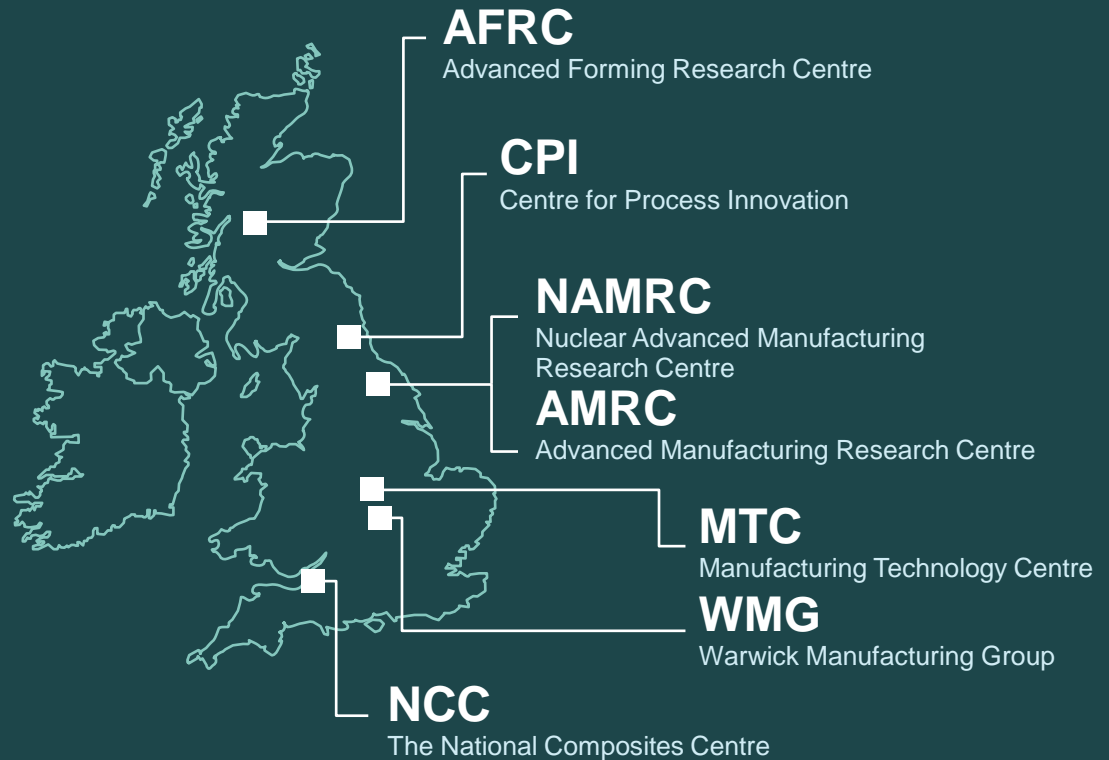
Informatics

Metrology & NDT

Operational Efficiency

HVM CATAPULT CENTRES

- ▶ **£350m**
Invested to date
- ▶ **£350m+**
Over next 5 years
- ▶ **430+**
Industry clients
- ▶ **800**
Staff



HOW ARE CENTRES FUNDED?

The funding model draws from 3 sources

1

Core public funding

For investment in the capabilities, know how, expertise and skills and long term capital assets of the centre

2

Business funded R&D contracts
(i.e contract research) won competitively

3

Collaborative (applied) R&D projects

Funded jointly by the public and private sector, won competitively

SEEDING THE FUTURE WORKFORCE



- ▶ **PRODUCT**
- ▶ **PEOPLE**
- ▶ **PROCESS -**
MTC core innovation

- ▶ Advanced manufacturing
- ▶ Apprenticeships
- ▶ Graduate training
- ▶ Graduate reskilling
- ▶ Industrial design incubation

WHY DO PEOPLE COME TO MTC TODAY?

Technical expertise & experience



Collaborative environment



Gearing

Equipment & facilities



Industrial focus



Independent

Solution provider



Inspirational



Showcasing



MTC's FORECAST when established:

10 year

business plan forecast for 2020

x10

Industrial members

£10m Turnover

150 Employees

MTC's ACHIEVEMENTS to date:

Over 75

Industrial members

2013/14 Financial performance

£17.5m Turnover

£286.5k Surplus

300 Staff

£13m+

Current order book with proposals valued at

£16m

MTC MEMBERS

TIER 1

Access to research outputs across all themes

Programme board seat (with voting rights)

TAB board seat (with voting rights)

TIER 2

Access to research outputs across all themes

Programme board seat (with no voting rights)

TAB board seat (with voting rights)



MTC MEMBERS

TIER 3

1 year commitment

No cash outlay required

Opportunity to engage with major OEMs and Tier 1's

Building Success
Layer by Layer

ABB

BOC
A Member of The Linde Group

CGTECH
VERICUT

CROWN
Brand-Building Packaging™

edgcam

greencore
group

Höganäs

**NATIONAL
INSTRUMENTS**

sharpcloud

Aerotech
design consultants

alicon

CAD TO METAL
Axiom AS™

**Rexroth
Bosch Group**
The Drive & Control Company

DEK
+ + + + +

europacer

HumiSeal

iBASEt

PRODUCTIV
DRIVING GREEN TECHNOLOGIES

STEMMER
IMAGING

BROWN & HOLMES (Tamworth) LTD
Precision Workholding and Machining

BECKHOFF

BLUEBIRD

SD scannersuk

DELFOI

DESTACO

fairfield

METROSAGE

LANNER

TTL

PRODUCTIV
DRIVING GREEN TECHNOLOGIES

STEMMER
IMAGING

FlexProp
Performance by competence

gom
Optical Measuring Techniques

GÜDEL

LPW

HYDROL
Precision in Aircraft Support

**integrated
intelligence**

Mahr

LANNER

TTL

RHODES
TECHNICAL SERVICES

Vibrant
NDT

fiolollis
International

Jemtech
Inspiring solutions

VFE
VACUUM FURNACE
ENGINEERING LTD

ROEMHELD
HILMA ▪ STARK

Theorem
Solutions

Ubisense

WITTE

WICIE
West Coast Industries-Europe

SGS
Solid Carbide Tools

EQE
EQUIPMENT ENGINEERING

ZESTRON
High Precision Cleaning

Sainsbury's

Unilever

NEW DEVELOPMENTS AT THE MTC



4 new facilities being constructed

- ▶ Aerospace Research Centre
- ▶ National Centre for Additive and Net Shape Manufacturing
- ▶ High Temperature Research Centre
- ▶ Advanced Manufacturing Training Centre

THE AEROSPACE RESEARCH CENTRE

A £30m investment for future
aerospace manufacturing
technologies



A ground-breaking national facility:

- ▶ Focus on future aerospace technology
- ▶ Government investment matched with funding from industry
- ▶ Secure environment – 8 x 2000m² List X rated manufacturing cells
- ▶ Directly link to the MTC

The centre is being established to:

- ▶ Provide a national facility for ground-breaking aerospace research and defence project work
- ▶ Create a hub for the world's major aerospace companies to test and develop future innovations in a secure manufacturing environment

THE NATIONAL CENTRE FOR ADDITIVE AND NET SHAPE MANUFACTURING

Phase 1: National Centre status granted by Gov't
£20m invested in capital equipment and research at MTC
Industry/government matched funding

Phase 2:
Plans are being developed for a bespoke building to house the National Centre



Additive technology:

- ▶ Electron Beam and Laser Deposition technology
- ▶ Advanced alloys and metals including Titanium and Nickel alloys
- ▶ Components built layer by layer in an inert atmosphere

Net shape technology:

- ▶ Powder Hipping technology
- ▶ Metal Injection moulding

Powder Characterisation:

- ▶ Quality of powder is critical for net shape and additive manufacture
- ▶ Centre will focus on characterisation and understanding the aging effects of powders

HIGH TEMPERATURE RESEARCH CENTRE

**£60m collaboration with University
of Birmingham and Rolls-Royce**



Developing future generations of aero engines:

- ▶ The 5,800 m² centre is funded through a £40m investment by Rolls-Royce plc, matched by a £20m government grant through the Higher Education Funding Council for England's (HEFCE) UK Research Partnership Investment Fund (UKRPIF)

The centre is being established to:

- ▶ Provide a unique casting, design, simulation and advanced manufacturing research facility
- ▶ Investigate the key design and manufacturing aspects of investment casting
- ▶ Reduce the weight and cost of castings
- ▶ HTRC will have direct links to the National Centre for Additive and Net Shape Manufacturing

THE ADVANCED MANUFACTURING TRAINING CENTRE

An £36m Gov't and Industry investment
in the future of manufacturing

Sponsored by Lloyds Bank: £1m

The first National College and the
pathway for future national colleges



The centre will deliver a range of innovation training elements:

- ▶ Manufacturing engineering apprenticeships (1000 by 2025)
- ▶ Up-skilling of manufacturing engineers
- ▶ Graduate development
- ▶ Industrial design incubation

The centre is being established to:

- ▶ Redress the manufacturing high-level skills gaps inhibiting the HVM sector
- ▶ Develop the skills that are needed for delivering the technologies of the future
- ▶ Centre will open in Sept 2015

AMTC Apprenticeship model

- ▶ Apprentices employed by MTC to undertake a Level 3 Advanced
- ▶ Apprenticeship registered with the Institution of Mechanical Engineers
- ▶ Qualified to Engineering Technician level. Around 20% will progress to university
- ▶ Will be placed with a variety of industrial partners to address skill shortages and development needs
- ▶ Apprentices will be assigned to SMEs for final year of training with SMEs will be responsible for employment costs

Benefits to SMEs

Won't bear high training costs in years 1&2 when apprentices add less value

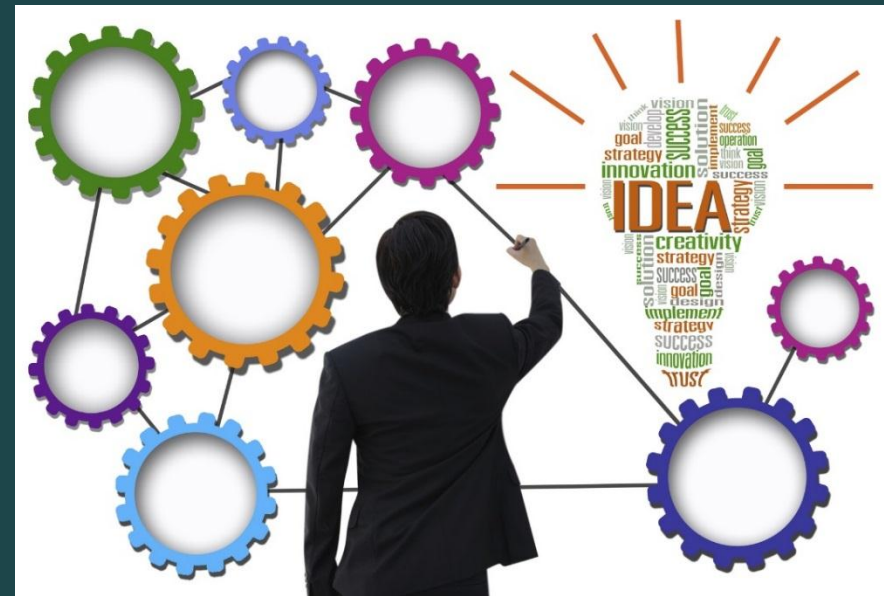
A qualified person after 1 year

Avoid having wasted investment, as highest drop out rate is in years 1&2



AMTC Engineer up-skilling

- ▶ 20 early career product engineers recruited each year, undertake a professional conversion course - becoming specialist manufacturing engineers
- ▶ Take graduates from other disciplines with intellect & aptitude to become manufacturing engineers
- ▶ Employed by MTC on a 2.5 year fixed term contract. On completion sufficiently qualified to apply to become chartered engineers
- ▶ Initial focus on specialisms in automation, metrology, net shape manufacture & welding



AMTC Graduate development

- ▶ 10 graduates recruited to AMTC each year and trained in the latest manufacturing technologies to become highly skilled manufacturing engineers
- ▶ Graduates employed by MTC on a 2 year fixed term contract, rotating between the themes within MTC
- ▶ Graduates mentored by highly experienced senior research engineers



AMTC Industrial design incubation

To incubate and support the launch of successful products and businesses in the UK through investment in, and mentoring of promising industrial design entrepreneurs

- ▶ Each year candidates will be accepted following a successful pitch of their product idea
- ▶ Design entrepreneur based at the AMTC for 2 years. They will receive the following support:
 - Access to expertise/ equipment and the latest manufacturing technology & processes, to develop their products
 - Mentoring from senior business development, finance & technical managers to help them develop their business plan
 - Support to establish their business to market their product
- ▶ When business is launched, ETC would have a 30% shareholding and would continue to mentor the business
- ▶ All profits from the business would be reinvested in the AMTC, so it becomes self sustaining
- ▶ Envisaged 1 in 10 businesses will grow to £1-5m turnover; 1 in 100 could become mid cap.

BUSINESS LAUNCH CENTRE (BLC)

An environment to de-risk and increase the speed of growth of start-up businesses, creating successful and sustainable companies



The UK's first one-stop-shop, de-risking accelerator for SMEs and other companies who wish to manufacture their first 1 to 100 market seeding products

Our unique offering:

- ▶ flexible manufacturing production
- ▶ serviced office space
- ▶ consultancy service to optimise prototype designs and then manufacture and commercialise products
- ▶ access to the pioneering MTC members

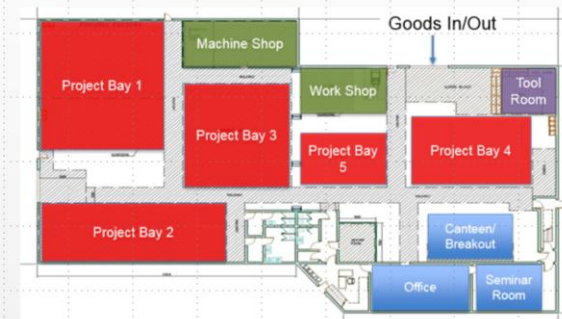
BLC services

Business & product incubation, build and commercialisation through access to the MTC's:

- ▶ Pioneering design, manufacturing and R&D skill sets
- ▶ Business incubation serviced office space - 200m²
- ▶ Flexible factory space - 750m²
- ▶ Assistance with accessing Government grants
- ▶ Introduction to MTC member supply chain

Infrastructure

750 m² Workshop
200 m² Offices
70 m² Seminar Rooms
Machine & Work Shop
Tool Room
5 Project Bays
2 Seminar Rooms
Reception
IT (100mb) network
Canteen/ Breakout



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UK City of Culture 2021

European Capital of Culture 2023

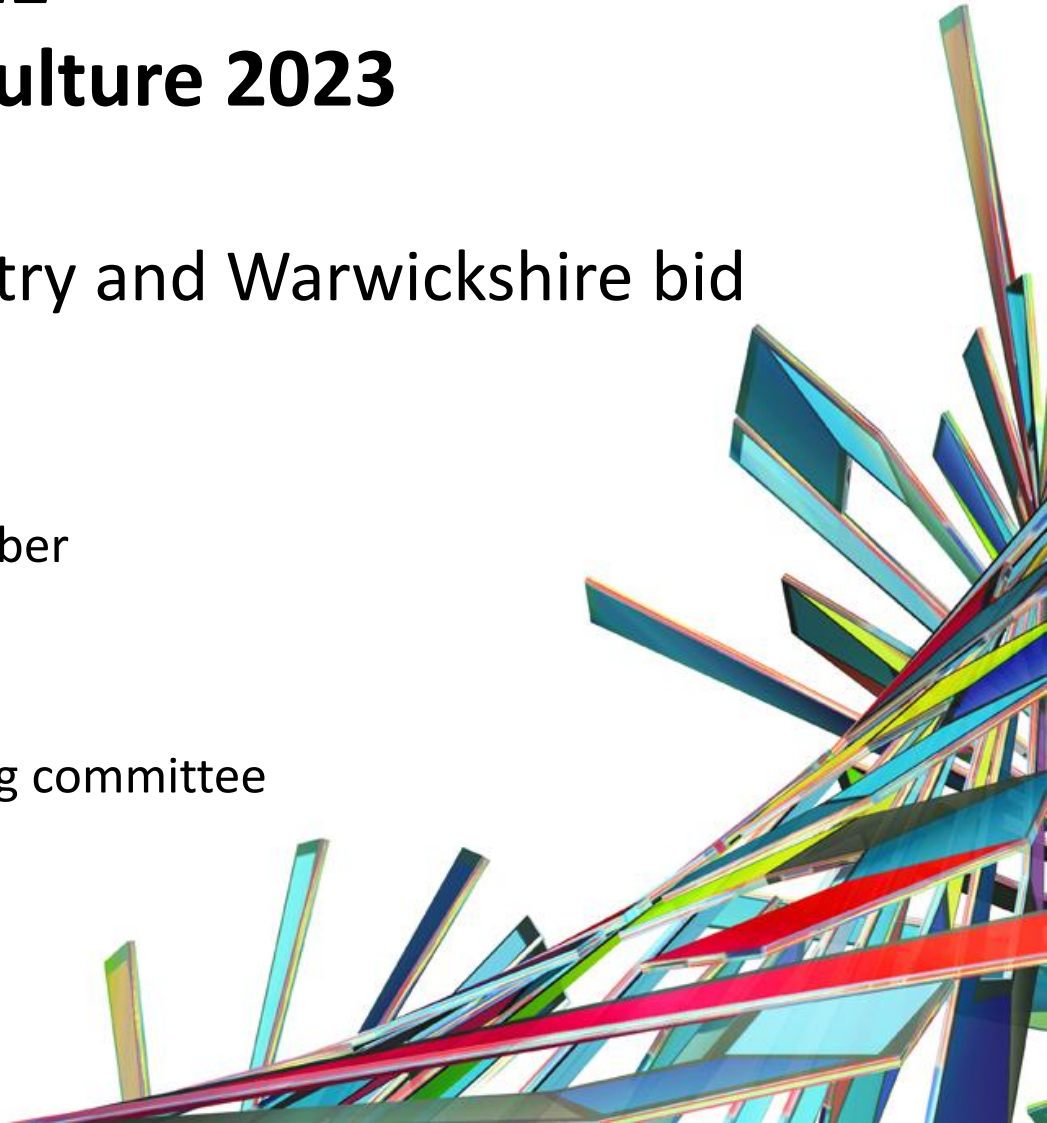
The potential for a Coventry and Warwickshire bid

Cllr Faye Abbott

Coventry City Council Cabinet Member

David Burbidge OBE, DL

Chairman of the Culture Bid steering committee



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- BOPA
- Coventry City Football Club
- D&P Holt
- Dafferns LLP
- Effective Company
- Eliane Champagne
- HSBC Bank
- Leask Accountancy Solutions
- Midlands Professional Development
- Needham Insurance Services
- PAYE Matters
- Pentlands
- Pera Training
- SVB Solutions
- The Highlife Centre
- Warwick Castle

@CWCHAMPIONS

Coventry and Warwickshire Champions

Wednesday 25th March 2015

7.45 – 9.30am

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