IT Strategy (2016-2018)

Realising the vision (document #2 of 2)

FFORDD GWYNEDD

Introduction

The vision of what the IT Strategy needs to achieve has been introduced in the first of the two documents, namely "IT Strategy (2016-2018) The Vision", and this document will guide us through what needs to be done to realise the vision.

The vision focusses on four themes:

1. **Bringing services closer to the people of Gwynedd**

2. **Lead and support the Council's internal departments and services with their use of technology**

3. **Free up staff time**

4. **Make the IT service more effective and efficient**

This document will address these themes and will build on them, referring to specific activities we will undertake to realise the vision.

Six main principles have been formed to realise these themes:

Principle 1 - technology and the department it supports should be flexible to meet Ffordd Gwynedd challenges

Principle 2 - the accurate technology should be presented to facilitate tasks, with appropriate skills to use the technology effectively

Principle 3 - it is necessary to consider using the digital channel for any changes or any presentation of a new service

Principle 4 - the current IT assets and any new assets will be reviewed, rationalised and exploited to make the best possible use by avoiding any wasting

Principle 5 - IT patterns and aspirations which are highlighted across many services should be dealt with as corporate solutions, or in a cross-authority/agency manner if appropriate

Principle 6 - Information technology should be flexible and secure, an enabler to deliver effective services in an efficient way. Technology, or a lack thereof, should not be a barrier

The ICT Strategy forms the Council's general ICT requirements by supporting the work of delivering several of its strategic aims which have been highlighted in the Gwynedd Council Strategic Plan (2013-2017):

(1) Putting the people of Gwynedd at the heart of everything we do

(2) Improving engagement with communities on the care challenge

(3) Improving integrated working focusing on what matters to individuals

(4) Preparing the care workforce to meet the new way of working

(5) Promoting the use of Welsh in Gwynedd

(6) Ensuring a balanced sustainable budget for the future

Theme 1. Bringing services closer to the people of Gwynedd

The objectives of the Gwynedd Strategic Plan which are being realised:

(1) Putting the people of Gwynedd at the heart of everything we do
(2) Improving enagement with communities on the care challenge
(3) Improving integrated working focusing on what matters for individuals

(4) Preparing the care workforce to meet the new way of working
(5) Promoting the use of the Welsh language in Gwynedd
(6) Ensuring a balanced sustainable budget for the future

Self-service - The Digital Channel

The work undertaken thus far states that:

- There are efficiency advantages for Council services by way of introducing the digital channel

- Research states that a minimum of 22% would move to using the digital channel, and the figure would increase if we marketed the service effectively

- Companies who sell self-service systems use unrealistic figures to try to sell their produce, at a cost that would be difficult to reclaim. We will research the best provision for Gwynedd by considering third party companies or internal provision

The Digital Channel in Gwynedd

- Every element of self-service exists in the "Gwynedd Self-Service Portal"

- The portal and the account are core to all services available through the digital channel

  - One account, one password

  - Account is secure and uses the same mechanism as www.gov.uk to validate the account holder

  - Change details in one place e.g. address, contact details. These will then be circulated to the individual services.

- The portal will be personalised to the account holder and will include historical information on service requests and further developments of the "where I live" page

15p   £2.83   £8.62

Bringing services closer to the people of Gwynedd

Field working

Infrastructure— review of infrastructure to support field working.

Conduct a full review of existing infrastructure by identifying what the needs are in our services to deliver field working provision. This review will include an exercise of categorising different types of field working e.g. working with clients such as social workers, working with resources such as Council property or working outside in the countryside undertaking environmental tasks.

The exercise will stretch to re-designing the infrastructure to meet field working provision, while identifying differences between what we already have and what we will require.

Solution—standardising a corporate solution, but it has be flexible enough to deviate from requirements specifically for third party systems.

Equipment—full review of the equipment used by Council staff at present in the context of field working. Traditionally, staff members have received additional equipment to undertake their duties in the field, but this needs to be reviewed while looking at supplying multi-purpose equipment which serves the employee in the office and outside the office.

Contact—we will review out contracts with mobile phone providers every three years by measuring the provider based on price and the strength of the County's connectivity. Any technology which supports wireless access will be reviewed as part of the corporate resources renewal scheme in a 7 year cycle.

Availability—new developments with the Council's telephony system provide us with opportunities to improve the availability of our field staff to receive calls and messages from those trying to contact them, be it Gwynedd residents, external agencies or Council staff / officers.

Bringing services closer to the people of Gwynedd

Facilitating Contact with the Council

Social media—enable Council staff to make the best use of social media. Evolve from a role which polices to a role that enables by removing existing barriers. To protect the employer by lowering the barriers, input from the IT Service will be required on a social media policy. A review of the produce will be used to filter access to websites as well as the reports we could circulate to indicate access to these sites.

Wireless—the wireless "Digital Gwynedd" service has been a great success since its introduction in 2012, with approximately 14,000 unique computers connecting to the network every month. People's expectations have also changed and this provision needs to be safeguarded and expanded. In terms of safeguarding, the scheme should be made familiar to the asset renewal scheme, introducing a renewal cycle of every 7 years. It will be necessary to commission an investigation to identify the resources that will be required to further expand the provision, looking at public wireless in locations where the public attend, and corporate wireless within Council offices.

Public wireless provision can build on our ability to increase the numbers who use the digital medium to contact the Council. It is also necessary to conduct a review of the statistics that are being collected and how the Council can improve or take advantage of this information e.g. advertising campaigns about the Council's services. Technology's role should be considered as iBeacons to expand this capacity.

Kiosks—introduce resilient computers which have been configured to connect to the Council's self-service website in public and convenient locations for the public. The number of kiosks and their locations need to be reviewed. The success of this type of medium will depend on the services available on this medium and the promotion scheme.

Public computers—105 computers have been located in the County's libraries for public use. These have not yet been included in the County's restoration programme and are being restored using old equipment which is now too old for office use. Public computers are used for many purposes, including pupils doing their homework, and the unemployed looking for work. It seems as though the demand will increase as the Government's Welfare Amendments procedure gathers speed, where it is projected that applications for Universal Credit will be submitted online.

By training library staff, we can take advantage of opportunities to refer any enquiry about Council services to the corporate website. Advantage should also be taken of opportunities to market the online medium and to encourage users of the library service to create a self-service account.

Contact medium—further research should be undertaken to contact mediums between the public and the Council. Two main mediums are used at present,

namely contact via telephone and face to face contact. The self-service medium through the computer exists at present and plans are in the pipeline to strengthen this provision. Other mediums are available which are used by some Council departments, but these mediums have not been interlinked e.g. facebook, twitter, Instagram or text message.

Phone provision—new phone provision has been introduced in the Council as an exercise to make efficiency savings. We will research the new technology further by seeking better ways of working.

Bringing services closer to the people of Gwynedd

Additional investment to deliver the heading

CAPITAL

£600,000 (It is estimated that a minimum of £200,000 will need to be allocated per year for a period of 3 years but the exact cost will depend on what type of system is adopted for self-service purposes and the steps associated with establishing it)

£15,000 (reporting pack on web searching trends)

£7,500 (to evaluate how many wireless contact points are required)*

*The evaluation could lead to a business case for more/fewer wireless contact points. This could lead to a further Investment in capital, revenue and IT Resources

IT RESOURCE

1.0 FTE Permanent on the S3 scale (£35,000 for the digital channel)

REVENUE

£30,000 (API Software for the digital channel)

£3,000 (reporting pack on web searching trends)

£27,500 (support on the wireless software/hardware)

Activities associated with the investment

- Providing the digital channel

- Strengthen our capacity to report on use of the internet as a response to opening its use e.g. enabling access to social media

- Reviewing our wireless provision

- Field working*

*The research could lead to capital and revenue costs, as the sums will depend on the level of the solution and how it will be supplied. Business cases will be prepared if it is required to turn to a financial source

Theme 2. Lead and Support

The objectives of the Gwynedd Strategic Plan which are being realised:

(1) Putting the people of Gwynedd at the heart of everything we do
(2) Improving enagement with communities on the care challenge
(3) Improving integrated working focusing on what matters for individuals

(4) Preparing the care workforce to meet the new way of working
(5) Promoting the use of the Welsh language in Gwynedd
(6) Ensuring a balanced sustainable budget for the future

IT Support—there will be a full review of the arrangements that are in place to overcome users' problems, with the arrangements being built from a place of seeking to improve and ease the experience for the customer and to cut back on the Helpdesk's workload. This will include how we will interact with our customers and improve their experience by solving their problems at the first point of contact.

We will also look to do more with the information collected during the customers' contact with the Helpdesk to identify and solve problems in an improved manner.

Surgeries—the IT Service in its entirety is located at the Headquarters in Caernarfon. Traditionally, there was visual support available at the area offices, but the presence of the service in these locations has now greatly decreased. We will re-present area office staff with the opportunity to visit officers of the service through a surgeries procedure, with the frequency and length of these to be decided.

Meeting rooms—the IT service will be responsible for the technology presented and for using it within the rooms. Occasionally, it will be necessary to visit the rooms when problems arise. We will conduct a review of all equipment in the meeting rooms including computers, presentation equipment, video conferencing equipment and Telephony equipment.

Programme Management—at present, there are two account managers working within the programme management unit, which is a resource that collaborates with other departments to facilitate the process of delivering IT solutions. One account manager has been in post since 2011, and the other since 2014. The departments find this role very valuable, and the success has increased the demand and by now two account managers are not enough. Another weakness to this role is that it seeks to address every element of client engagement e.g. analysis, project management, but cannot delve far enough to really address the issue. In order to strengthen the provision for departments, there is a proposal that the programme management unit is expanded to include roles for business analysts and project managers.

The role of account managers needs to further evolve and to have more frequent contact with the employees who directly serve the public, in order to understand their roles and educate employees about technological developments which could enrich the way the service is delivered.

With more resource, the programme management unit could expand to include a service to better exploit departments' resources e.g. improve the standard and accuracy of data, reduce the number of systems and making better use of what we have.

It will be necessary for the account manager to become more prominent within departments as well as earlier on in the process of procuring new systems.

Lead and Support

Provide technology to deliver—the need to have expert technology for an individual is an exception. More often than not, the technology is required to address the work's requirements, not too dissimilar from a job description or person specification. To facilitate the work of designating equipment to staff and to ensure that Council officers receive the correct technology to fulfil their duties, an exercise should be undertaken to add categories of technology use into the jobs system. There are several advantages to this:

- Provide fit for purpose equipment
- Identify the costs of supplying equipment for a post
- Fair for all
- Reduce on waste where an arbitrary decision is made
- Facilitate the procedure of collecting equipment when an officer leaves his or her post

The Welsh language—the Council operates a language policy where every member of the public has the right to receive or use all of its services either in Welsh or English. New Welsh language standards will be coming to power on 1 April 2016, with specific arrangements for providing an IT service for the public. Any IT produce which serves the public will commit to the new language standards.

Welsh is the Council's administrative language and the previous strategy states that internal software will supply an only Welsh language service. Occasionally, software which has been internally developed has received external attention, and developments like the "Language Web" have received national acclaim. To facilitate sharing systems which have been internally developed, all Council systems will be provided to support bilingualism, but internally, will be only in Welsh.

Training—the Helpdesk deals with many different calls, some report technological problems and others contact the Helpdesk because their technological skills are insufficient. This information needs to be harnessed to identify common technological deficiencies and to collaborate with the Learning and Development unit to create training packages for Council staff.

We have already discussed surgeries, which are an opportunity to give staff informal support. We can improve on this by introducing good work practices as part of staff induction arrangements, and to change the procedure of presenting equipment. At present, equipment goes to staff in a continuous flow, with the expectation that they know how to use it. Presenting the equipment to staff in the form of a workshop would provide the IT Service with an opportunity to train people on its use and to avoid information duplication.

Technology as an enabler to transform—The IT service will test several different devices which will enable staff to work wherever and whenever is convenient for them. Historically, the department had been supplying equipment for traditional working, namely office provision, but the image and expectations of staff and managers is changing. Work is a series of tasks which are completed rather than somewhere someone attends, and the IT service needs to arm the workforce with purposeful equipment to achieve this
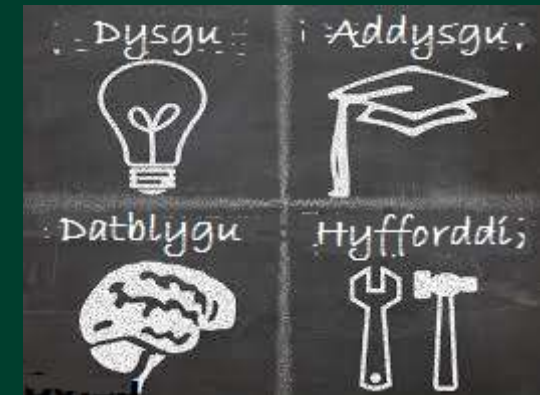
Lead and Support

Additional investment to deliver the heading

CAPITAL

£45,000 (standardise the equipment available in the rooms—total of 9 rooms)

£9,000 (room management system, to include digital signs)

IT RESOURCE

2.0 FTE Permanent on S3 scale (Business Analysts / Project Managers—total of £74,000 for both posts)

REVENUE

£9,720 (support based on 18% of the capital cost)

Activities associated with the investment

- Strengthen meeting room provision
- Strengthen the programme management role

Theme 3. Free up staff time

Managing change—to avoid confusion with managing corporate change, this involves the good practice of discussing any change to the Council's computer system which will be undertaken. The scope of this exercise will be to seek to reduce any disturbance to the service when introducing change. Investing time to research if a change will cause a problem will be very valuable in comparison with the time we could waste seeking to respond to correcting a situation when a change goes wrong. Wasting the technological team's time is not the biggest burden when change goes wrong, but its side-effect on our users and the productive time that would be lost due to unnecessary deficiencies.

We will seek to incorporate a change management procedure as part of the helpdesk system's provision, which is also being reviewed in order to do more with what we have. It is essential that the procedure is a pragmatic one, which is introduced with the intention of saving time and supporting our efforts rather than adding to them.

Documenting and recording information—the IT service has a limited number of technical officers, and this means, on many occasions, that expertise on some systems are limited to one individual. Ideally, we would have more than one officer with expert knowledge on the systems, but this is not practical as it would significantly add to the workforce. However, we can improve our procedure of documenting systems and having an information database on our systems.

Reviewing and rationalising the helpdesk's activities—the helpdesk is the gateway for most of the Council's staff to IT services. Approximately 20,000 incidents are recorded by the helpdesk, but there are around double this figure of records of contact with the helpdesk, with an increasing number of Council staff being unable to contact on their first attempt because helpdesk officers are busy processing other calls. This is unsustainable, and support has been received from the Council to add resources to this unit, with the intention of increasing the number of calls which are addressed at the first point of contact from 63% to 85%.

Another aspect that needs to be improved is to bring the number of problems recorded down, but it is very likely that these will increase at the beginning as a significant number of problems are being addressed without being recorded at present, due to a lack of time. It is essential that we record everything to gain a better understanding of where our problems exist, and it is only by identifying this that we can analyse and impose measures to strengthen the areas of service which indicate a high percentage of problems.

Free up staff time

The helpdesk unit will be improved by:

- Reviewing our usage of the phone system
- Simplifying the process of recording calls
- Introducing self-service elements for Council staff to be able to monitor progress on their calls
- Strengthen our presence on the intranet in an effort for Council officers to help themselves by using a comprehensive information bank.

Research—technology is changing at a quick pace, and time needs to be allocated to research trends and developments in order to deliver the best service. Council officers' expectations are also changing and their use of personal technology is increasing and becoming more sophisticated, but contrary to the use of personal equipment for pleasure purposes, there are considerable limitations upon us in terms of security. The challenge is to deliver resilient, innovative, fit for purpose, efficient, effective and secure technology. Time needs to be invested to test the new technology and its suitability for the Council's work field.

"IMAGINATION IS THE HIGHEST FORM OF RESEARCH."
ALBERT EINSTEIN

The Council workforce includes approximately 6,500 staff, and 2,350 of these are users of traditional computers. This provision is critical for those officers to be able to complete their tasks. In the past, the IT service's efforts have focussed on these traditional users, but perhaps there are opportunities that we have not researched where technological provision could be of help to the staff and the posts which we do not currently provide for, including expanding to the public's use.

Waste collection services—geographical information technology systems could be used to make waste collection routes more effective e.g. East

Northamptonshire District Council saves £200,000 annually by using this technology.

- Highway maintenance—the Jaguar Land Rover car company is experimenting with technology which records potholes and the technology company Google have received a patent for similar technology. Technology such as this could be used to identify deficiencies before they develop to becoming expensive problems

- Associated homes—technology such as telecare has been used for some time to safeguard older and vulnerable people in their homes. The IoT (Internet of Things) expands on this and enables technology to behave in a much more knowledgeable manner and its possibilities are far-reaching. By researching we could take advantage of these developments in order to improve the quality of life of our residents and deliver cheaper care services.
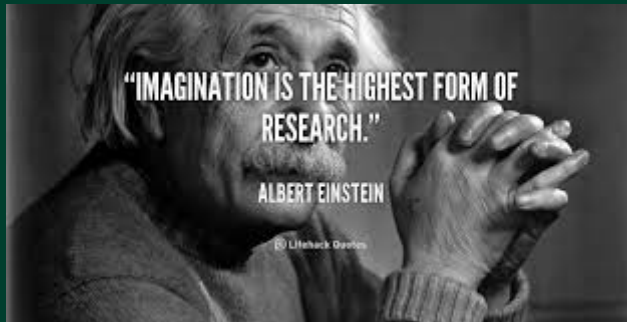
Free up staff time

Additional investment to deliver the heading

CAPTTAL

Depends on the findings of the research

IT RESOURCE

Depends on the findings of the research

REVENUE

Depends on the findings of the research

Activities associated with the investment

Outcomes of research activities

Theme 4. Effective and Efficient IT Service

Work programmes—historically, there has been considerable difference in the way the development unit and infrastructure units manage their work programmes, with the development unit producing and monitoring a comprehensive programme and the infrastructure teams treating every piece of work as reactive work. One of the reasons for this is a lack of time from the infrastructure team, but with the recent investment made to strengthen these units, time can be freed up in the daily work of team leaders and technical leaders to create and monitor work programmes. This means that we can communicate with our clients in a more clear and confident manner on progress, and manage expectations about any slippages.

Another advantage of a comprehensive work programme is the ability to collect historical information which could help us to produce more accurate work programmes for the future and to identify trends for slippages. The development unit records the developer's time, and records whether it is development or maintenance work being undertaken. This statistic is essential to identify how many resources are available for any new developmental work and therefore means that the work programmes coincide with our original expectations. This is not true about the infrastructure units and is almost impossible to have a work programme running against the original objectives. These units will follow the good practice of the development units and will record their efforts to identify how much developmental/maintenance work is undertaken.

Proactive v Reactive—the current nature of the IT service is a mixture of proactive practices, where the service's efforts are managed by work programmes, and the rest are reactive practices where it is not possible to project the extent of their impact on the service's resources.

Reactive work derives from two different directions; work which needs to be undertaken immediately due to a deficiency or problem and work where a Council service has an additional requirement in which a solution needs to be sought at short notice. At present, in order to deliver the reactive work, we are re-prioritising the proactive work by preventing some incidents completely, and although we address the reactive problem/request, we are neglecting our maintenance duties which can cause problems for the future.

The aim is to seek to avoid as much as we can of the wasteful reactive work, in which we are correcting a deficiency or problem, by freeing up more time for the developmental proactive work. It is foreseen that this can be undertaken by investing more time in the proactive work programme in order to prevent problems before they happen, by freeing up more time than the investment. This is essential to free up staff time to work on work packages which improve the Council and to respond to requests that derive from activities such as Ffordd Gwynedd interventions.

Effective and Efficient IT Service

The Cloud—every now and again, the technology industry establishes an activity or procedure which organisations are expected to follow. The "cloud" is a description of a procedure where there will be less dependency on hardware and purposeful rooms to maintain equipment where services are housed. Gwynedd Council has two data centres, the main one at the Headquarters in Caernarfon, and one at the Galw Gwynedd centre in Penrhyndeudraeth. All Council systems and our information are located in these locations.

By now, it is impossible to disregard the "cloud" to house systems and/or Council information, but it must be analysed in terms of costs, practicality and security. During the three years of this strategy, we will create the Council's cloud strategy, referring to the provision of the future.

Effective and Efficient IT Service

Additional investment to deliver the heading

CAPITAL
None

IT RESOURCE
None

REVENUE
None

No activity leading to additional investment

The strategy's action steps

Bringing services closer to the people of Gwynedd

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
The Digital Channel					£600,000	£65,000
	Research and establish the system which will be the basis of the solution					
	Provide a digital channel for 18 services					
	Provide a digital channel for 14 services					
	Provide a digital channel for 6 services					
Field working					Departments to fund any field working provision	
	Review the support infrast-ructure					
	Review mobile phone con-tracts					
	Provide good practice for the use of telephony equipment in the office/field					
	Review different provisions and equipment for field working					
	Provide a corporate solution					

The strategy's action steps

Bringing services closer to the people of Gwynedd (continued)

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resouce)
Facilitating contact with the Council					£22,500 (could be significantly higher if the wireless is expanded)	£30,500 (it may be required to add to the IT Resource if the wireleness network is sig-nificantly expan-ded
	Establish a secure arrangem-ent where the use of the Int-ernet and social media is free from access restrictions	↔				
	Provide a review to expand access to the wireless net-work at Council offices		↔			
	Review and rationalise pub-lic use of computers at our libraries			↔		
	Prepare a report on how we can make the best use of the new phone system and im-prove the resident's exper-ience of contacting the Council	↔				
	Research and provide altern-ative methods for residents to contact the Council		↔			

The strategy's action steps

Lead and Support

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
IT support						NONE
	Review the Helpdesk's support arrangements	←――――――――――――――→				
	Strengthen the presence of the IT service on the intrantet to improve the availability of our support	←――→				
	Use the new phone system to improve the service for users	←――→				
Surgeries						NONE
	Establish surgeries for officers in area offices to have visual access to the IT service	←――――――――→				

The strategy's action steps

Lead and Support (continued)

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
Meeting rooms					£54,000	£9,720
	Review the suitability of the Council's meeting rooms	⟷				
	Design any changes to equipment and/or the use of rooms	⟷				
	Present the new provision	⟷				
	Re-design the meeting room reservation service	⟷				
Program Management					NONE	£74,000
	Establish and train a programme manager and business analyst		⟷			
	Plan a new work arrangement to run the IT service's projects		⟷			

The strategy's action steps

Lead and Support (continued)

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
Technology as an enabler to transform and deliver					NONE	
	Review work trends and the technology needed to address this		←——————————→			
	Adapt Gwynedd's jobs system to include details of the technology required to complete the post's duties		←——→			
	Create an arrangement to collect staff assets when they leave their posts		←——→			

The strategy's action steps

Lead and Support (continued)

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
Training						NONE
	Create an induction prog-ramme for new staff		⟷			
	Establish a staff training working group together with the learning and devel-opment service		⟷			
	Review the arrangement of presenting new Equip-ment/software to staff		⟷			
The Welsh language						NONE
	Establish bilingual devel-opment standards	⟷				
	New internal system devel-opments to adhere to the new development standards		⟷			
	Develop standards regarding the use of the Welsh language for tender docum-ents	⟷				

The strategy's action steps

Free up staff time

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
Managing change						**NONE**
	Establish a change management procedure	⟷				
	Train staff to use the new procedure and review its scope	⟷				
Documenting and recording information						**NONE**
	Create a series of technological templates to record information about systems	⟷				
	Review the use of the helpdesk's system to record details about deficiencies in an improved way	⟷				
Research						**NONE (but research could lead to a requirement for support to establish a project to further develop the research**
	Free up time for all staff members to have the opportunity to research new technology	⟷				
	Quarterly review research projects and their findings	⟷				

The strategy's action steps

Free up staff time (continued)

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
Review the helpdesk's activities					NONE	

The strategy's action steps

Effective and Efficient IT Service

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
Work programmes					NONE	
	All department staff recording whether project time, maintenance, research or administrative work being undertaken	←————————————————————→				
	Produce templates to record and report on work programmes	←————————————————→				
	Programme management unit to meet with infrastructure and development units weekly to report on the progress of work programmes	←————————————————→				
The Cloud					NONE	
	Establish a startegy for Gwynedd Council's use of the "Cloud"			←——→		

The strategy's action steps

Effective and Efficient IT Service (continued)

Activity	Step	2016	2017	2018	Capital	Revenue (including IT resource)
Practive v Reactive						NONE
	Produce a proactive prog-ramme and plan general maintenance days					