

Cefndir

Cyflogodd Cyngor Sir Ceredigion Swyddog Datblygu Digidol ar gyfer Ceredigion i ysbrydoli, arwain a chynghori unigolion, cymunedau a busnesau ledled Ceredigion, nad oedd ganddynt unrhyw gysylltedd digidol neu gysylltedd digidol cyfyngedig, ar ystod o opsiynau er mwyn gwella'r mynediad at dechnolegau digidol a'r defnydd ohonynt.

Ymgysylltodd y swyddog â'r gymuned a sefydliadau mewn sawl ffordd gan gynnwys gwneud cyflwyniadau i Gynghorau Tref a Chymuned a rhanddeiliaid lleol. Nod yr ymgysylltu oedd datblygu gwell dealltwriaeth o anghenion digidol lleol er mwyn gallu ymateb i'r rheini a datblygu datrysiadau amgen ar lawr gwlad. Roedd mabwysiadu technoleg ddigidol yn cynnwys band eang a thechnolegau newydd eraill fel LoRaWAN.

Protocol rhwydweithio ardal eang, pŵer isel yw'r LoRaWAN a ddyluniwyd i gysylltu 'pethau' a weithredir gan fatri â'r rhyngwyd mewn rhwydweithiau rhanbarthol, cenedlaethol neu fyd-eang. Mae'n cysylltu dyfeisiau â'r rhyngwyd yn ddi-wifr ac yn rheoli'r cyfathrebu rhwng dyfeisiau nod pen a phyrth rhwydwaith. Defnyddiodd y datblygiad yng Ngheredigion tua 35 porth ac mae monitro amgylcheddol, cyfrif nifer yr ymwelwyr mewn trefi a diogelwch fferm yn rhai enghreifftiau o'r defnydd cyfredol ohono.

Canlyniadau a Chynlluniau ar gyfer y Dyfodol

Cafodd y prosiect effaith gadarnhaol ar y sir gan ei fod wedi gweld nifer sylweddol o drigolion a busnesau yn cael eu cefnogi i archwilio i'r opsiynau a'r cyllid o ran gwella cysylltedd band eang.

O ganlyniad i'r prosiect hwn, rhoddwyd cymeradwyaeth ar gyfer pwyntiau mynediad Wi-Fi mewn Trefi a fydd yn galluogi i ddadansoddiadau Canol Tref gael eu gwneud a chyfrif nifer yr ymwelwyr yn Aberaeron, Llanbedr Pont Steffan, Llandysul, Tregaron a Chei Newydd.

O ganlyniad i COVID-19 mae mwy o ddibyniaeth ar gysylltedd digidol wrth i fwy o bobl weithio gartref ac angen mynediad at wasanaethau ar-lein eraill arnynt. Amlygodd y prosiect hwn nad oedd gan



gyfran fawr o eiddo yng Ngheredigion fynediad at fand eang cyflym a dibynadwy. Felly, o ganlyniad i'r ddau ffactor hyn, cyflwynodd Cyngor Sir Ceredigion, mewn cydweithrediad â Llywodraeth Cymru, astudiaeth beilot i dreialu'r ddarpariaeth o lwybryddion 4G.

Yn gyffredinol, mae'r prosiect wedi cynhyrchu mwy o ymwybyddiaeth o'r opsiynau a'r cyllid sydd ar gael i breswylwyr a sefydliadau i wella eu cysylltiadau band eang, a bydd y gwaith yn parhau hyd at 2022 trwy hwyluso a chefnogi mynediad pellach at dechnolegau digidol.

Nifer arfaethedig y prosiectau ffibr i eiddo - **18+ gyda 6 eisoes wedi'u cymeradwyo**

Caledwedd a rhwydwaith LoRaWAN i'w ddefnyddio ledled Ceredigion - **£100,000**

Dyfarnu cyllid drwy Gronfa Busnes Trawsnewid Trefi - **£185,000**

Cynnydd mewn % o ran argaeledd Superfast (> 30Mbps) - **84.5% o fis Awst 2021**

Nifer y rhanddeiliaid a ymgysylltodd - **200+**

Nifer y cymunedau a ymgysylltodd - **40**



Cyngor Sir
CEREDIGION
County Council



Case Study

Ceredigion Connected

Ceredigion County Council

Background

Ceredigion County Council employed a Digital Development Officer for Ceredigion to inspire, lead and advise individuals, communities and businesses across Ceredigion who have no or limited digital connectivity on a range of options to improve the access to, and usage of digital technologies.

The officer engaged with the community and organisations in numerous ways including presentations to Town and Community Councils and local stakeholders. The aim of the engagement was to develop a better understanding of local digital needs, in order to be able to respond to those and develop alternative solutions at a grass roots level. The adoption of digital technology included broadband and other new technologies such as LoRaWAN.

The LoRaWAN is a low-power, wide area networking protocol designed to wirelessly connect battery operated 'things' to the internet in regional, national or global networks. It wirelessly connects devices to the internet and manages communication between end-node devices and network gateways. The development within Ceredigion deployed approximately 35 gateways, with environmental monitoring, town footfall counting and farm security being some examples of its current use.

Results and Future Plans

The project has had a positive impact on the county as it has seen a significant number of residents and businesses supported to explore options and funding to improve broadband connectivity.

As an outcome of this project, approval has been given for Town Wi-Fi access points, which shall enable Town Centre analysis and footfall counting within Aberaeron, Lampeter, Llandysul, Tregaron and New Quay.

As a result of the COVID-19 there is more reliance on digital connectivity as more people work from home and need access to other online services. This project highlighted there is a large proportion of



properties within Ceredigion without access to fast, reliable broadband. Therefore as an outcome of both these factors Ceredigion County Council, in collaboration with Welsh Government, introduced a pilot study which trialled out the provision of 4G routers.

Overall the project has generated a greater awareness of the options and funding available to residents and organisations to improve their broadband connections, and the work shall continue into 2022 through facilitating and supporting further access to digital technologies.

Number of fibre to the property projects proposed – **18+ with 6 already approved**

Amount of LoRaWAN hardware and network to be deployed across Ceredigion – **£100,000**

Funding awarded through the Transforming Towns Business Fund – **£185,000**

Increase in % of Superfast availability (>30Mbps) – **84.5% as of August 2021**

Number of stakeholders engaged – **200+**

Number of communities engaged – **40**

