

Heather Wright

Teitl Swydd: Ymgynghorydd Rheolaeth, Hartley McMaster

Cymwysterau: BSc mewn Ystadegau a'r Gyfraith (Prifysgol Keele)

Mae llawer mwy o ddefnyddio mathemateg yn y byd real nag a ddychmygais pan oeddwn yn yr ysgol. Er enghraift, defnyddir Ymchwil Weithredol yn y diwydiant hedfan i gynllunio amserlenni hedfan.



"Yn y diwydiant manwerthu, mae mathemateg yn cael ei defnyddio i weithio allan pa gynhyrchion y mae cwsmeriaid eu heisiau"

Ac yn y diwydiant manwerthu, mae'n cael ei defnyddio i weithio allan pa gynhyrchion y mae cwsmeriaid eu heisiau, ble a phryd maent eu heisiau a sut i'w dosbarthu yn y modd mwyaf cost effeithiol. Defnyddir mathemateg ym mhob diwydiant sy'n seiliedig ar gwsmeriaid i fformiwlaid patrymau mewn busnes ac mae'r llywodraeth yn ei defnyddio i ddadansoddi data er mwyn adolygu effeithiolrwydd eu polisiau.

Mae fy nghwmni i yn arbenigo mewn defnyddio dulliau dadansodol a strwythurol i ddatrys problemau busnes. Rydym yn gweithio gyda chwmniau i'w helpu i ddeall pwy sy'n prynu eu cynhyrchion, faint i'w fuddsoddi yn eu seiwaith a sut i wneud y defnydd gorau o'u hadnoddau. Rydym hefyd yn darparu cyngor arbenigol i'r llywodraeth ar sut i gyflenwi gwasanaethau, amddiffyn y cyhoedd a buddsoddi ar gyfer iechyd a chyfoeth y dyfodol yn y modd mwyaf effeithiol.

Rwyf yn aml yn gorfol defnyddio dadansoddiad mathemategol. Mae cael meddwl mathemategol hefyd yn help

i strwythuro'r broblem, penderfynu ar y modd mwyaf effeithiol i'w datrys ac i ddefnyddio'r data sydd ar gael yn y modd gorau posib.

Roedd fy mhrosiect cyntaf yn cynnwys gweithio mewn tîm o dri i ddatblygu arolwg ar-lein a system ddadansoddi ar gyfer cleient. Yr oedd prosiect ystadegol arall yn ceisio mesur cywirdeb y data sy'n cael ei yrru at y Swyddfa Gartref. Ceisiais hefyd ddynodi prif achosion camgymeriadau. Mae prosiectau eraill yn cynnwys edrych ar y ffordd orau o amserlennu ymwelliadau a chwilio i wirio bod cwmniau'n talu'r Isafswm Cyflog Cenedlaethol ac adolygu model y mae'r llywodraeth yn bwriadu ei ddefnyddio i asesu perfformiad carchardai.

Pan oeddwn yn yr ysgol roeddwn yn bennaf yn mwynhau delio gydag ystadegau, megis canrannau, a thrin fformiwlâu algebraidd. Gwneuthum fathemateg i lefel-A, a dyna hefyd oedd hanner fy nghwrs gradd. Ar ôl y brifysgol, euthum i deithio a dysgu mathemateg yn Kenya am ddau fis cyn cychwyn fy swydd bresennol.

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Job Title: Management Consultant, Hartley McMaster
Qualifications: BSc Statistics and Law (Keele University)

There are many more applications of maths in the real world than I imagined when I was at school. For example, operational research is used



"In the retail industry, [maths] is used to work out which products customers want."

in the airline industry to plan flight schedules.

And in the retail industry, it is used to work out which products customers want, when and where they want them and how to distribute them in the most cost-effective way. Maths is used in all customer-based industries to formulate trends in business and the government uses it to analyse data in order to review how effective its policies are.

My firm specialises in using analytical and structured methods to solve business problems. We work with companies to help them understand who is buying their products, how much to invest in their infrastructure and how to make best use of their resources. We also provide expert advice to government on how best to deliver services, protect the public and invest for future health and wealth.

To do this, we often need to use mathematical analysis. Having a mathematical mind also helps to

structure the problem, decide how best to solve it and to use the data available in the best way possible.

My first project involved working in a team of three to develop an online survey and analysis system for a client. I have also worked on a statistical project which sampled data sent to the Home Office to gauge its accuracy and to try to identify the main causes of errors. Other projects included looking at the best way to schedule inspection visits to check that companies are paying the National Minimum Wage and reviewing a model that the government plans to use to assess the performance of prisons.

When I was at school I mainly enjoyed dealing with statistics, such as percentages, and manipulating algebraic formulae. I did maths at A level and it also made up half my degree course. After university, I went travelling and taught maths in Kenya for two months before starting my current job.