

LOCAL PRODUCE VENDING AND RETAILING PROJECT – Nant y Bîg

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OVERVIEW

A group of food and drink producers from Gwynedd came together to pilot a direct retail model involving a refrigerated vending machine and an element of "honest retail".

A vending machine and honesty shelves were piloted to sell directly to customers in a location in Gwynedd. With the help and support of LEADER, the objective was to pilot an innovative, cost-efficient and reliable retail model for a rural area. This was in response to the lack of retail services now in many rural areas of Gwynedd and also in response to the challenge of finding innovative ways for local food and drink producers to sell their produce within the economy in Gwynedd.

The main benefits of the retail model piloted included the following:

- Customers understood the system and valued the provision.
- Customers were able to access it 24 hours a day without staff having to be present.
- The presentation of the products was appealing.
- A vending machine can keep track of stock levels and sales on the internet.
- The honesty shelves worked extremely well and efficiently.
- It offers a convenient retail approach to a campsite or any site/location without a shop.
- It provides an innovative model for selling local produce.
- The benefit of getting producers together to collaborate. The producers mentioned that they had appreciated having a forum to come together to collaborate, and had gained further benefits such as training on food and drink hygiene. This showed that Gwynedd producers have a strong appetite to collaborate more.
- There is no significant obstacle to meeting food and drink hygiene rules and guidelines.
- The e-mail addresses of a number of customers were collected during the retail pilot. Is there a further opportunity with this type of retail, namely to collect e-mail addresses of customers who wish to purchase local produce, and therefore seek to develop a website linked to the retail site, to sell local produce throughout the year?

Some challenges were also highlighted during the pilot, including:

- High running costs for a refrigerated vending machine, which includes paying rent to the machine supply company and electricity to run it. A normal fridge with clear doors could work just as well, i.e. "an honesty fridge".
- Relatively high cost of providing a card payment service. Confidence in significant sales is needed to justify offering the provision. With a campsite for example, it was noted that customers were almost always within reach of cash.
- A lot of time is needed to co-ordinate deliveries and orders as producers generally did not use distributors. Being unable to buy a product from Gwynedd through a distributor is an obstacle for many businesses wishing to buy and retail local produce.
- Clear gaps in local produce provision such as lack of variety of dairy products, bakery products, snacks and soft drinks.
- The importance of having a CCTV system to keep an eye on the security of the retail site, and to facilitate monitoring.

See cover for a picture of the retail model developed to pilot the concept.

Many lessons were learnt during the pilot at Nant y Bîg that have led to the conclusion that this model can be used, and perhaps adapted to the requirements of the location, to provide a service to people in a rural area that wouldn't be possible within a normal retail store model.

LOCATION

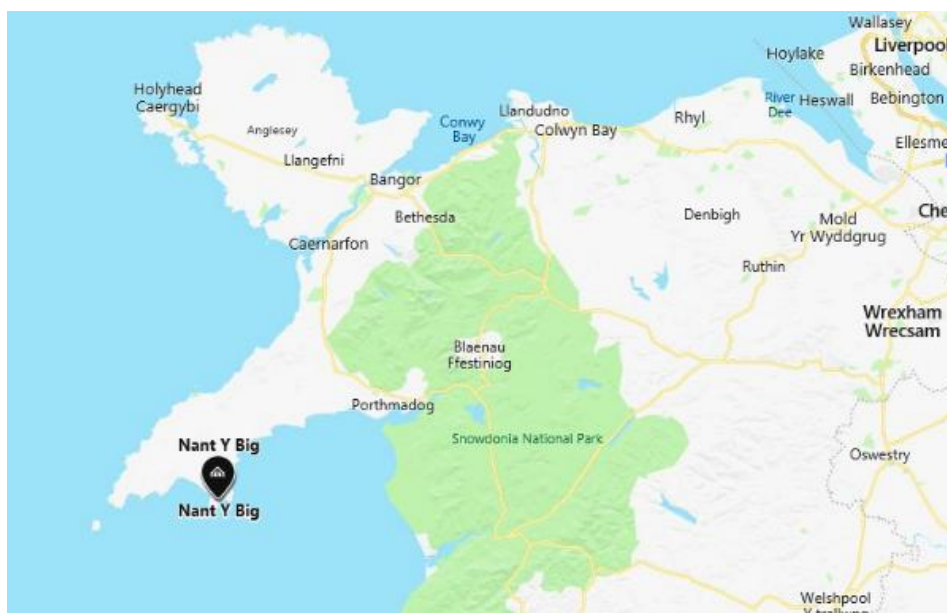
Following an open call process by Arloesi Gwynedd Wledig (AGW), the Nant y Bîg campsite was selected as a location for the local produce vending and retailing pilot.

Nant y Bîg is a campsite on the beach of Porth Ceiriad near Abersoch on the Lleyn Peninsula. There are three different sites for camping there and it's a popular destination for visitors, especially during holiday periods. It is the only campsite adjacent to Porth Ceiriad beach near Abersoch. The Coastal Path adjoins the campsite. The camping season runs from March to October.

Nant y Bîg is a traditional campsite, which includes facilities such as toilets, showers, a wash area and a freezer. There isn't a shop on site, and the nearest shop is 2.5 miles away in Abersoch. The vending machine was located in an old converted cowshed on the campsite.



Image: Nant y Bîg Campsite



Map: Location of Nant y Bîg

PRODUCERS

A wide variety of producers came forward to take part in the project. An open call was shared on social media and through the traditional media to invite producers in Gwynedd to be part of the pilot.

Every single product in the vending machine or on the honesty shelves at the Nant y Bîg site was supplied by producers from Gwynedd County. Here is a list of the producers:

- Oinc Oink! – Ffridd, Llithfaen: **Sausages, Bacon and Burgers**
- Llaethdy Llŷn – Madryn Isaf, Pwllheli: **Milk**
- Dragon – South Caernarfon Creameries, Chwilog: **Cheese**
- Jones Crisps – Madryn Foods, Dinas, Pwllheli: **Crisps**
- Popty Bakery - Llanllechid, Bethesda: **Bara Brith and Welsh Cakes**
- Mêl Cymreig – Bwlch y Ffordd, Bryn croes: **Honey**
- Pleser Pur - Nantcyll, Garndolbenmaen: **Chocolate**
- Poblado Coffi – Y Barics, Nantlle: **Coffee**
- Wyau Dysynni Eggs – Llanegryn, Tywyn: **Eggs**
- Scarlet Angel Fudge – Pwllheli: **Fudge**
- Snowdon Water – Caernarfon: **Bottles of water**
- Tafolog – Caernarfon: **Jam, Mustard, Marmalade and Chutney**
- Pant Du – Penygroes, Caernarfon: **Apple Juice**
- Coconut Kitchen – Llanbedrog, Pwllheli: **'Thai' Sauce**
- Wild Trail – Tywyn: **Snack Bars**



The above map of Gwynedd highlights the location of the various producers. A large copy of the map has been printed for display at the pilot site to explain the system to customers, its purpose as a pilot and also as a visual indication to show where the producers involved in the LEADER project are situated. (See picture on the cover of the report to see where the map was displayed.)

The majority of producers came forward through the AGW open call process. The response was very positive, and the meeting held at Plas Heli, where producers came together for the first time to be briefed, was very successful. The producers showed significant goodwill to collaborate with AGW and with each other. There was a strong interest amongst producers to come together outside of this pilot to consider opportunities to collaborate for mutual benefit.

Following the start of the pilot, producers from Gwynedd were contacted directly to procure products that were not for sale at Nant y Bîg, such as the Dragon cheese company and the Snowdon Water company, because the site owner felt that there was customer demand for this type of product. As these products did not compete with any of the original producers, they placed orders with them to improve choice, and make the pilot even more attractive.

It is clear that a wide variety of products are available within Gwynedd County, which meets customer requirements, and with more time and resources it may be possible to identify more. The vending machine offers the producers a good opportunity to showcase their products to new customers.

CO-ORDINATING THE PILOT

Co-ordination has been an important element in running the local produce vending and retailing pilot. The contract for monitoring and co-ordinating the pilot was awarded to Bwydydd Madryn Foods Ltd, which specialises in food supply chain management. The company is experienced in the food and drink market in Gwynedd and beyond, and is familiar with dealing with companies specialising in different parts of the supply chain. Day to day co-ordination was undertaken by Heulwen Williams within the company.

During the initial meeting at Plas Heli, led by the AGW Project Officer and the co-ordinator, the producers and site owner came together giving everyone the opportunity to get to know each other and develop a relationship. It was suggested on the evening that it would be possible for some to collaborate to deliver their products to Nant y Bîg, demonstrating goodwill amongst the crew, although this did not happen due to the practical challenges of co-ordinating everyone to the same system and timing.

Following the briefing, the co-ordinator undertook research to establish each producer's system, such as their ordering system, delivery system, minimum order, best before dates, price terms, the number of units in a box, method of communication and payment, accreditations etc.

The co-ordination work was very time-consuming during the first month of the pilot. The vending unit and shelves were ready by Easter 2019, and the heavy preparation work started from early March. Co-ordination work took approximately 1 day a week (8 hours) on average once the pilot was up and running. Time was spent undertaking tasks such as overseeing the vending machine's stock levels, processing orders, recording sales, site visits and banking. The weekly costs of co-ordinating the vending machine would therefore amount to a salary of around £72.00 (based on a rate of £9 an hour) with additional overheads such as tax, holiday pay, travel and office running costs. It is estimated that £40-50 a week would need to be added to these additional overheads, meaning that around £110-120 a week would need to be budgeted, or £5,000-6,000 per annum for co-ordination. The cost would probably decrease over an extended period of time as everyone involved becomes better accustomed to the system.

One method of saving co-ordination time, and creating a more commercial system would be to use a distributor to supply the product. Dealing with each producer individually was time-consuming.

However, there is no existing distributor specialising in the provision of local produce from Gwynedd, and it is very unlikely that a similar range of produce could be sourced from Gwynedd using a distributor.

It is likely that Welsh produce could be sourced through a distributor, e.g. honey from Wales rather than honey from Bryncroes, Llyn Peninsula as used in the pilot. However, the local/county element would be lost. This is a significant obstacle preventing many businesses in Gwynedd from retailing more products from the County.



If a distribution company were ready to supply, the small amount of orders could mean that they would not be willing to travel to rural locations such as Nant y Bîg, which is not on a normal delivery route. A minimum value would probably need to be ordered for free delivery by a distributor.

The co-ordinator believes that the systems for tracking stock would need to be developed further. One example was to keep an account of any waste after a product passed a "best before date". In one case, there was an error in the number of stock delivered, and what was on the invoice. A more sophisticated system would need to be developed to track stock levels and facilitate the work of the co-ordinator. One element that adds more complexity with the development of such a system is that each producer adopts their own system of delivery and paperwork.

Adopting a similar approach to supermarkets, where producers would have to follow the supermarket's unique electronic system in terms of arranging deliveries, raising orders and invoicing, would not be fair or appropriate in this case. AGW would not want to impose additional costs upon small producers. In the long term however, and within a purely commercial context, a location such as Nant y Bîg would be likely to adjust the producers' systems to be more similar to each other and to what suits the Nant y Bîg system.

Another aspect that came to light was that there were some instances where sales were not high enough to make it practical for a company to deliver products to the site. An example of this was Oinc Oink's product. The co-ordinator met the producer weekly near her home to collect sausages and bacon to supply the vending machine. This would not be feasible in the long term.

One possible solution could be to have a frozen vending machine, so that the "best before date" of a product is extended and there's less need to deliver low volumes so regularly. However, as this is a campsite, it is unlikely that frozen products would appeal to the customer. Similar challenges were faced with the water bottles, eggs and bread.

There was already a CCTV system on site. In this case, the co-ordinator was unable to access the system. Access to the CCTV system may have facilitated the work of the co-ordinator, enabling her to keep an eye on the condition of the machine without having to visit. The co-ordinator visited at least once a week to check things on site and with the owner. The visits were potentially more numerous due to the nature of the pilot, and the need to learn and adapt as they progressed.

VENDING MACHINE

In researching vending machines, farm vending machines from J.S.R Services from Scotland were considered first – www.jsrservices.co.uk

However, due to the high cost of the machine and the long wait for it, other alternatives were explored. The team at AGW was also keen to have a lighter machine than the 'Farm Foods Vending Machine', in order to move the machine around more easily.

After consideration, the 'Shopper 2' vending machine was hired from Service Vend of Llanrug (see Appendix 1) for £40 + VAT per month – see picture of machine on the right hand side, branded specifically to reflect the pilot. The machine consisted of cold lockers and ambient temperature lockers, it was light and convenient, and could accept card payments.

The machine was able to facilitate the co-ordination process by sending a daily text message informing others of which lockers needed to be replenished and the sales status of the machine. The vending system could also be programmed to send an automated text message after a certain level of sales had been reached.

It's worth noting that, as the co-ordinator spoke regularly with the site owner, extensive use was not made of this technology as a tool to monitor and track stock levels.

Note that the cost of estimating the machine's power supply during the project period was £500. On average, this was a monthly cost of around £83, inclusive of VAT. This was a significant cost given the monthly machine sales.

The site owner noted that a very small minority of customers had been asking for clearer instructions on how to use the machine. Some customers put money in before moving the carousel to the correct place, which in turn meant that the customer was not getting what they wanted. This could be solved by providing simple instructions near the vending machine reminding them of the correct purchasing steps.



HONESTY SHELVES

Honesty shelves were located near the vending machine. The shelves were made by a local carpenter and included a range of local produce from Gwynedd. All items were clearly priced and a box was placed nearby for the customer to put money in. A change plate at the top of the box included small change for the customer, if needed. Food allergy signs and a CCTV notice were displayed nearby.



FOOD AND DRINK RETAIL AND HYGIENE RULES

Dorothy Williams, Public Protection Enforcement Officer, Gwynedd County had been consulted for guidance on food labelling and hygiene issues.

The following websites were used to access relevant documents and information:

- <https://www.food.gov.uk/business-guidance>
- <http://ratings.food.gov.uk>
- <https://www.gwynedd.llyw.cymru/en/Businesses/Licences-and-permits/Business-and-street-trading-licences/Business-and-street-trading-licences.aspx>
- <https://www.businesscompanion.info/en/quick-guides/food-and-drink>

All stakeholders involved in the pilot received food hygiene training from Siân Davies, a food hygiene consultant from the Llyn Peninsula. A number of other hygiene considerations emerged. In order to sell a product in a vending machine:

- all locations would need to register with Gwynedd Council as a Food Vending Property.
- each producer would have to register their location/site with Gwynedd Council for a food rating. They must receive at least 3 stars or higher in order to be able to sell their product in the vending machine which is managed by another company.
- all producers would have to ensure that their food labels follow food and trading rules.
- the venue would have to obtain public liability insurance.
- AGW, through Menter Môn, would have to obtain insurance for supplying food to the public, as the stock for the pilot was funded by AWG.
- the setting would have to ensure that they kept a detailed record of the machine's temperature, cleaning and checking dates on a daily basis.
- a Public Protection Enforcement Officer would have to visit the site within 28 days of establishing the machine.

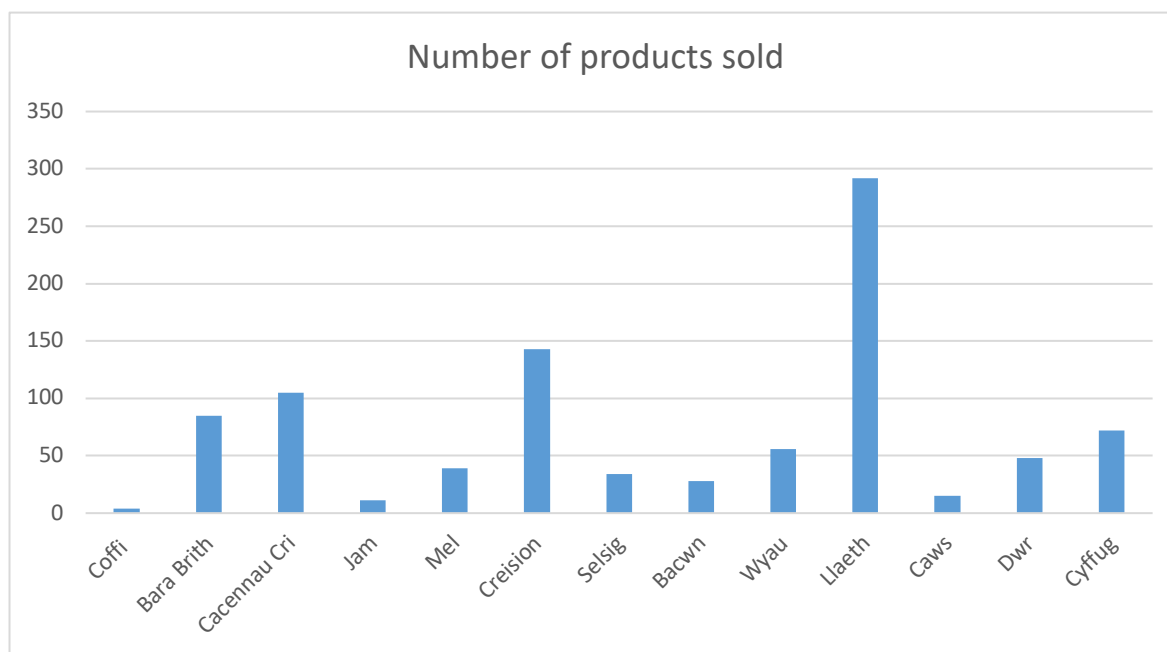
By following the above, the vending machine at Nant y Bîg was able to receive a 5 'star rating'.

The only issue raised by the Public Protection Enforcement Officer was that someone could tamper with some of the products on the honesty shelves, such as cakes and jams. To address this, the CCTV kept the produce under surveillance 24 hours a day, with clear signs to inform people that they were being watched.



PRODUCE

Figure 1: Unit sales of produce (Vending Machine and Honesty Shelves)



The produce was bought in following the producers' commercial sale terms. It was essential that the pilot reflected a real retail situation, therefore it aimed for a pricing policy that would create a gross profit of around 20-25%. This is considered to be a reasonable percentage that would reflect this type of low cost model, and would also keep sale prices reasonable. In general, convenience stores aim for a gross profit of 30-35%, and supermarkets expect a gross profit of 35-45%.

Inevitably when dealing with food, the pilot would have to face waste costs, which is another reason for ensuring reasonable gross profit was calculated and considered in the model. To achieve an average gross profit of 20-25%, some products needed to produce significantly higher gross profit, while others were going to be less. The gross profit of a particular type of product was dependent on the nature of the product, the buy-in price, the likelihood of waste and the customer's expectations.

Looking at the sale of stock keeping units (or SKUs), the most popular product was milk (500ml).

The milk was supplied by Llaethdy Llŷn and was delivered to the site at the end of the week, as the most sales were made over the weekend period. The milk was bought in at 50p and sold at 80p. This was a mark-up of 62.5% or a return on margin/gross profit of 37.5%. Milk sales generated a profit of £87.60. Over the period of the project a total of 20 bottles were thrown away because they had passed their 'best before date'. Even after deducting £10 of waste value, due to high levels of sales and the mark-up, milk sales were profitable, and gross profit remained at £77.60.

Cakes, fudges and crisps were also popular items: 85 large loaves of bara brith were sold. With the buy-in price of £2.00 and the sale price of £3.00, a gross profit of £85.00 was made. There was no waste in relation to these items over the project period.

Items such as jams and chutney were less popular: 11 jars of jam and 10 jars of chutney were sold. Given that the cost of buy-in was £2.80 and the selling price was £3.50, only £14.70 gross profit was made. There was also a high number of jams left at the end of the project.

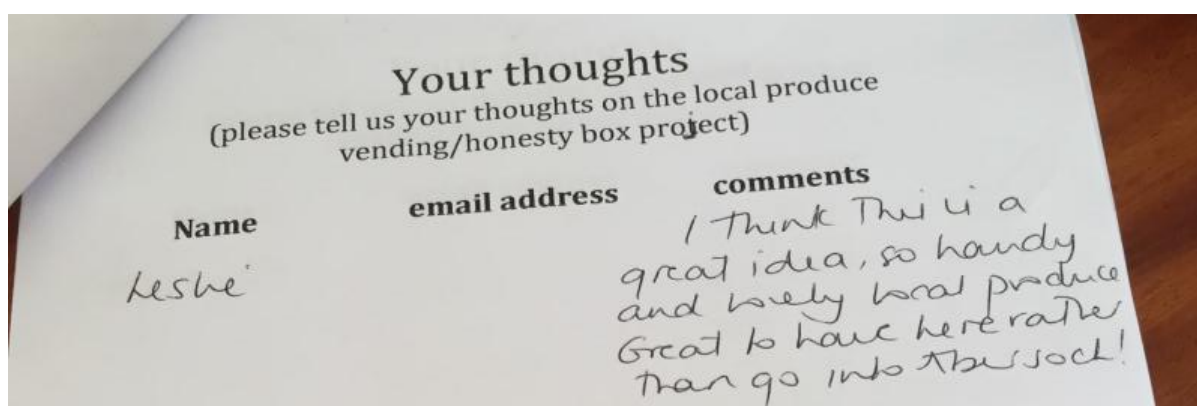
The less popular produce included coffee, with only 4 packets sold. A high cost of £6.50 is likely to be a factor, as well as the fact that campers would not have specialist equipment such as a *cafetière* to prepare it. This highlights that campers are looking for convenience food.

Bacon and sausage sales were generally low: 34 packs of sausages and 28 packs of bacon were sold. These were bought in for £3.20 and sold for £4.00 each. The meat produce made £49.60 gross profit. However, due to the low level of sales and a short 'best before' date, waste levels were very high: 27 packs of sausages and 5 packs of bacon were not sold, at a cost of £102.40. This means that this particular loss is significantly higher than the gross profit.

CUSTOMERS

According to the owner of Nant y Bîg, all visitors' comments had been very positive when discussing with him. The concept of selling to visitors in this type of business provided an additional useful service to its customers. Even though the owner did not feel that he was making significant additional money, he believed that offering this was setting his business apart and making it unique. Many customers liked the idea of supporting local producers and contributing to the local economy.

During the project, customers were asked for their views. A total of 31 comments were received, almost all of which were positive. See also owner and customer comments on the YouTube video <https://www.youtube.com/watch?v=4IDUrE9TduU>



From the positive comments received, the main points highlighted the campers' appreciation of local produce and the convenience of having a shop on site.

"Really lovely to be able to buy locally produced food to reduce roadmiles and support local people.
Caroline, camper

"Really like the buy local produce ethos."
Leise, camper

The few less positive comments made reference mainly to a lack of stock, such as no milk for a period on August 28th 2019, following a very busy period.

"The only thing that could improve it more would be a slightly better stocked shop so we didn't have to go into town. Although the addition of the little shop was really good."
Anonymous camper.

There have been many positive comments about the taste and quality of the produce, such as praising the Welsh cakes and fudge. Some campers recognised the value of including vegan food.

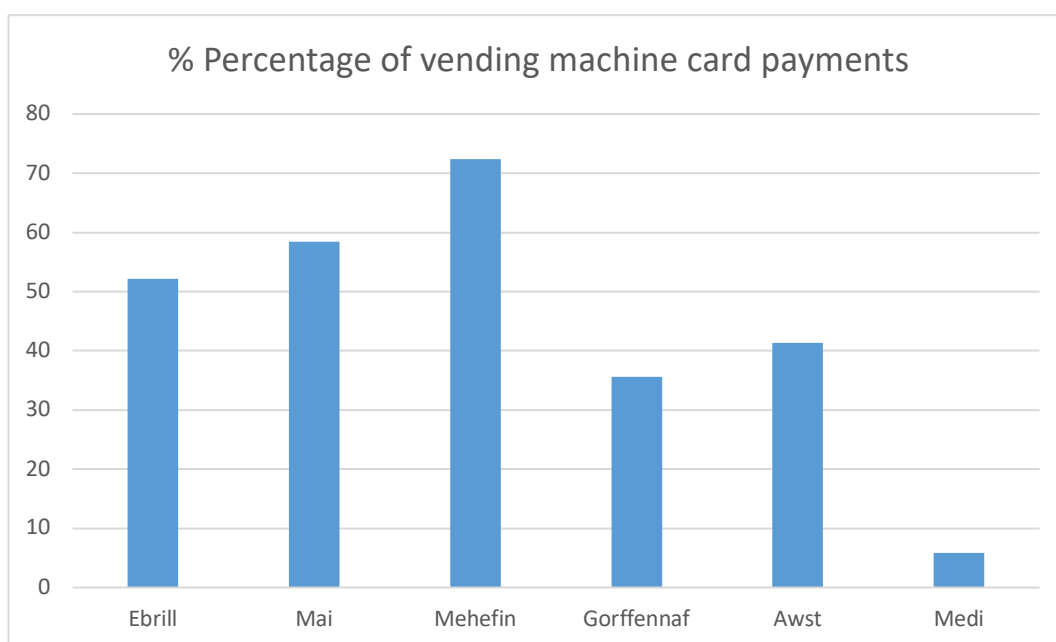
"Great to include Wild Trail Bars as they are Vegan."
Ben and Daniel, campers

No comment was received referring to the costs of the products, which proves that campers are prepared to pay a fair price for standard produce from the area. The convenience of having a shop on site, and the fact that they did not have to travel to the nearest town, outweighed the higher costs of some of the products compared to the local shops.

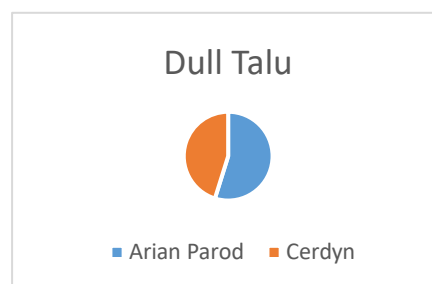
CARD PAYMENTS

The vending machine included equipment that accepted card payments. This was provided through a contract with Nayax (Nayax Cashless and Remote Monitoring Solution). The machine accepted the majority of the main credit cards and Visa debit cards. This facilitated co-ordination as it reduced the amount of cash that needed to be handled and also reduced the burden of managing small change.

Figure 2: Percentage of vending machine card payments.



Over the course of the project, card payments accounted for around 45% of the value of all the vending machine's payments. Over the pilot period, £332.30 was received through card payments and £403.45 in cash. This shows that there is demand for the service and that it appeals to customers. We can be certain that this trend will continue as more and more people use credit cards and other payment methods, such as mobile phones.



However, whilst the percentage of vending machine card payments was close to half, the monthly fee of £15.00 + VAT for the card machine and the additional commission of 1.8% to 2% of the value of each card payment, had a significant impact on profits. For example, although the card sales made in April amounted to £38.60, as there was a monthly fee of £15.00+ VAT for the service, the amount received before commission was actually £20.60. The cost of providing the service for the month was 47% of the total, and it would not be viable to sustain this type of provision in the long term. The overall vending machine sales

were low, and the card machine payments would ultimately have a big impact on the profit. In August, when the card use was at its highest level, the payment of £15 + VAT remained a high percentage of 13% of all card income.

However, this pilot scheme has provided a valuable opportunity to pilot the technology and to highlight the potential advantages and disadvantages. It is clear that a certain level of sales is required to justify the cost, and we will try to estimate that later in the report.

SALES

Over the trial period, the vending machine sales were tracked using NAYAX software.

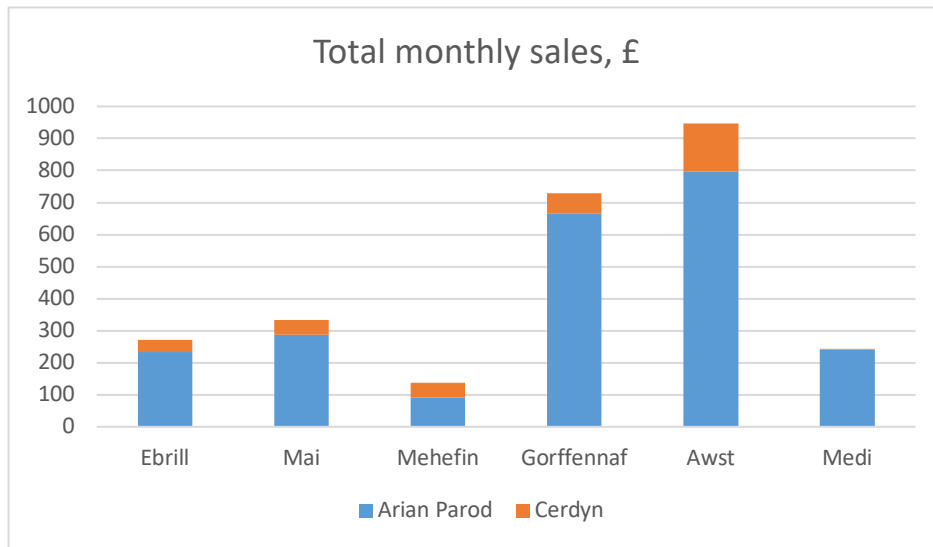
Figure 3: Record of vending machine sales.



Figure 3 above provides a visual summary of the vending machine sales on a financial basis. The orange parts of the graph represent cash, and the green parts represent card payments. It was notable how seasonal the use of the campsite was, which the owner expected.

The very seasonal nature of the site was very obvious, with sales higher at weekends and during holiday periods. August was the busiest month of sales, reflecting camper numbers. In deciding how many products to order from week to week, the co-ordinator was provided with information on the number of campers who had booked in advance to stay on site. This information proved to be very useful in trying to keep waste to a minimum.

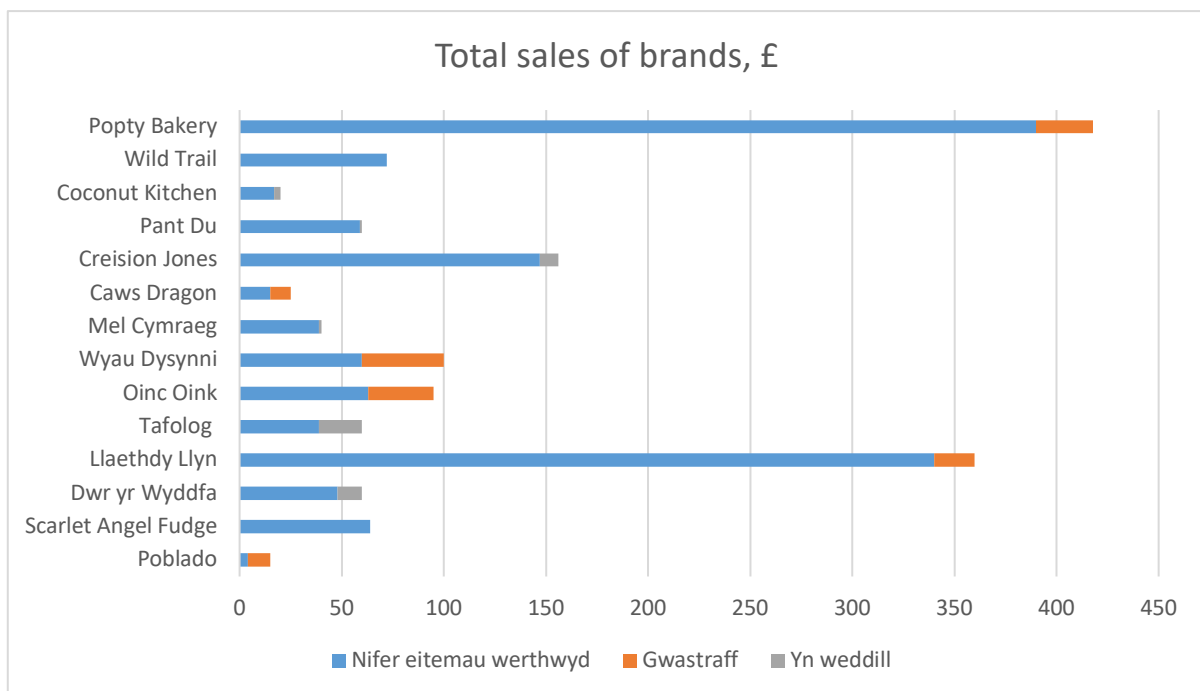
Figure 4: Total sales (£) from vending machine and honesty shelves



When considering which product was the most popular, it was clear that demand for milk was high. There was also a high demand for sweet foods, such as Popty Bakery products and also snacks such as 'Wild Trail' bars and Jones crisps. The milk was kept in the vending machine. The Popty Bakery products and crisps were sold on the honesty shelves.

The least popular products were coffee, cheese and sauces.

Figure 5: Total sales (£) by product type



During the project, a detailed record was kept of waste after the produce passed its 'best before date'. In cases of waste, the co-ordinator sought to respond to this with subsequent orders by adapting accordingly. For example, after 28 packs of 2x Welsh cakes were wasted in May, the co-ordinator decided to only order packs of 6 from then on.

Figure 6: Overview of waste by product type during the trial period

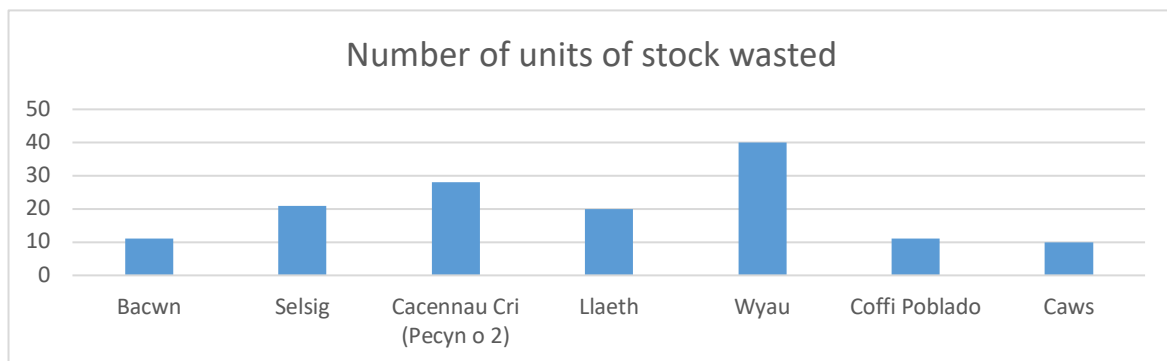
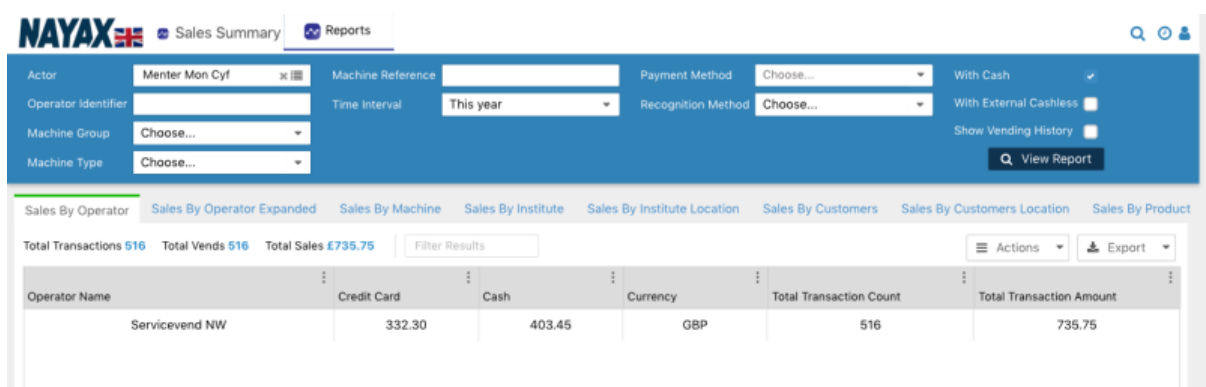


Figure 6 above summarises the level of waste for particular types of products. The items wasted included meat (sausages and bacon), Welsh cakes, milk, eggs, cheese and coffee. The 'best before' dates for these products were generally quite short. At the end of the project, the items that were not sold were given to a local food bank project.

Clearly, the aim was to try to create a commercially viable sales model. During the trial period, the vending machine and honesty shelves generated £2406.53 sales in cash and £332.30 sales by card.

Figure 7: Total vending machine sales



The total sales made over the trial period came to £2,738.83, with £2,003.08 (73%) generated from the honesty shelves and £735.75 (27%) from the refrigerated vending machine. The month with the least amount of sales was April, with an amount of £216.08

and the busiest month being August, with total sales of £797.80. These figures show that sales vary widely, reflecting the extreme seasonal nature of this type of business.

In terms of sales from the vending machine, the amount received was accurate. This wasn't the case with the honesty shelves. There was some inconsistency here.

Note for example that the amount of cash received was £15.25p less than the total stock sold in May. The amounts received in June were 25p higher and the amounts in July were £7.26p higher. Over the pilot period a total loss of £129.28 was incurred. This represented an average loss of 6.4% in the honesty shelves' payments. Although the running costs of the honesty shelves were not as high as the vending machine, the loss was having an impact on gross profit.

There was a thorough investigation to try to clarify the discrepancies, and the following were highlighted as possible reasons:

- Administrative errors such as incorrect stocktaking.
- By the middle of the pilot, we realised that staff at Nant y Bîg had been filling the vending machine with some products from the honesty shelves, such as apple juice, in order to fill it and to be more attractive. Despite their good intentions, this caused difficulties in trying to keep track of stock, with the stock that was meant for the honesty shelves being transferred to the vending machine without possibly being properly recorded.
- Customers paying wrong amounts for a product.
- Young children who were staying on site and using the system without understanding it properly or being able to calculate the sums due correctly.
- There was no suggestion of wrongdoing, and when there was a significant difference in the amounts, a video from the CCTV cameras was viewed, and no suspicious behaviour was observed.

Despite the loss, it is understood that inconsistencies in sales of honesty retail models are fairly common, and that the owners of such enterprises are willing to accept this, within reason, as the system is much cheaper to run than conventional retail.

Given the costs, it is clear that more sales are needed than those generated in Summer 2019 at Nant y Bîg to create a long term commercial model using this model.

It is estimated that approximately £187 a month is required solely to support the cost of the vending machine:

- Co-ordination - £112 a month
- Electricity – £20 a month
- Machine Hire - £40 a month
- Card payment machine fee - £15 a month

In determining the cost of the produce, an average of around 20-25% of mark-up was sought. Note for example that the gross profit in August, the busiest month was £159.56, which was lower than the total cost of £187. Given this, the machine would need to take a monthly amount of around £900-1,000 (around £250 a week) before seeing any real profit.

However, the business owner feels that the retail model adds value to their business and offers something unique to their customers. The cost of providing the facility was also significantly less than if it had been required to employ staff to work in the shop over the

same period. The owner mentioned that he was keen to buy a machine himself for the 2020 camping season, which could reduce running costs. However, due to the high running costs and high machine costs, he did not believe that he would invest in a machine for refrigerated products.

Financially, and perhaps unexpectedly, simply maintaining the honesty shelves would have generated a good return during Summer 2019. However, would as many people have been drawn into the shop knowing that milk and other cold products were not available there?

INNOVATION IN RETAIL

When we look at the entire food and drink supply chain, we tend to focus on support and assistance in the initial stages, with farmers, producers and food and drink processors. There is little support at the end of the chain, such as distribution and retail.

Retail is equally important, and has a direct impact on producers and farmers. There is an urgent need to look at how innovation can be made in the sector, in a way that benefits downstream producers. With the closure of a number of small rural shops, there is a need and demand for identifying innovative cost effective solutions to providing food and drink vending services in the rural communities of Gwynedd.

One innovative retail model emerging this year is 'Amazon Go,' which is a chain of convenience stores from the retail giant 'Amazon.' These shops are automated and customers can buy goods without having to go through a checkout. The customer opens 'Amazon Go' before stepping into the shop, and any purchases made by the customer will be added to their virtual card, with payment taken for their items after they leave the store. See an introduction to this innovative shopping technology on YouTube:

<https://www.youtube.com/watch?v=NrmMk1Myrxc>

Another interesting concept is the use of an app such as "My Honesty Box" to enable customers to buy items through their mobile phones. A QR code is displayed next to honesty boxes at sites in New Zealand. The customer registers with the Company, scans the QR code, selects the items before paying using a credit card. The customer will receive a receipt to the email they registered with. This is an interesting platform that could offer a valuable resource to small rural businesses in Gwynedd. Such an app would be a good way of making honesty boxes an accessible method for customers over time where the use of cash reduces in society.

<https://www.myhonestybox.co.nz/ui/home/index>

CONCLUSIONS

In considering the main benefits of the retail model established at Nant y Bîg, there are clearly many strengths.

- It offers a convenient retail approach to a campsite without a shop.
- It provides a means of selling local produce.

However, careful consideration needs to be given to the location of any vending machine, taking into account the likely levels of sales if the enterprise is to be commercially viable. In this case, because the average weekly sales are below £250, it is suggested that it would be better to look at cheaper models to run, such as honesty boxes and an honesty fridge. Buying a second hand vending machine would be an option for smaller businesses. However, it is unlikely that a site such as Nant y Bîg would be able to justify paying for a refrigerated vending machine due to initial purchase costs and high running costs.

Positive findings from the pilot include:

- Customers understood the system and valued the provision.
- Customers were able to access it 24 hours a day, 365 days a year without having to have staff present.
- The presentation of the product is attractive in an appropriate vending machine and honesty shelves.
- The cloud technology of a vending machine can keep track of stock levels and sales on the internet.
- The honesty shelves worked extremely well and efficiently. There is further opportunity to develop the concept of "honest retailing".
- It offers a convenient retail approach to a campsite or any site/location without a shop.
- It provides an innovative model for selling local produce.
- The benefit of getting producers together to collaborate. The producers mentioned that they had appreciated having a forum to come together to collaborate, and had gained further benefits such as training on food and drink hygiene. This highlighted that producers have a strong appetite to collaborate more.
- There is no significant obstacle to meeting food and drink hygiene rules and guidelines.
- The e-mail addresses of a number of customers were collected during the retail pilot. Is there a further opportunity with this type of retail, namely to collect e-mail addresses of customers who wish to purchase local produce, and therefore seek to develop a website linked to the retail site, to sell local produce throughout the year? Is collecting information about customers wishing to buy more local food and drink, and who are broadminded enough to consider different ways of buying food and drink, one of the main selling points of a retail site such as the one established at Nant y Bîg?

Some challenges were also highlighted during the pilot, including:

- High running costs for a refrigerated vending machine, which includes paying rent to the machine supply company and electricity to run it. A normal fridge with clear doors could work just as well, i.e. "an honesty fridge".
- The relatively high cost of providing a card payment service. Confidence in significant sales is needed to justify offering the provision. In a campsite for example, it was noted that customers were almost always within cash reach.
- A lot of time is needed to coordinate deliveries and orders as producers generally did not use distributors. Being unable to buy a product from Gwynedd through a distributor is an obstacle for many businesses wishing to buy and retail local produce.
- Clear gaps in local provision, such as the variety of dairy produce, bakery produce, snacks and soft drinks.
- The importance of having a CCTV system to keep an eye on the security of the retail site, and to facilitate monitoring.
- The need for a satellite connection to the internet via cable or via a 3G or 4G mobile signal.

The next task for AGW will be to share these findings, and to move to phase 2 of the pilot by identifying a community in Gwynedd that would be keen to pilot the concept. Stage 2 will be able to build on the work of phase 1 and will benefit from the lessons already learnt.

In conclusion, is there is a golden opportunity here to marry this pilot with other elements of the LEADER work? The most obvious opportunity is to consider the use of network technology to facilitate the management and co-ordination of such a site. Through the use of sensors, for example, a record could be kept of the temperature of an honesty fridge, as well as the site's pattern of use in terms of the number of times the access door is opened and closed every day.

This pilot has highlighted that the food and drink retail sector offers opportunities that supermarkets may not be flexible enough to meet. It seems as though there is an opportunity to develop innovative retail models to provide better services in the countryside, and to create commercial opportunities for retailers and producers.

Appendix 1: Details of the vending machine

Specifications

Height: 1830 mm
Depth: 752 mm
Width: 958 mm
Weight: 232 kg
Refrigerant: R134A CFC Free
Compartment Height: 127 mm

Food Storage Area
Height: 810 mm
Depth: 430 mm
Width: 184 mm

Electrical Services
Voltage: 220/240V AC
Frequency: 50/60 Hz
Current Rating: 6 amps (max)
Refrigeration Unit: 1/2 hp compressor

Temperature Control
 Operating temperature controlled by electronic sensor at 2° C. Safety function closes door if temperature reaches 5° C.
 Cooling system designed to maintain internal temperature at or below 2.2° C - 3.3° C with a 70% relative humidity at an 35° C ambient temperature.

All weights and dimensions are approximate and are for guidance only.

Capacities

Each shelf can be divided into 5, 10, 15, 20 or 25 compartments to suit various product sizes

Standard Capacity:
 115 items - 1 shelf with 20 items, 3 shelves with 15 items & 5 shelves with 10 items.

Minimum Capacity:
 45 items - all trays with 5 items

Maximum Capacity:
 225 items - all trays with 25 items

Tray Capacities

- 5 items: 229 mm - round plate
- 10 items: 127 mm - round plate
- 15 items: 90 mm - pie wedge
- 20 items: Fruit, sandwiches, bottles
- 25 items: Tetra-packs, narrow items



shopper2
 Quality | Satisfaction | Sustainability

**ONE MACHINE
 24/7 REFRESHMENT
 SERVICE!**

Visual Style To Enhance Any Location

The Shopper 2 is available as standard in silver or metallic black to complement machines available from the CMIS range.

When matched with Abstract or Ultra Blue graphics, these machines provide a strong visual impact to any location.



Silver



Black



Abstract



Ultra Blue

Enjoy fresh food...
 ...from the market
 leading Shopper 2!

UK FR1306000 04/11

CRANE MERCHANDISING SYSTEMS

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CRANE MERCHANDISING SYSTEMS

shopper2

Quality | Satisfaction | Sustainability



enjoy fresh

The world's favourite food merchandiser!

The Shopper 2 has been designed to meet the varying needs of a 24 hour refreshment service. Machines provide the largest selection of products that consumers demand, leading to higher sales volumes and increased operator profitability. Shopper 2 is the first choice for around the clock fresh food, snack and cold drinks vending.

Why Choose Shopper 2?

- Nine levels, each with 127 mm tall vend doors, provide optimum product visibility, promoting sales
- Increased operator revenue/profit through widest selection of products available from one machine
- Exclusive "Pretter Max" function automatically returns the drum to the view with most products for sale
- Powered vend doors on all levels allow easy one handed operation
- Five Zone partitioned drum provides excellent merchandising alternatives while the two way drum rotation speeds customer selection time
- Individual selection pricing increases flexibility
- High efficiency refrigeration and improved airflow provides even temperature distribution to all levels - environmentally friendly and keeps products fresher for longer
- Refrigeration unit can be easily serviced from the front of the machine
- Foam-in-place cabinet and door increases operating efficiency and helps to reduce energy consumption
- Side-of-drum storage area keeps additional products refrigerated and available for immediate re-stocking
- Audit system records sales information, aiding stock control and machine management

Flexible merchandising options

The Shopper 2 offers unprecedented merchandising flexibility. Products are stocked into individual compartments on 9 rotating shelves. Each shelf comprises five trays, each of which can be divided into two, three, four or five segments.

Trays can be easily configured to hold a selection of plated main meals to small snack items, maximising the available space and offering customers a wide choice of products.

With increased compartment width and height, the Shopper 2 can also stock 229 mm diameter platters as well as upright cans, tetra packs and sandwiches for dramatically improved product display.

N.B. All trays on a level must have equal divisions.



Refrigerated Product Compartments



- The rotating drum is fully refrigerated with air evenly distributed throughout the shelves
- Highly efficient refrigeration provides the best air distribution system in the industry

Choice of Payment Systems



- Shopper 2 is compatible with the leading M.D.B. and Executive coin and cashless systems
- Either option can be fitted depending on the payment format required

Reduce Your Carbon Footprint

The Shopper 2 is one of the more energy efficient, vending machines in the market-place today, achieving an EPA EMP rating of A. The latest power save software reduces energy consumption whilst keeping the machine "vend ready". A Shopper 2 in energy save mode uses 13% less energy per hour than when in standby mode while a machine in energy save mode and door heaters switched off (where conditions allow) uses 56% less energy per hour!



- Maximum Reliability
- Increased Profitability
- Consistently Delivered



Place the Shopper 2 with snack, combination and drinks machines from the Crane Merchandising Systems range to create a total vending solution tailored to the needs of specific staff/customer preference or location.

Image shows Pretter Max 4 1/2 select, Shopper 2, MiniFood & 6 Evolution. Base graphics shown on MiniFood and Evolution are available as extra cost options.