

IB2C7-15 Work in the Digital Era: Algorithmic Management

26/27

Department

Warwick Business School

Level

Undergraduate Level 2

Module leader

Manuela Galetto

Credit value

15

Module duration

10 weeks

Assessment

30% coursework, 70% exam

Study location

University of Warwick main campus, Coventry

Description

Introductory description

The rapid acceleration of new digital technologies in the workplace commensurate with the expansion of new working patterns requires deeper managerial understanding of how the “fourth industrial revolution” affects and shapes work and organisations.

Advancement in digital and social technologies are shaping and changing the nature and meaning of work, the organisation of the workplace and managerial relations, as well as prompting policy changes to ensure the legality and trustworthy use of algorithmic management tools.

As such, students will have the opportunity to explore a digitally transformed landscape of work. Students will analyse the opportunities, as well as debate the risks of the digital workplace and, in doing so, further develop their critical thinking and ethical decision-making skills.

This is an elective module available for WBS and non-WBS students. To find detailed availability and to apply for this module, log in to my.wbs.ac.uk using your normal IT login details and apply via the my.wbs module application system. Once you’ve secured a place on my.wbs you should apply via your home department’s usual process, which usually takes place via eVision.

Note that you do not require the module leader’s permission to study a WBS module, so please do

not contact them to request it.

Module aims

This course focuses on the digital transformations taking place in contemporary workplaces with the introduction of AI-powered tools for the organisation and management of work. It will offer students:

- A multi-perspective analysis of digital technologies increasingly used in the organisation of work;
- Tools to navigate the world of work as employees, managers, and entrepreneurs in the digital era;
- Understand how the acceleration in technological change impact the design, sustainable development, ethical, and strategic dimensions of work;
- In-depth analysis of management theories in relation to contemporary digital workplace developments;
- Use of gamification, high-profile examples, and case studies of managerial practice to better understand the legal, ethical and managerial effects of digital technologies on the workplace;
- Contextualisation of the use of AI at scale in relation to the environment and the increasingly urgent sustainability questions.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

The algorithmic management of work and workplaces:

- Theories of work and management
- Human capital theory in the digital era
- Frameworks of workplace relations

Algorithmic Technologies in the Workplace: Opportunities and Challenges:

- AI decision-making and the changing relationship between managers and employees
- Ethics and the use of artificial intelligence and data analytics in workplaces
- Impact of robotisation and task automation on the future of work.

Management for the Digital Age:

- Exploring digital technologies: the design, implementation and promotion of data-driven management practices
- Utilising technologies in sustainable and responsible employing organisations
- Opportunities and implications for management in relation to technology in diverse business organisations, including start-ups, entrepreneurs, the self-employed, large corporations, etc.

Digitalisation, Inclusion, and Diversity:

- Impact of new technologies and new forms of organising on diversity and inclusion

Employment status and the new platform economy e.g. found in platform work, crowdwork and Elancing

Legal Implications of a Digitalised Workplace:

- Changing workplace regulation (e.g. Data Protection)
- Surveillance, privacy, and regulation of technology in the workplace (e.g. Article 22 GDPR)
- Working From Home: implications for the intersection of professional and personal

The future of work: Digital Practices and Changing Workplace Demographics:

- Technology and the trajectory of automation's impact on future employment
- New work practices in response to environmental and sustainability challenges (e.g. SDG 8)
- Young workers and the new normal of the digital workplace

Models of national regulations around the use of AI in the workplace, with examples from the USA and Europe in particular.

The use of AI to address environmental crises and the environmental costs of AI.

Learning outcomes

By the end of the module, students should be able to:

- Identify, explain and assess the key drivers, current practices and implications of digital technologies in the workplace
- Recognise and assess the mediating effect of the legal and economic context on the implications of digitallybased innovations at work
- Recall, critique and analyze the legal dimensions of digital transformations
- Application of theories to practical cases in a way that demonstrates nuanced judgment and ethical decision-making;
- Critical thinking in relation to the multi-stakeholder perspective in decision making and implementation of technology in organisations;
- Personal reflection on contemporary technological developments within broader legal, business and management contexts

Indicative reading list

[Reading lists can be found in Talis](#)

Subject specific skills

Critically assess and analyse the effects of digital technologies from a multi-stakeholder perspective, keeping in mind consequences for sustainable and ethical work, toward developing digital literacy.

Evaluating the complexities of digitally mediated work related design and decision making processes within organisations

Transferable skills

Analytical and debating skills in oral communication;
Develop critical thinking and writing skills;
Critically evaluate ideas and practices in relation to the digital transformation of business toward developing nuanced personal digital literacy.

Study

Study time

Type	Required
Lectures	10 sessions of 1 hour (7%)
Seminars	9 sessions of 1 hour (6%)
Online learning (independent)	10 sessions of 1 hour (7%)
Private study	49 hours (32%)
Assessment	73 hours (48%)
Total	151 hours

Private study description

Private Study.

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group D

Assessment component	Weighting	Study time	Eligible for self-certification
Individual Assignment	30%	22 hours	Yes (extension)

	Weighting	Study time	Eligible for self-certification
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Reassessment component is the same

Assessment component

Centrally-timetabled examination (on-campus)

70%

51 hours

No

- Answerbook Green (8 page)

Reassessment component is the same

Feedback on assessment

Feedback via my.wbs.

[Past exam papers for IB2C7](#)

Availability

Courses

This module is Optional for:

- Year 2 of UIBA-NN02 BSC International Management with Marketing
- Year 2 of UIBA-NN01 BSC Management with Marketing
- Year 2 of UIBA-NN03 BSC Management with Marketing (With Placement Year)
- Year 2 of UECA-L1N3 BSc Economics and Management with Placement Year
- UIBA-N20B BSc in Management
 - Year 2 of N20B Management
 - Year 2 of N20B Management
 - Year 2 of N23K Management with Accounting
 - Year 2 of N234 Management with Digital Business
 - Year 2 of N235 Management with Entrepreneurship
 - Year 2 of N232 Management with Finance
 - Year 2 of N252 Management with Marketing
 - Year 2 of N23L Management with Strategy and Organisation
- Year 2 of UIBA-N400 Undergraduate Accounting and Finance
- UIBA-N404 Undergraduate Accounting and Finance (with Foundation Year and Placement/Undergraduate Partnership Programme)

- Year 3 of N4N7 Accounting and Finance (Foundation Year and Intercalated)
- Year 3 of N404 Accounting and Finance (Foundation Year and Placement)
- Year 3 of N405 Accounting and Finance (Foundation Year and UPP)
- Year 3 of N403 Accounting and Finance (with Foundation Year)
- Year 3 of UIBA-N403 Undergraduate Accounting and Finance (with Foundation Year)
- UIBA-N401 Undergraduate Accounting and Finance (with Placement Year/Undergraduate Partnership Programme)
 - Year 2 of N401 Accounting and Finance (Placement)
 - Year 2 of N402 Accounting and Finance (Undergraduate Partnership Programme)
- Year 1 of UIOA-VEU Undergraduate EU Visiting
- Year 2 of UECA-L1N2 Undergraduate Economics and Management
- Year 2 of UGEA-RN21 Undergraduate German and Business Studies
- Year 2 of UIPA-L8N1 Undergraduate Global Sustainable Development and Business
- Year 2 of UIPA-L8N2 Undergraduate Global Sustainable Development and Business Studies (with Intercalated Year)
- UIBA-N20F Undergraduate International Management
 - Year 2 of N20F International Management
 - Year 2 of N20F International Management
 - Year 2 of N20S International Management (with Accounting)
 - Year 2 of N20T International Management (with Chinese)
 - Year 2 of N20P International Management (with Entrepreneurship)
 - Year 2 of N20M International Management (with Finance)
 - Year 2 of N20U International Management (with French)
 - Year 2 of N20L International Management (with Marketing)
 - Year 2 of N20V International Management (with Spanish)
 - Year 2 of N20W International Management (with Strategy and Organisation)
 - Year 2 of N20N International Management with Digital Business
 - Year 2 of N20E Management (with Foundation Year)
 - Year 2 of N234 Management with Digital Business
- UIBA-N220 Undergraduate International Management (with Foundation Year)
 - Year 4 of N220 International Management (with Foundation Year)
 - Year 4 of N221 International Management with Accounting (with Foundation Year)
 - Year 4 of N226 International Management with Chinese (with Foundation Year)
 - Year 4 of N223 International Management with Digital Business (with Foundation Year)
 - Year 4 of N224 International Management with Entrepreneurship (with Foundation Year)
 - Year 4 of N222 International Management with Finance (with Foundation Year)
 - Year 4 of N227 International Management with French (with Foundation Year)
 - Year 4 of N225 International Management with Marketing (with Foundation Year)
 - Year 4 of N228 International Management with Spanish (with Foundation Year)
 - Year 4 of N229 International Management with Strategy and Organisation (with Foundation Year)
- UIBA-N20J Undergraduate Management (with Foundation Year and Placement Year/Undergraduate Partnership Programme)
 - Year 3 of N20J Management (Foundation Year and Placement)
 - Year 3 of N20K Management (Foundation Year and UPP)

- Year 3 of N23H Management with Digital Business (with Foundation Year and Placement Year)
- Year 3 of N23J Management with Entrepreneurship (with Foundation Year and Placement Year)
- Year 3 of N23G Management with Finance (with Foundation Year and Placement Year)
- Year 3 of N255 Management with Marketing (with Foundation Year and Placement Year)
- UIBA-N20E Undergraduate Management (with Foundation Year)
 - Year 3 of N20E Management (with Foundation Year)
 - Year 3 of N23N Management with Accounting (with Foundation Year and Placement Year)
 - Year 3 of N23M Management with Accounting (with Foundation Year)
 - Year 3 of N23E Management with Digital Business (with Foundation Year)
 - Year 3 of N23F Management with Entrepreneurship (with Foundation Year)
 - Year 3 of N23D Management with Finance (with Foundation Year)
 - Year 3 of N252 Management with Marketing
 - Year 3 of N254 Management with Marketing (with Foundation Year)
 - Year 3 of N23P Management with Strategy and Organisation (with Foundation Year)
- UIBA-N20C Undergraduate Management (with Placement Year/Undergraduate Partnership Programme)
 - Year 2 of N20M International Management (with Finance)
 - Year 2 of N20B Management
 - Year 2 of N20D Management (Undergraduate Partnership Programme)
 - Year 2 of N20C Management (with Placement Year)
 - Year 2 of N20Q Management with Accounting (with Placement Year)
 - Year 2 of N236 Management with Digital Business (with Placement Year)
 - Year 2 of N235 Management with Entrepreneurship
 - Year 2 of N237 Management with Entrepreneurship (with Placement Year)
 - Year 2 of N232 Management with Finance
 - Year 2 of N233 Management with Finance (with Placement Year)
 - Year 2 of N253 Management with Marketing (with Placement Year)
 - Year 2 of N23L Management with Strategy and Organisation
 - Year 2 of N20R Management with Strategy and Organisation (with Placement Year)
- UIOA-VOS Undergraduate Overseas Visiting
 - Year 1 of UVOS Undergraduate Overseas Visiting
 - Year 1 of UVOS Undergraduate Overseas Visiting