

## An Independent Review of Cashless Catering Systems



# Schools Food Trust

## Cashless Catering Systems

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# 1. Executive Summary

In May 2006 the Government announced new legislation for the nutrient-based and final food-based standards for schools lunches in England. These regulations are to be implemented in all Secondary schools by 1<sup>st</sup> September 2009. As part of the Public Service Agreement Targets, National Indicator 52 places a duty on Local Authorities to measure the take up of school meals. This measurement of take up coupled with the monitoring of menus to ensure they are compliant means that Local Authorities and schools will be required to gather detailed data that in the main is not currently collected. As a result Secondary Schools are showing an increasing interest in cashless catering systems to help them collate data, refine current administration systems and assist them in meeting the forthcoming legislation.

In March 2009 APSE Best Value Consultancy was commissioned by the School Food Trust to:

- Research the cashless catering systems currently on offer in the market place
- Detail the relative merits and drawbacks of the system by reviewing the different mechanisms to identify pupils
- Identify the methods for topping up the pupils accounts.

This report has been produced using information obtained through research with key stakeholders using telephone interviews and surveys with ten cashless catering system suppliers and the findings of surveys completed by ninety eight secondary schools.

## **Schools**

Evidence gathered from secondary schools indicated that half the schools were already operating a cashless system and highlighted a range of benefits. The majority said they would recommend the system to other schools and most were pleased with the product and after sales service. (See Appendix C and D)

The main challenges experienced with managing the systems were equipment failure. A small number of schools also experienced poor after sales care. When asked how they used the sales data was used schools indicated that it was for:

- information on nutritional analysis
- analyse meal take up
- analysing pupil's menu choices and to
- answer enquiries and feedback requests from parents

The research project did however uncover a number of issues with regard to the reliability of some of the systems and highlighted that one company had gone into administration during 2008 leaving a number of schools unsupported.

Schools who had not installed a cashless catering system were asked what reasons had prevented them from doing so. These were:

- budgetary constraints
- lack of information
- unsure of the benefits of such a system.

Schools also indicated their willingness to participate in further research into cashless catering systems in order to help other schools.

### **Cashless Catering System Suppliers**

All the companies contacted were willing and happy to take part in this research project. All were cooperative and helpful in explaining the different aspects of their cashless systems. Ten cashless catering systems suppliers were invited to take part in the research project and eight suppliers agreed to be interviewed and to complete the survey form. They have given their consent for this information to be included in this report and published on the School Food Trust website.

|  |                             |
|--|-----------------------------|
| • Easy Trace Systems                     | • Live Register             |
| • Gladstone Education                    | • M H Systems               |
| • Impact (CRB Solutions and Cunninghams) | • Nationwide Retail Systems |
| • Infineer                               | • Vericool                  |

The majority of suppliers offer a full range of pupil ID systems and can configure their cashless system to meet the needs of each individual school. Some suppliers were at a more advanced stage in linking with nutritional systems but all the suppliers were aware of the new nutritional standards coming into effect from 1<sup>st</sup> September 2009.

They thought that budgetary constraints were the main reason schools did not purchased a cashless catering system.

Cashless systems are moving into a new era with schools and local authorities considering the complete cashless solution for their schools through the use of 'ParentPay' and 'WorldPay'. This allows Parents to load funds onto their child's account online or at the Pay Point in their local shop. This removes the need for revaluation units as parents no longer need to send in cheques and money into school. Parents also have the opportunity to view what their child is consuming and how much they are spending.

The system enables schools, caterers and local authorities to access the centralised data on meal numbers, income, pupil menu choices and this information could be used to help meet the national indicator 52 to measure the take up of school meals and to provide information centrally for nutritional analysis.

## 2. The Project Aims and Objectives and Methodology

### **The projects aims and objectives in full were to:-**

- Research the cashless catering systems currently on offer
- Identify a representative cross section of those systems and detail the relative merits and drawbacks of the systems.
- Identify the different mechanisms used to recognise pupil accounts e.g. photograph and pin number, swipe card and biometric recognition
- Identify the different methods of topping up pupil accounts
- Produce an independent supplier comparison

### **The Methodology used:-**

- survey schools
- interview cashless catering system suppliers
- use information and data contained in the Welsh Draft Report 2008

### 3. Cashless Catering Solutions - constraints and benefits

Within the school food sector in the UK, the last ten years in particular has seen rising demands for, and growth in the installation of cashless catering systems school meal provision. Many local authorities, private catering providers and individual schools within England, Scotland and Wales have introduced, or would like to introduce, a technology based cashless catering system or systems.

Cashless Catering System uses information technology, which removes the handling of cash at the point of sale and speeds up the food service. Schools can choose a system that meets their specific requirements with a pupil recognition system of their choice.

**From the research conducted the perceived constraints about installing a cashless catering system:-**

- The initial costs of installing the system with all the current budgetary constraints.
- Who is going to fund the cashless system and which budget is the money coming from.
- How to assess the benefits of installing a cashless system and which system to choose.
- Lack of information about cashless systems
- Possibility of disruption if the systems isn't reliable or doesn't work properly
- Developing a specification

**Cashless catering systems have to be viewed as a long term investment. They require careful selection of the appropriate system to match each Local Authority and school's individual need.**

**From the research conducted the perceived benefits of having a cashless catering system for:-**

**Pupils:-**

- Reduces queuing time by speeding up delivery at the point of sale
- Removes stigma for free meal pupils by protecting their anonymity at the point of sale
- Removes cash from pupils pockets so reduces the opportunity for bullying or theft
- It's easy to use

**Parents:-**

- Can pay by cheque or notes directly to the school administrator or catering manager which ensure the money is used to purchase a school lunch or breakfast/brunch.
- Can pay on-line and access information about their child's account
- Can pay by direct debit through the Local Authority or school portal
- Can request a report on the eating habits of their child.
- Can set a daily spend limit.

**Schools and Caterers:-**

- Cashless systems can deal with large volumes of customers within the fixed time constraints of the school day.
- Can help schools to reschedule their lunch time arrangements to gain maximum efficiency from the installation a cashless system
- Increases school meal uptake and raises additional income which could fund the purchase of the cashless system.
- Cashless suppliers will advise, configure and install a system and support with training, backup and after sales service from engineers and give on-line support.
- Reduces the opportunity for bullying and theft by removing cash from school.
- Enables nutritional reporting.
- Can integrate and with link with other management systems.

## 4. Evaluation and results of the surveys with Secondary Schools

In March 2009 APSE carried out a short research project into cashless catering systems in England. This report was produced using information obtained from surveys completed by ninety eight secondary schools. The full details are the surveys are contained in Appendix C and Appendix D but here are the main highlights.

### **Schools were asked:-**

#### **❖ Did their schools currently operated a cashless catering system**

53 schools (54%) said they were currently operating a system. All the schools taking parting the survey answered this question.

#### **❖ How many years they had been running a cashless system**

11 schools (23%) said they had been operating a cashless system for 1 year and 22 schools (47%) had been operating a cashless system for between 2 and 5 years. 13 schools (28%) had operated a cashless system for between 6 and 10 years.

7 schools did not answer this question.

#### **❖ How much it costs to install their cashless catering system**

6 schools (13%) spent less than £6K for their systems; 8 schools (17%) spent between £7k to £12K and a further 8 schools (17%) spent between £13K – £18K; 15 schools (31%) spent between £19K - £24k whilst 2 schools (6%) said their system had costs over £25K and 1 school said they had spent over £30K.

7 schools did not know how much their system had costs.

6 schools did not respond to the question.

#### **❖ Give the main reasons for considering a cashless system**

The survey gave six options why schools would consider cashless systems and schools were invited to give more than one reason. In all 17 reasons were given for considering a cashless system

36 schools (77%) indicated the removal of the free schools meals stigma and 31 schools (66%) indicated a faster transaction time. A further 31 schools (66%) said it was to ensure the dinner money is actually spent on schools meals and 29 schools (62%) said shorter queues.

29 schools (62%) said it enabled parents to pay by cheque, bank notes and on-line.



27 schools (57%) said the system would enable them to monitor healthy meals; 25 schools (53%) said it was easy for pupils to use the system and 23 schools (48%) indicated that it would reduce bullying.

24 schools (50% indicated the system gave central control reporting options and 10 schools (21%) indicated it would assist with nutritional data.

6 schools (13%) said it had given them the opportunity to restructure their lunch time service arrangement and 6 schools (13%) said it had reduced administration costs. 5 schools (10%) said it had aided menu planning.

7 schools did not answer this question

❖ **Who the manufacturers of their cashless systems were.**

14 schools (30%) reported using the Impact (Cunnighams) and 3 schools (6%) reported using Impact (CRB Solutions).

3 schools (8%) reported using Live Register; 3 schools (6%) reported using Easy Trace System and 1 school (2%) reported using Transact payment system which is the Easy Trace System.

3 schools (6%) use Nationwide Retail Systems. 2 schools (4%) use Gladstone Education; 2 schools (4%) use Vericool and 2 schools (4%) use Sharp Retail Systems. 1 school (2%) uses Infineer and another uses Fidelity.

11 schools said they did not know who manufactured their system and several responded that their supplier (PCS Plastic Card service) had gone out of business. The other suppliers named by the schools were Seltrax, Unaware, and Hero but none of these companies could be identified or be contacted during the period of the research project. The Hero pad is a point of sale unit and is normally supplied a part of a cashless system.

❖ **What type of Pupil Identity system they were currently using**

21 schools (45%) are using Biometric fingerprint; 19 schools (40%) are using a swipe card; 5 schools (11%) are using pin numbers: 4 schools (8%) are using a proximity system and 2 schools (4%) are using Touch screen with photograph.

2 schools did not answer this question.

❖ **How the monies were collected**

42 schools (89%) collected cash and 39 (83%) collected cheques. 15 schools (32%) collect using the Parent pay System and 1 school (2%) is using World Pay.

10 schools (21%) use notes and coins cash loaders and 1 school (2%) uses a coins only cash loader.

6 schools did not answer this question.

**❖ Indicate what problems, if any they had experienced in the use of a cashless catering system?**

23 schools (49%) said they had experienced equipment failure whilst 19 schools (40%) had not experienced any problems. 7 schools (15%) said there had been a lack of training and 6 school (13%) had experienced poor after-sales care.

2 schools (4%) said they were concerned about the risk of ID fraud and 2 schools (4%) said they had experienced difficulties with the lease arrangements.

7 schools(15%) indicate a range of problems from slow to input name, revalue located in stupid place, thumb print recognition poor in small percentage of pupils and system unreliable and maintenance very poor.

6 schools did not answer this question.

**❖ Comment on how user friendly the system was on a rating that 5 was Excellent and 1 was Poor**

10 schools (22%) gave a 5 (Excellent) rating; 19 schools (42%) gave a 4 rating; 13 schools (29%) gave a 3 rating; 2 schools (4%) gave a 2 rating and 1 school (2%) gave a 1(Poor) rating.

5 comments received, one of which suggested the system should be linked to the school's facility so that when students leave the schools they are automatically removed from the cashless system. Another comment said the system was excellent and they did not know how they would manage without it. One comment said that whilst the system was excellent from a pupil perspective it was only perceived as average by the catering staff.

8 schools did not answer this question.

**❖ Rate the reliability of the system on a rating that 5 was excellent and 1 was poor.**

8 schools (18%) gave a 5 (Excellent) rating; 20 schools (44%) gave a 4 rating; 9 schools(20%) gave a 3 rating; 7 schools(16%) gave a 2 rating and 1 school (2%) gave a 1 (Poor) rating.

5 comments were received and identified two suppliers who provide good systems and service whilst another said they had experienced significant and frequent problem in the first year with students suddenly being charged VAT but then reported that the system was getting more reliable.

8 schools did no answer this questions

❖ **Rate the after sales service.**

10 schools(22%) gave a 5 (Excellent) rating; 12 schools ( 27%) gave a 4 rating ; 15 schools (33%) gave a 3 rating; 4 schools(9%) gave a 2 rating and 4 schools (8%) gave a 1 (Poor) rating.

8 schools (18%) considered the reliability and after sales service to be poor or average but 3 of those schools were more concerned with poor after schools service than about reliability of the system.

9 comments were received and the comments were varied. One complaint was that the staff are unhelpful and often rude and another said that the service was poor at first, but much improved now. Other comments highlighted that the suppliers are great and always available and happy to help and advise. One school said they had been offered a very advantageous deal to install a system and the company had since gone into administration.

8 schools did not answer this question.

❖ **Rate the product overall**

10 schools (22%) gave a 5 (Excellent) rating; 18 schools (40%) gave 4 rating; 12 schools (27%) gave a 3 rating; 3 schools (7%) gave a 2 rating and 2 schools (4%) gave a 1(Poor) rating.

Whilst 28 schools (62%) gave a rating of 4-5 for reliability and the cashless product overall this figure drops to 22 schools (49%) for after sales service and highlights a service improvement requirement. From interviews with the cashless system supplier it appears that most schools and local authorities have procured a maintenance contract so one might have expected a better score for after sales service.

❖ **Would they recommend this system to other schools**

39 schools (87%) replied YES and 6 schools (13%) said NO.

8 schools did not reply to this question.

❖ **Do they use the information from the system for anything else other than managing the provision of school meals?**

28 schools (62%) using the take up data; 21 school (47%) use it for parental feedback and 15 schools (33%) use the pupil profile and meal analysis. 7 schools (16%) are using the system for nutritional analysis and 8 schools (18%) are using it for menu planning. 4 schools (9%) use the system for food ordering and 4 schools (9%) do not use the information for anything else.

7 comments were received ranging from collecting information about turnover to VAT reporting to the Local Authority.

8 schools did not reply to this question

**❖ Can parents receive reports on the eating habits of their child and how the information is passed onto parents**

40 schools (89%) said their system could provide reports for parents and 5 schools (11%) said their system could not.

8 schools did not reply to this question.

20 schools (53%) said reports were mailed to parents; 10 schools (26%) said the information was sent home via the pupil; 8 schools (21%) said the information was emailed to parents; 1 school (2%) said the information is not relayed to parents and 1 school (2%) said the parents have internet access.

14 comments were received and on the whole the information is only provided when a request is received from the parent. One school however sends a report with the termly report which is posted to each pupils home.

**❖ Schools who do not have a cashless system were asked the reasons which have prevented them from installing one.**

29 schools (69%) said it was due to budgetary constraints; 7 schools (17%) indicated it was due to lack of information; 5 schools (12%) said they were unsure of the benefits; 3 schools (7%) said that there was no reason; 2 schools (5%) said it was data protection issues; 2 schools (5%) said it was about parental issues and 2 schools (5%) said it was due to procurement issues.

9 schools (21%) offered a variety of other reasons. One school said they would be provided with a cashless system under Building Schools for the Future and several said they were currently investigating cashless systems. Two schools said they were not ready to proceed and there were problems with facilities and organisation. One school said there was a changeover with catering companies and having finally installed ParentPay they were ready to install a cashless system in the summer. One school was hoping the Local Authority would provide the funding for a cashless system.

## 5. Evaluation and results of the interviews and surveys with Cashless Catering Systems Suppliers

The research carried out with the suppliers indicated that there are a number of companies within the UK who design, build, and maintain functional, easy to use cashless payment systems. This research identified ten companies who supply up-to-date advanced technology and software specifically designed for the education sector's school meal catering and they agreed to take part in the research project

### **Suppliers were asked:**

❖ **How many years they had been supplying cashless system to schools; their financial and business status and future business intention to continue supplying and supporting systems in schools.**

4 suppliers (50%) have been supplying systems from 3 years and 5 years and the other 4 suppliers (50%) have been supplying from 11 year and 18 years.

4 of the suppliers (50%) were willing to share their turnover figures which ranged from £800K to £7M.

All the suppliers indicated their intention to continue supplying to this market.

❖ **How their system would help secondary schools meet the nutritional standard from September 2009 and if their systems were compatible with nutritional software systems and management information systems.**

8 suppliers (100%) said their systems collect and store sales data which is the basis for carrying out nutritional analysis and 6 suppliers (75%) said their systems already integrate with nutritional software such as Crisp, Nutmeg and Saffron.

All the suppliers' software can be integrated with school management information systems such as Capita SIMS and Serco MIS. 3 systems sit on the schools systems and 5 systems are stand alone.

❖ **Which Pupil ID systems they offer**

1 supplier (12%) only supplies the biometric fingerprint solution and 7 suppliers (88%) provide the full range of solutions.

❖ **How their system ensures anonymity for Free Meal Pupils at the point of sale.**

8 suppliers (100%) said their system offered anonymity to free meal pupils at the point of sale although.

2 suppliers (25%) said the point of sale operator could still see this information on the screen, so technically systems do not meet the total anonymity at the point of sale criteria. One supplier said this happened because the caterer had requested this facility to make sure the pupils spend their whole free meal allowance.

❖ **The speed of procession customer sales at each point of sale and if the system could maintain a 4 second transaction at any device during peak loading.**

All suppliers indicated their systems could meet this criterion.

1 supplier (12%) whose system sits on the school systems did warn that transaction times would depend upon the school network speed.

❖ **How many systems they had supplied to schools and whether they had any contracts with Local Authorities.**

5 suppliers (50%) have supplied between 30 -100 systems to schools; 2 suppliers (25%) have supplied between 250 -500 systems to schools and 1 supplier (12.5%) has supplied over 1500 systems to schools.

4 suppliers (50%) have contracts with local authorities as well as contracts with individual schools. 4 suppliers (50%) are supplying systems through the Building schools for the Future schemes and PFI projects.

1 supplier (12.5%) said they do not bid for any local authority contracts because there is too much paperwork, so they concentrate on selling to individual schools.

❖ **Which cash/money loading capabilities they supplied**

8 suppliers (100%) said they offered schools the whole range of loading capabilities but suppliers did highlight the growing interest in on-line payments systems.

Schools and Local Authorities can now consider a completely cashless solution for secondary schools through the use of 'Parent Pay' or 'WorldPay'. Parents can load their child's account online or at the Pay Point in their local shop and this removes the need for cheques or cash to be sent into school.

❖ **Comment on data integrity, provable reconciliation and the provision of user and technical manuals**

Suppliers indicated in their responses that they could meet these requirements.

❖ **Indicate how much their systems would cost to install and what would be included.**

When suppliers were invited to complete the surveys they were given the opportunity of choosing the different price bands (e.g. £13K -£18K) Costs appeared to

vary from supplier to supplier as they were reticent to give out precise figures. They stressed that there is no such thing as a standard system as each school and local authority have particular requirements and financial constraints and this is where their individual consultancy service comes into play.

The cost bandings took account of:-

- the size of school
- the type of Pupil ID system chosen (card, fingerprint, pin, touch screen or proximity)
- the number of point of sale units and revaluation units
- whether the system is stand alone or on the school system
- the type of software and hardware (whether 'off the shelf' or bespoke)
- the cost of the licence
- the implementation and staff training
- the after-sales support package/maintenance agreement

❖ **How they help schools to choose a suitable cashless system and how they help to install the system.**

**Choosing a System** – Discussion and demonstration and by hosting visits to other schools. Site surveys and discussions with all stakeholders to ascertain what is required. I.e. is it to be a stand alone or a networked system and what type of Pupil ID and the methods for cash collection? Develop a project team from all stakeholders (e.g. admin, IT, property/electrician for wiring the system, caterers, parents, governors, senior managers and cashless supplier)

**Installation and Marketing** – Plan of action to install the system and communicate with all the parents, pupils and staff about how the system works and with Go-Live information.

**Training** – Generally this is on site at the customer's premises or at the supplier's training school. 2/3 days included in the price. Training and user manuals provided (hard copy and on-line)

**Launch "Go-Live" Support** – installation team in school for the first week and many suppliers provide a project manager to work with school and/or the local authority senior manager to oversee the installation.

❖ **How much they charge for training and the maintenance contract and what this included and how they support the system year on year.**

**Training** – suppliers include training in the purchase price.

**Maintenance** – this is an important aspect and should be fully discussed prior to signing any contract. Any school or local authority considering a cashless system should ensure

that their after-care package is affordable and allows some flexibility for future changes. Several suppliers build the Year 1 maintenance costs into the purchase prices. Year 2 costs varied between 8% -12% of purchase price or £1K - £3K per year.

### **Support Services:-**

**Helpdesk** – many companies offer a 10/12 hour and out of hour's helpdesk or helpline, which is a telephone based service. These support staff have immediate access to system engineers and architects. CCS trained and experienced operators assist clients in finding resolutions to operational or functional problems that can occur at any time before or during school meal service times. This includes all meal times including breakfast, mid-morning /afternoon breaks and school lunch times.

**Callouts** – where a technical problem cannot be solved by the helpline, or self-help manual, mobile trained engineers will travel to the school to repair the problem and restore the system to functionality as quickly as possible. Primarily this is for problems with hardware and not with software.

**Field Service** – akin to callouts but includes annual maintenance check-up, parts renewals, and updated pupil registration.

**On-line Assistance** – many suppliers offer an on-line help system, modem linked, with direct access to the schools central control p.c. This enables software downloads and updates. This is usually accessible through a log-in facility or members group.

**Self-help solutions** – most suppliers include self-help manuals as part of the initial training package for staff. This is a resource which is kept at the POS as well as in the school office. Manuals and laminated information sheets are included as part of training packages, and training days, for both catering and school administration staff.



## 6. Pupil Identification (I.D.) Solutions Explained

### **Swipe and Smart Cards**

The use of a plastic 'swipe' or magnetic strip or smart card replaces the need for cash for all school meal purchases within the dining facilities. Cash or points value are added or 'loaded' onto the card and these replace cash as payment for all meal/food or drink purchases within the dining facilities and vending machines.

Swipe cards include bar codes, proximity cards, magnetic strip cards, photo cards, smart cards and/or use of pin numbers. Every card is swiped into the terminal at the POS till and the student's account is immediately accessible on the PC touch screen. Cards can be branded to suit school logos.

### **Biometric Fingerprint Scanning**

Fingerprint recognition technology is a more recent advancement in unique identification for cashless catering systems. Here, an image of the student's fingerprint is taken and registered. The image is converted into digital data (usually an alphanumeric code) using a secure cryptographic method. This becomes the unique identifier, which is only decipherable to the biometric 'reader'. The initial fingerprint image is not retained or stored. When a student wishes to access their account, they place their finger on the biometric reader. The stored fingerprint digital data is matched and the unique account is accessible.

This system has 'sensitivity and security issues' from parents and students alike. One of the main causes of concern initially can be the fear that biometric fingerprinting is akin to police/criminal fingerprinting and that a 'record' is being retained for the future. However, according to interviews with biometric providers and catering providers alike, once the operation of the system has been explained and understood the majority of students and parents give their permission for schools and authorities to change to biometric. Where a student/parent decides to opt out, pin numbers are provided as an alternative option, ensuring inclusively.

### **Pin Numbers**

Pin numbers are used with POS keypads, revaluation units, or with swipe cards, fobs, or with biometric fingerprint. They can be used alone but, in general, are used with a card, fob or as an alternative option where a school has installed a biometric system.

### **Touch Screen Technology**

Touch Screen is a card-less solution. Catering staff select the class/year group and either/or photographs and names of students are displayed on screen. Once a corresponding photo or name is touched, the individual student account is displayed on screen. This user

friendly software allows for fast throughput of pupils at the point of sale. The entire system can be controlled from the computer at the POS terminal.

This system is a popular choice in the primary school sector as it eliminates the need for the children to carry cards and encourages catering staff to get to know children by their faces and names. It is easy and quick to use, particularly by staff with limited information technology experience.

### **Proximity Cards, Tags or Key Ring Fobs**

Proximity Cards, tags, key fobs, wristwatches are automatic identifiers, which are contact less i.e. they are not swiped but 'read'. A 'proximity Radio Frequency Identification (RFID) reader' is connected to and placed in near to a POS till and its reads the customer's i.d. using RFID within a range of up to 75mm. All readers connect to POS till with USB interface.

### **Iris Recognition**

Iris Scanning/Recognition system is a relatively new biometric identification system, akin to fingerprint technology in that it relies on pattern recognition techniques. These are high resolution images of the irises of an individual's eyes, which are then translated into a logarithm or unique identifier number/code.

This is a high security system currently not available in the UK and not compatible with biometric fingerprint technology. The idea of usage of this system has brought controversy around the ethics of usage for children, families and schools. In particular, civil rights activists have voiced concerns over its possible usages and applications by government or public bodies/agencies.

# 7. Methods of Topping up Pupil Accounts

## **By Cash**

Depending on individual cashless catering system providers, and schools, both parents and children who prefer to pay by cash can do so through the use of Revaluation Units Cash Loaders. These provide users with the ability to check their balance and load cash onto their accounts in a simple and accessible way. Transactions are instantly credited and balances instantly adjusted. Account Balances are held on a central PC so that loss or damage to a swipe card does not result in loss of money for the user.

Revaluation units are typically located on the school premises, in dining areas, entrance halls or secure lobbies. Parents with multiple accounts are able to select the account they wish to credit.

## **By Cheque**

Cheques sent into schools by parents and are credited to their child's account by school administration or catering manager

## **By Credit/Debit Card Payment via the internet using Parentpay®**

Parentpay® is a trade name registered, web based service that enables parents to make secure online payments by credit/debit card to schools and catering service providers. Parentpay® is an income management service. Benefits to schools include: reduced staff administration; reduction in the amount of cash held in school offices; reduced concerns around security; provides audit trails and helps reduce bad debt. It assists schools and school caterers to move more towards a cashless school environment. Through **Parentpay®** the income collection process is both convenient and safe.

As well as collecting payments by credit and debit card, and in cash through the PayPoint network, schools can also record cash and cheque payments sent to school in the traditional way ensuring all income is maintained in a central system.

Every item is linked to an account; whether money is banked locally by the school, centrally by the authority, at a third party service provider or a combination of these, Parentpay® automatically settles funds to the correct bank account. Parents unable to pay online can pay in cash through the PayPoint network in local convenience stores, or through a PayPoint on the schools premises.

**Parentpay®** reduces the time spent on administration, minimizes cash held on school premises

**NB sections in this report and the following case study extracts have been taken from the draft report written by Lindsay Graham Limited (LGL) for the Welsh Local Government Association in 2008 and permission has kindly been given too include this information in the report. (Costings given in case studies are 2008 figures**

## 8. Case Studies

### 8.1 Denbighshire Local Authority

A need to reduce queuing times in secondary schools and administration time, plus debt collection in primary schools led Denbighshire to install a variety of CCS into their schools – swipe cards, photograph recognition and biometric.

### 8.2 Vale of Glamorgan Local Authority

A successful pilot with one primary school using Touch screen Identification technology. Not totally cashless but grew out of a need to cut out the administration paper trail associated with school meal provision. A roll-out programme to other primary schools within the authority is in progress. A fob/tag system is used in all 7 secondary schools.

### 8.3 Tayside Local Authority (including Angus, Dundee, Perth & Kinross)

Ten years experience of using CCS swipe card/smart card systems following a comprehensive Catering Review. Currently in the process of upgrading some schools to biometric fingerprint identification systems.

### 8.4 Durham - Roseberry Community College

Using Cashless Catering Systems daily and weekly reports to monitor Free School Meal uptake before and after installation of biometric system; also to help evaluate the success of the investment made by this large comprehensive school in both dining room refurbishment and installation of biometric fingerprint identification system.

### 8.5 Croydon Local Authority

Developing a Data Warehousing Project for the authority through the use of an innovative Central Control and Central Reporting Model; now known in the Cashless Catering Sector as 'The Croydon Model'. A partnership approach to school meal provision and a 12 month roll out programme consisting of a roll out of 4 schools per week.

**Please note that approximate costs are given where available and that participants willingly gave permission to share this information within the context of this report.**

## 8.1 Denbighshire Catering Services

### **Background Information**

Denbighshire Catering Services has responsibility for school meal provision in sixty five schools within the authority.

### **What did you do?**

Around 2001, Cashless Catering was introduced into six high schools; the aim was to speed up their queuing times, to help eliminate the stigma that is attached to Free School Meals (FSM), and in turn increase uptake, especially in high schools.

Cashless Catering was introduced into larger primary schools to help reduce secretarial /administrative workloads and to help control levels of dinner money debt.

Currently, seven high schools are involved – three of which are Biometric and the remaining four use Swipe Cards. These will be updated as and when necessary, based on an awareness that Cashless Catering systems technology has moved on, e.g. the biometric system eliminates the need for a swipe card, which can be easily lost.

In eleven primary schools, the need for cards is not necessary as a Photograph Recognition System is used.

### **Why did you do this?**

To help improve relationships between the schools and ourselves, by listening to them and responding to the challenges they found around the provision of school lunches, especially in terms of school office administration time, Free School Meal uptake, and on-going problems collecting outstanding dinner money debts from parents.

### **What system did you use?**

As is described above, a mixture of systems was introduced and provided by one of the market leaders in this field; although not the cheapest, they were able to provide on-going support.

### **Benefits**

- Ability to provide information to Parents re eating habits - what their children are spending their money on
- Elimination of any stigma re Free School Meals
- Improved relationship with some Primary Schools due a reduction in administration time
- Ability to target debtors
- Sales information

- Reduction in queuing times.

### **Challenges**

The majority of the starting point challenges were addressed by switching to cashless catering systems: time spent on queuing; time spent on administration; strained relationships with school office staff; dinner money debt.

Time spent talking to and listening to the schools and having them on board from the outset helped smooth the transition.

### **Costs**

**Set-up cost:** High School – approx £21k per school  
Primary approx £7.5 k per school

**Maintenance cost:** High School – approx £2.5k per annum;  
Primary approx £1k p.a.\*

**\* The maintenance costs include the annual updating of pupil registration – intake and leavers etc.**

### **Advice to others**

- Remember to factor in annual maintenance costs.
- Question whether you already have a good system in place in your Primary Schools? – If yes – why change it?
- Go for the best system you can afford – a company recently ceased trading and this has caused problems with Councils that have school cashless catering systems with this company.
- Involve your IT Dept.
- Build in your reward schemes at the outset as it is more difficult to add in later on.

### **Contact:**

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## 8.2 Vale of Glamorgan - Primary Schools

### **Background**

An in-house Local Authority Catering Supplier has responsibility for 50 primary schools and 7 secondary schools. Feedback from the primary schools showed that the documentation associated with a cash based system for school meal provision created

additional paper work for secretarial staff. Following a Catering Review of all primary schools, we wanted to address the issue of how we could remove this paper trail from the school office.

### **What did you do?**

A decision was taken to trial a new system in a county village school where there was a good uptake. It was recognised that the catering staff, in particular a cook, might find the transition from a cash based system to a new technology based system challenging. The school secretary was involved in initial discussions, since it was recognised that the school did not want to lose complete control; a joint venture was decided on. This was trialled for three months with a great deal of support from all the school and catering staff.

### **What system did you use?**

Specifically for the primary school pilot, the decision was made to use a Touch screen identification system. Children's names are entered onto the screen class by class and differentiated by gender. Credits come up on the screen when the child has been identified. This information is linked into the school MIS.

### **Why did you choose this system?**

An easy and relatively quick to use system was wanted for catering staff since many have little or no I.T. experience and could find the prospect daunting. A pilot school was chosen where it was expected staff might have difficulties or, perhaps, even resist the change. However, because it is easy and quick to use, staff were very quickly confident with it. In addition, a system was wanted that would encourage staff to engage with the young children they serve, especially in primary schools. When children come to the point of sale, the staff have the opportunity to talk to them and get to know them better as individuals.

### **Benefits**

- School administration time is more structured – paperwork generated is now specific to the needs of the catering providers and the school
- The end of day till receipt /print out contains all the relevant information
- Once a week collection – cheques by parents
- More interaction with pupils and catering staff – lunchtime has become more of a social activity; more verbal discussion is going on
- More parental control; they can check on their child's eating patterns
- From a catering point of view, there is more transparency now re meals served and income from dinner money
- Meal records and traceability is far more accurate
- More children are taking lunch
- It has reduced the stigma of FSM
- Queues are more orderly, and pupils are better behaved



- Outstanding dinner money debt is flagged up and a letter can be printed off for the parent
- The beauty of the technology is that it's mobile and has a three pin plug; a cash drawer system is available if wanted

### **Challenges**

- It's not totally cashless as parents pay by cheque that has to be physically banked. However, on-line banking may be a matter of course, in five to ten years time
- Schools, especially Head Teachers, need to be on board and to put time commitment to see the system through the initial settling in phase for it to work successfully
- Success is reliant on the individual schools Head Teacher being involved from the beginning right through to installation; that includes being able to dedicate time to be in the dining room in those early transition days and weeks

### **Advice to Others**

- Plan from the outset - the LA Audit Department were heavily involved
- Involve the school secretarial and catering staff together as part of the planning
- Be prepared to invest in a lot of training, you need to factor in time for staff to learn to do the job (some of the catering staff will not have I.T. experience or knowledge and will need time to gain confidence through training)
- The school is the customer; so spend time getting to know your schools and their individual requirements to build sound working relationships.

## Vale of Glamorgan - Secondary Schools

### **What did you do?**

Around 1999, a swipe card system for secondary schools was installed. A switch has since been made to a Fob/Tag identification system with an oracle database. This was first introduced into one school and now it is in all seven secondary schools.

### **Why did you choose this system?**

Primarily because of the all round benefits, including:

- Reducing queues in secondary schools and concerns around young people carrying cash. This completely cashless system speeds up service and so reduces queuing
- It has an immediate and detailed reporting system. Comprehensive schools with delegated budgets operate differently and have to report to a Board of Governors. The reporting suite in this system allows us to extract whatever information needed
- Pupils like this state of the art technology, and have ownership of their tags/fobs; fobs have a 'cool' image with students
- It's a way to educate students to learn how to manage their finances through their school meal account
- Cash can be loaded anytime through the revaluation units

- Information for us as a catering operator is equally efficient. Trends, popular items and opportunities to target or market healthy options can all be identified
- Information e.g. on spending can be extracted and passed on to the school and parents
- The tag/fob system can be adapted to link up with other SIMS: - library access, secure toilet facilities, computer access, or registration, even school transport
- It has completely taken away bullying from FSM students

### **Challenges**

- Annual maintenance costs are not cheap, but the school/education picks up the costs
- The swipe card system can be abused; with the particular company chosen, a strong partnership was established to use the latest technology to develop a bespoke programme that suits both the catering service and schools

### **Advice to others**

In the catering service it is important to stay ahead of the game, especially in secondary schools. If the point of service is quicker more income is generated; an increase in uptake has been noted since installing the tag/fob system since it is quick, easy to use and reliable.

### **Contact:**

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## 8.3 Tayside

### **Background**

Tayside Contracts Management manages a range of catering and cleaning contracts for the councils of Angus, Dundee and Perth & Kinross, serving two hundred and twenty five schools, twenty eight of which are secondary schools.

### **What did you do?**

Following a Best Value Review of Catering Services around nine years ago, a Cashless Catering System was introduced within schools. Initially swipe cards were used with revaluation units in agreed secure locations in the schools. These were beneficial in reducing queues and in speeding up service at the point of service; this was especially beneficial when lunchtimes were short or with staggered lunchtime service. It has also worked very well for our pre-ordering service. Linking in with Healthy Eating Incentive Schemes, it has improved the overall lunchtime experience.

### **What system did you use?**

Initially Touch Screens with Swipe Cards and Cash Revaluation Units on school premises.

## Why did you choose this system?

At the time, they were the best option but, since they were introduced in the late 1990's, technology has moved on. We are now moving towards the introduction of a biometric system.

## Benefits

- Faster and improved speed of service, especially with staggered lunches
- Reduced queues
- Works well for pre-ordering

## Challenges

- **Loss of cards** can be a problem, especially in terms of school administration. However, through lessons learned along the way, we now have keypads on our revaluation units and at the till/POS so that students without a card can enter a pin number
- **Account Security** There were incidents where students were raiding other student's accounts; this has led to a push down the biometric route because you can't lose or forge a fingerprint
- **New Systems** Although parents can be a bit sensitive about the notion of this system, there is a hard push to go down the biometric route
- **Annual Maintenance Costs** Tayside Contracts Management is currently questioning annual maintenance costs; the suppliers are very responsive to needs and the card system has been upgraded to a SMART CARD system. Maintenance costs are around £70,000 for the three councils. At a time when costs have to be considered carefully in relation to efficiency, there is interest in carrying out local informal research with other authorities to find out what services they receive within their respective maintenance packages

## Advice to others

- Look at your annual maintenance costs and find out what you are getting for what you are paying

## Indication of Costs - figures based on 2008 purchase

10 Touch Screen Terminals and 10 Biometric Readers

2 Note/ Coin Revaluation Units      Total Costs: £28,717.00

## Contact:

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## 8.4 Roseberry Sports & Community College, Durham

### **Background**

The college's mission is "to improve the health and well-being of the entire College community and their families by teaching ways to establish and maintain life-long healthy eating and exercise habits. At the core of this lies the provision of food and drink."

In 2004, when levels of school meal take-up at Roseberry Sports & Community College reached an all time low, the College Management Team committed to overhaul their dining service.

### **What did you do?**

Following the outcome of a School Meals Questionnaire, the school made a unanimous decision to take the catering service in-house. In August 2005, immediate changes included the appointment of a new Catering Manager, introduction of new menu options with emphasis on 'Healthy Eating' together with a new pricing structure. The existing 'smart card' cashless system was phased out, until a good alternative could be found. An interim cash based system was re-introduced while refurbishment was underway.

By September 2006, the new kitchen and dining halls were completed and a biometric Cashless System (based on fingerprint recognition) was installed.

### **What system did you choose?**

Following initial discussions and meetings with a leading market supplier, a biometric fingerprint recognition identification system was chosen. It was considered that this was the most beneficial system for the school. The school governing board was keen to increase school meal uptake and it was believed that this system could help achieve that.

### **Why did you choose it?**

To increase school meal uptake, especially Free School Meal numbers, and to make meal times more enjoyable for students.

### **Challenges**

Having the whole school behind the changes, including capital spend in a total refurbishment of the dining room helped minimize problems. The challenge now is not just to maintain this rise in uptake, but to find new ways of increasing uptake through incentives and meal choice.

## **Benefits**

- Queuing time (the biggest single complaint of service users) was significantly reduced
- Stigma around FSM was eliminated because there is no differentiation between paying students and those entitled to FSM
- Use of fingerprint recognition eliminated the need to deal with lost, stolen or damaged cards
- The college has been awarded Flagship School Status through the Food for Life Partnership
- When the college took over the catering service there was a steady and sustained increase in uptake of school meals
- The newly launched biometric cashless payment system had an impact on the uptake of school meals, in particular on the uptake of Free School Meals (FSM) after September 2006; rising from 69 (48%) free meals prior to the introduction of the biometric system to an average of 121 (over 90% of entitlement)
- The kitchen and dining room refurbishment undoubtedly had some impact on the number of meals taken but it is probably fair to conclude that the biometric system was also a significant contributory factor in the increase of uptake in FSM

## **Advice to others**

- Anything is possible when you have drive, commitment and determination. Be prepared for the long-haul – things do not happen overnight
- The appointment of a suitably qualified and experienced Catering Manager is essential to success
- You must have whole-school backing – if you do not have the full support of the SMT and the Governing Body you are much less likely to make a success of things
- Establish good links with Local Authority personnel; we work particularly well with our school meals, finance and building staff etc. who helped us tremendously with our project.
- Finally, don't be afraid to do it. Have a vision and stick to it

## **Contact:**

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## 8.5 Croydon

### **Background**

Croydon Council has over 120 schools, served by both external catering providers and schools with delegated authority. Half of secondary schools and four primary schools use cashless catering systems. This developed out of a need for reform:

- Workforce Reform – need to reduce amount of administration time for school meals
- Corporate Reform – to reduce youth crime, bullying, anti-social behaviour, petty theft
- Health & Wellbeing – to have school meal data to feed into obesity reduction and other children's health related strategies

### **What did you do?**

A 'Data Warehousing Project' was set up – through the installation of a central control and central reporting system. This is a major 12 month programme, which is still in the roll-out phase with 4 new schools per week. A high level evaluation of the project is underway with a completion target of September 2008.

### **What system do you use?**

In secondary schools a mixture of biometric, photo recognition biometric fingerprints or cards is used. In primary schools, the system is Touch Screen photo identification. The schools had a choice based on suitability to their particular needs. Secondary Schools made a contribution to overall costs of hardware.

### **Why did you choose it?**

A market leader supplier was chosen because of prior experience with them and because they were willing to work with the authority to help develop a new system unlike any in existence. A company was required that could be trusted to deliver to the authority's specifications.

### **Benefits**

- **Data Collection** The central control and central reporting system permits a large amount of data to be collected. By 2pm every day, details can be extracted how many meals are being sold/served across the borough. This can be broken down school by school and also down to an individual to look at eating patterns. Menus can be checked to see if they are meeting school food standards. This information can be forwarded to the PCT and Healthy Schools so that they can feed this into their overall strategies for Croydon and for individual schools. The data can be analysed so that support for schools and for children is better targeted.
- **FSM** An increase of over 5% in uptake has been achieved; it is now over 50%. There is complete anonymity with regard to FSM uptake. The percentage of FSM uptake and money allocated to FSM which hasn't been taken up can be calculated.
- **Cash** Prior to Central Control System, all cash was held in school bank account – now all cash comes into a centrally held account. A fully on-line Parent Pay system is in place. All bank statements are dealt with and reconciled centrally. Debtors are picked up and parents contacted more efficiently and quickly; a parent letter is in the software.

- **Monitoring** It is possible to see exactly what is going on in the borough around school meal provision irrespective of who is providing the catering.

### **Challenges**

- PayPoint cards have to be paid for – they are £1.50 per card. However, if parents pay on-line no card is needed.
- Transaction charges are set at twenty five pence per transaction; to avoid schools having to pay these, the centrally accrued interest is used to offset the charges.
- School Administration. Some negative responses were received from school administration staff who feared that they might lose their jobs if they lost the control they had over school meal administration to central control. Effective communications with Head Teachers and governors was essential to overcome the negativity.
- Training. Catering staff needed additional training. The ambitious plan – 4 new schools per week - meant that this had to be thought through in advance. School administration staff also had to be trained.
- Service is a little bit slower on the changeover days but it does not impinge on the school timetable.

### **Advice to others**

- The key to this process is partnership – from the outset establish a high level project board – a collective of expertise from across council departments and partners. During the roll-out phase ensure regular planning meetings are held
- It has been a massive learning experience. The system as it stands, while designed to meet Croydon's needs and, having been externally audited, should meet the needs of other education establishments.
- It is also crucial that during the planning/setting up you have a practical operations person who goes to the schools looking for best position for POS tills.

### **Contact**

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### **Additional Information from Case Studies**

All of the contributors have stressed the value and benefits of sharing practice, and how lessons learned elsewhere can be beneficial to others considering the purchase of cashless catering identification solutions for both primary and secondary schools. Contributors were keen to point out that one of the over-riding advantages of a Cashless Catering System is their ability to interface with other School Information Management systems, daily registration, libraries, IT facilities/access and within some authorities transport and leisure facilities.

## 9. Current Research

Web-based searches, telephone interviews and use of university research networks were conducted in a bid to locate new or recent evidence-based research and/or evaluations on the effectiveness of opting for cashless catering systems specifically for school meal provision. Very little was found to be available. However, two studies will become available in autumn 2008; LGL gained consent to include information about these as part of this report. LGL has agreed that all contributors will be credited.

### **Leeds Metropolitan University Study - Exploring Take up of Free School Meals**

Commissioned by Education Leeds, Leeds Metropolitan University Faculty of Health is currently undertaking research exploring factors that influence the take-up of FSM in Leeds. The authors are P. Sahota, J. Woodward and S. Bowyer.

**Aim:** to explore factors that influence the take up of free school meals and identify examples of good practice through a literature review and exploratory research within schools. From this information, the aim is to develop, implement and evaluate a series of interventions aimed at increasing uptake of free school meals in Leeds.

### **Methodology**

Exploratory research was conducted with 4 secondary schools and 4 primary schools from across Leeds selected using the following criteria:

- A high number of pupils entitled to Free School Meals.
- Schools with high uptake and low uptake of Free School Meals
- Schools with high and low ethnic minority intake
- A range of providers
- Cash and cashless systems (in the secondary schools)

Ten schools (5 primary and 5 secondary) will be recruited to develop, implement and evaluate interventions aimed at increasing Free School Meals uptake using the information gathered in the exploratory phase.

Details of this are now available on the Leeds City Council website.

### **Croydon Central Control – Data Warehousing Project Evaluation**

Over the course of the past twelve months Croydon CC has been rolling out a Central Control Cashless Catering System across their schools at a rate of four schools per week. What was initially thought to be a highly ambitious project has been managed through its partnership project board and it passed an internal audit by Deloitte La Touche.



Partners comment on “The sheer quantity of data that we can collect on a daily, weekly and monthly basis. We have multi-party meetings where we can analyse this data, and share it between the PCT, Caterers, Education, Schools, and Council. We can see what is going on in the borough irrespective of who is providing the catering.”

## 10. Additional Guidance & Information

### **BECTA's Guidance on use of Cashless Catering Systems**

Advice on how the Data Protection Act 1998 applies to the use of biometric data in schools is now available for schools.

It advises schools to fully involve parents in any decision to introduce biometrics or fingerprint technology to run cashless lunch queues, school libraries and attendance systems. The guidance also advises that head teachers and governing bodies should be clear and open with all parents and pupils about this and all aspects of their education.

For further information please see:

[http://localauthorities.becta.org.uk/index.php?section=pf&catcode=is\\_pict\\_04&rid=14160](http://localauthorities.becta.org.uk/index.php?section=pf&catcode=is_pict_04&rid=14160)

### **The Schools Interoperability Framework (SIF)**

"The Schools Interoperability Framework is a mature international standard used widely to link together school data systems. A UK proof of concept, which Becta is involved in, is looking at how the standard could work in practice in the UK education sector." Becta website <http://industry.becta.org.uk/display.cfm?resID=28188>

## 11. Future Considerations

At present there is a lot of work being done to link Cashless Catering Systems and nutritional software. If this interface was achieved it would allow schools to compile accurate data to support schools in meeting the nutrient-based standards. Research will be needed to study the time and cost factors, implementation strategy and reliability of such an interface.

## 12. Acknowledgements

The School Food Trust commissioned APSE best value consultancy to complete this research.

APSE would like to acknowledge the following local authorities, companies and organisations for their contribution to this report:

### **Lindsay Graham Limited (LGL)**

### **The Welsh Assembly Government**

### **Welsh Local Government Association**

#### **Local Authorities**

|          |           |              |                   |
|----------|-----------|--------------|-------------------|
| Bradford | Croydon   | Denbighshire | Leeds             |
| Rochdale | Stockport | Tayside      | Vale of Glamorgan |

#### **Companies**

|  |                     |          |               |
|--|---------------------|----------|---------------|
| Easytrace Girovend                             | Gladstone Education | Infineer | Live Register |
| Impact Systems (CRB Solutions and Cunninghams) |                     |          |               |
| Nationwide Retail Systems                      | M H Systems         | Vericcol |               |

#### **Others**

Leeds Metropolitan University

All schools who took part in the cashless systems survey.

Appendix A: Analysis of interviews and surveys with Cashless Systems Suppliers (Easy Trace Systems; Gladstone Education; Impact Systems (CRB Solutions and Cunninghams; Infineer)

| <b>Company</b>   | <b>Easy Trace Systems</b><br><a href="http://www.easytrace.co.uk">www.easytrace.co.uk</a> | <b>Gladstone Education</b><br><a href="http://www.gladstone-education.com">www.gladstone-education.com</a> | <b>Impact (CRB Solutions and Cunninghams)</b><br><a href="http://www.crbsolutions.co.uk">www.crbsolutions.co.uk</a><br><a href="http://www.cunninghams.co.uk">www.cunninghams.co.uk</a> | <b>Infineer</b><br><a href="http://www.infineer.com">www.infineer.com</a> |
|--|---|--|---|---|
| <b>Years continuously supplying Cashless Catering Systems to schools?</b>  | 11 years  | 3 years  | 15 years  | 15 years  |
| <b>Financial &amp; Business Standing?</b>                                  | 25-30 Staff<br>Turnover £3.3M   | 14 staff   | 90 employees<br>Impact Turnover £7m+.   | 24 employees<br>Turnover £1.8M  |
| <b>Has Company traded under another name?</b>                              | No  | No   | No.   | Absecc  |
| <b>Has company been bought out or bought out another cashless system?</b>  | No  | Acquisition of London Systems  | No.   | No  |
| <b>Which Regions do you supply and from which locations?</b>               | UK  | UK HQ Wallingford, Oxford<br>Glasgow   | UK and NI Support bases in London,<br>Glasgow, Birmingham, Bristol, Inverness,<br>Midlothian, Sunderland and Belfast  | UK and NI   |
| <b>Intention to continue in this market and maintain cashless systems?</b> | Yes   | Yes  | Yes.  | Yes   |

|  |  |   |   |  |
|--|--|---|---|--|
| <p><b>How does system collate sales data on menu choices and how could this be used to help Secondary School meet nutritional standard from 1<sup>st</sup> September 2009?</b></p> | <p>We are currently working on this project at the moment. Trial April 2009; release June 2009.</p>  | <p>Order Report<br/>Sales Reports (Daily, Weekly &amp; Monthly)<br/>Stock Report<br/>Reward Point Reconciliation<br/>Multi-Site Reconciliation<br/>Grab 'n Go Reports</p> | <p>All purchase data is recorded. Menu items have nutritional content fields to enable nutritional analysis of purchases on individual or aggregated basis.</p>   | <p>Developing a process to enable the data to link with a nutritional software system such as Saffron and Nutmeg.</p>                    |
| <p><b>Company</b></p>  | <p><b>Easy Trace Systems</b><br/><br/><a href="http://www.easytrace.co.uk">www.easytrace.co.uk</a></p>   | <p><b>Gladstone Education</b><br/><br/><a href="http://www.gladstone-education.com">www.gladstone-education.com</a></p>   | <p><b>Impact (CRB Solutions and Cunninghams)</b><br/><br/><a href="http://www.crbolutions.co.uk">www.crbolutions.co.uk</a><br/><a href="http://www.cunnighams.co.uk">www.cunnighams.co.uk</a></p>   | <p><b>Infineer</b><br/><br/><a href="http://www.infineer.com">www.infineer.com</a></p>   |
| <p><b>How is the system compatible with Nutritional Software Systems and other Management information Systems?</b></p>   | <p>MIS = SIMS; CMIS; Integris G2; Pearson Phoenix E2<br/>Nutritional Analysis Software packages are being evaluated and generic links being developed.</p>       | <p>Nutmeg integration.<br/>Retrieve Inventory from Nutmeg.<br/>Export Nutritional reports.<br/>Saffron integration planned.</p>   | <p>System can integrate with any nutritional analysis module. Nutritional analysis data can be imported and registered along with purchases. Syandar export files to any nutritional analysis module such as Crisp, Nutmeg, Saffron and HPORT.<br/>Integrates with SIMS. Technical partners with SIMS and Serco (CMIS). Through our link with Biostore's ID Manager, and their integrated Groupcall module, we can link with 7 School Management Systems.</p> | <p>Not intending to develop our own nutritional analysis system but link with other specialist systems.</p>                              |
| <p><b>System for identifying pupils/customers?</b></p>   | <p>Magnetic Swipe Card<br/>Mifare Proximity Card<br/>Mifare Fobs<br/>Mifare Wrist Bands<br/>Biometric - fingerprint<br/>Touch screen with photograph<br/>PIN</p> | <p>Biometric –Fingerprint<br/>Swipe Cards<br/>Smart Cards – Mifare &amp; HID<br/>Proximity Card, Fob or key Ring<br/>Touch screen with photograph</p>                     | <p>Swipe Card<br/>Smart Card<br/>Proximity Card<br/>Pin Number<br/>Fobs<br/>Biometric - fingerprint<br/>Touch screen with photograph<br/>Iris recognition</p>   | <p>Swipe Card<br/>Smart Card<br/>Proximity Card<br/>Pin Number<br/>Fobs<br/>Biometric - fingerprint<br/>Touch screen with photograph</p> |

|  |  |   |   |   |
|--|--|---|---|---|
| <b>How does system ensure anonymity for Free Meal Pupils at the point of sale?</b>                       | Same process for all pupils so total anonymity.  | Automated import of FSM data from MIS system. The FSM is represented as an allowance on the till screen which is only visible to the catering operator. | The free meal allowance is treated as a value credit exactly like any other type of credit and there is total anonymity at the point of sale  | Same process for all pupils so total anonymity.                           |
| <b>Company</b>   | <b>Easy Trace Systems</b><br><a href="http://www.easytrace.co.uk">www.easytrace.co.uk</a>  | <b>Gladstone Education</b><br><a href="http://www.gladstone-education.com">www.gladstone-education.com</a>  | <b>Impact (CRB Solutions and Cunninghams)</b><br><a href="http://www.crbsolutions.co.uk">www.crbsolutions.co.uk</a><br><a href="http://www.cunnighams.co.uk">www.cunnighams.co.uk</a>   | <b>Infineer</b><br><a href="http://www.infineer.com">www.infineer.com</a> |
| <b>What is the speed of processing customer sales through each point of sale?</b>                        | 8 - 10 pupils per minute   | 10 pupils per minute  | Min of 12 pupils per min  | 8 -10 per minute  |
| <b>Can the system maintain a minimum of 4 second transaction, at any device during the peak loading?</b> | Yes.   | Yes   | Yes.  | Yes   |
| <b>How does the cashless system link with other school systems?</b>                                      | Integrated with SIMS, CMIS, Integris and E2. Other modules within the suite include Access Control, E Registration; Follow Me print, Lockers, Library integration, Praise Points and Movement Manager. | Dynamic link with MIS and integrated solutions with on core product operation as an identity manager for all products.                                  | Impact uses standard networking and IT technology to integrate with any other school application such as: nutritional analysis; school management systems; library management systems; access control; internet payment portals etc | SIMS technical partners<br>CMIS   |
| <b>Number of individual schools supplied with cashless systems?</b>                                      | 290 schools  | 31 schools  | 1500 schools  | 100 schools   |
| <b>Individual schools in maintenance contract?</b>   | 290 schools  | 31 schools  | 1500 schools  | 101 schools   |
| <b>Local Authority Contracts?</b>  | 16 Building Schools For the Future projects and a number of LA's   | No local authority contracts but 4 separate BSF authorities use the system in their new schools   | Our customer base comprises individual schools, commercial contractors (catering; ICT and capital projects) and Local Authorities.  | 40 schools in 10 Local Authorities  |

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| <b>Local Authority maintenance contracts?</b>   | 20 LA's   |   | Most maintenance contracts relate to individual schools even where a Local Authority tender has been won across a number of schools.  | 41 schools in 10 Local Authorities  |
| <b>Company</b>  | <b>Easy Trace Systems</b><br><a href="http://www.easytrace.co.uk">www.easytrace.co.uk</a>   | <b>Gladstone Education</b><br><a href="http://www.gladstone-education.com">www.gladstone-education.com</a>  | <b>Impact (CRB Solutions and Cunninghams)</b><br><a href="http://www.crbsolutions.co.uk">www.crbsolutions.co.uk</a><br><a href="http://www.cunnighams.co.uk">www.cunnighams.co.uk</a> | <b>Infineer</b><br><a href="http://www.infineer.com">www.infineer.com</a>   |
| <b>Cash Loading Capabilities?</b>   | Re-valuation Cash Loaders (Account Loaders)<br>Manual input of cheques and notes<br>Direct Debit via LA/School portal<br>On-line payment facility | Re-valuation Cash Loaders<br>Manual input of cheques and notes<br>Direct Debit via LA/School portal<br>On-pine payment facility<br>Cash at the till option which is configurable for out of school use. | Revaluation Units (Coins and Notes)<br>Manual input of cheques<br>Online payment facilities - Credit Cards<br>PayPoint outlets  | Re-valuation Cash Loaders<br>Manual input of cheques and notes<br>Direct Debit via LA/School portal<br>On-line payment facility |
| <b>Is data integrity backed up and preserved at all times so that nothing is lost in the event of a power failure or system failure. Is this transaction tracking or your own solution?</b> | Yes through site by site determined methods   | System is web based and information is stored on the school server. If school network is down system will not work but school ICT or FM team would clear network or power interruptions.                | Yes. Own solution   | Yes   |
| <b>Does the system have a provable reconciliation with fully accountable data?</b>  | Yes.  | Yes   | Yes.  | Yes   |
| <b>Are user and technical manuals provided?</b>   | Yes   | Yes   | Yes   | Yes   |



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| <b>How variable are the contract specifications you receive from Local Authorities and Schools</b>  | Very variable and almost nil from individual schools who just buy systems off the shelf   | The requests vary by school depending upon the market they are serving   | Very variable.  | Our standard solution suits at least 90% of prospective clients. As we own and have developed the system ourselves we have the flexibility to tailor the system to meet a client's exact specifications. |
| <b>Company</b>  | <b>Easy Trace Systems</b><br><a href="http://www.easytrace.co.uk">www.easytrace.co.uk</a> | <b>Gladstone Education</b><br><a href="http://www.gladstone-education.com">www.gladstone-education.com</a>   | <b>Impact (CRB Solutions and Cunninghams)</b><br><a href="http://www.crbsolutions.co.uk">www.crbsolutions.co.uk</a><br><a href="http://www.cunnighams.co.uk">www.cunnighams.co.uk</a>   | <b>Infineer</b><br><a href="http://www.infineer.com">www.infineer.com</a>  |
| <b>Cost of Cashless Catering System to included type of pupil ID system, hardware, software, implementation, training and licence costs</b> |   | Cashless card Mifare 3 x tills and 1 Revaluation unit (which is both kiosk and multiple information terminal) with installation and 2 days training and 1 day go live support. Includes all hardware, software and licences. Cards and card printer are optional extras.<br>A biometric system is slightly more expensive as it requires additional software and hardware. | Typical secondary school system costs between £14K and £18K with choice of user recognition system.<br>Magnetic swipe card at lower end of price range and biometric fingerprint at the upper end and proxcard mid-point. Price includes launch and support of system for first year. | Assuming a standard school specification of four tills and two value loaders with a choice of three pupil ID options (Proximity, fingerprint or Pin)   |
| <b>£7K - £12K</b>   | 750 students, 2 POS, 1 A/C Loader   |  | Small secondary school with multiple point of sale units, revaluation and biometric system  |  |
| <b>£13K- £18K</b>   | 1200 students, 4 POS, 2 A/C Loaders   | Card system  | Most medium sized secondary school systems fall into this range, for all user-recognition methodologies.  | All three options with a standard configuration will cost below £15k   |
| <b>£19K – £24K</b>  | 1500 students, 6 POS, 3 A/C Loaders   | Biometric System   | Most medium/large and large secondary school systems would fall into this range for all user-recognition methodologies.   |  |

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| <b>£25K - £30K</b>   | 1800 students, 6 POS, 3 A/C Loaders and links to other applications   |  | Only the largest systems would fall into this range. For example, a biometric system with 7 POS units and 5 revaluation units.  |  |
| <b>Over £30k</b>   | 4500 students, 16 POS, 6 A/C Loaders and full card production systems   |  |   |  |
| <b>Company</b>   | <b>Easy Trace Systems</b><br><a href="http://www.easytrace.co.uk">www.easytrace.co.uk</a>   | <b>Gladstone Education</b><br><a href="http://www.gladstone-education.com">www.gladstone-education.com</a>   | <b>Impact (CRB Solutions and Cunninghams)</b><br><a href="http://www.crbsolutions.co.uk">www.crbsolutions.co.uk</a><br><a href="http://www.cunnighams.co.uk">www.cunnighams.co.uk</a>   | <b>Infineer</b><br><a href="http://www.infineer.com">www.infineer.com</a>  |
| <b>How much do you charge for training or is this included in the costs?</b>               | Included  | Initial training is included in the costs. Additional training is £500 per day on site. On-line training modules for new staff.  | Training and go-live support is inclusive: 2 operatives for 3 days in the case of a secondary school system, and 1 operative for 2 days in the case of a primary school system.   | Included   |
| <b>What do you charge for the yearly maintenance contract?</b>                             | First year £995 all inclusive 10.5% of capital value for further years  | On the above project hardware and software maintenance will be £2,200  | Year 1 is inclusive in the above prices. Year 2 is typically between 10% and 12% of the system cost for a secondary school system.  | First Year included, subsequent years £1,600.00 plus VAT   |
| <b>What do you included in the maintenance contract?</b>                                   | EVERYTHING EXCEPT VANDALISM AND THEFT. ALL SOFTWARE UPDATES   | Remote support telephone and dial in support for both hardware and software with a nationwide team of engineers for onsite support   | Support and maintenance contract includes unlimited telephone and remote access with year-end updates, and free scheduled software upgrades; hardware, parts replacement and labour cover for all parts, on a targeted 4 hour response. | Access to help desk, all parts and labour for onsite repairs. Software updates as they are issued. Help with system clean up, database re-indexing etc. at year end.     |
| <b>How do you help schools to select and purchase a suitable Cashless Catering System?</b> | Through practical catering experience, a thorough knowledge of the market, local research and a long term approach to the whole education sector. It's a partnership approach and not a sales approach. | We meet with clients and discuss the benefits of the Gladstone system. As we supply more than just cashless systems we always cover all the product modules and future potential of integrated solutions | The main decisions to be taken are:<br>Method of ID recognition<br>Whether to have a 'stand-alone' or networked system.<br>No. POS and revaluation units<br>A period of consultation assessing the                                      | With many years experience in the industry, we conduct a site survey to identify a school's exact needs and meet with key personnel to ascertain their key requirements. |

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|   |  |  | client's circumstances, preferences and objectives establishes the optimal solution for any situation.   | Only then is a firm proposal prepared.   |
| <b>How do you help schools to install and implement a Cashless Catering System?</b> | Pre delivery workshops, pre delivery training on set up, advice letters to parents, students and staff, and extensive hand holding.    | Installation is undertaken and managed by own engineers and project management team.   | The whole project management process from consultation, through system preparation, to installation, launch and training, is managed by IMPACT personnel on an inclusive basis                                   | Project manager will oversee implementation and liaise with school. Agree project plan to ensure achievable on-time implementation and support during the "go-live" period including training.   |
| <b>Company</b>  | <b>Easy Trace Systems</b><br><a href="http://www.easytrace.co.uk">www.easytrace.co.uk</a>  | <b>Gladstone Education</b><br><a href="http://www.gladstone-education.com">www.gladstone-education.com</a>                       | <b>Impact (CRB Solutions and Cunninghams)</b><br><a href="http://www.crbsolutions.co.uk">www.crbsolutions.co.uk</a><br><a href="http://www.cunnighams.co.uk">www.cunnighams.co.uk</a>                            | <b>Infineer</b><br><a href="http://www.infineer.com">www.infineer.com</a>  |
| <b>How do you support the Cashless Catering System year on year?</b>                | Telephone support within 15 minutes; remote access within 1 hour; engineer visit within 24 hours and regular preventative maintenance. | Providing the support contacts and maintaining the system which is upgraded twice per annum as product developments are released | Support/maintenance contract for all day-to-day operational issues and hardware problems. Unlimited telephone and remote access support, assistance with year-end updates, and free scheduled software upgrades; | Support calls logged on our help-desk and prioritised based on the severity of the issue. Problem fixed in timely fashion. Periodic reviews with the school and their account manager to ensure the system is delivering all the expected benefits as previously agreed. |

Appendix B: Analysis of interviews and surveys with Cashless Systems Suppliers (Live Register; MH Systems; Nationwide Retail Systems; Vericool)

| <b>Company</b>  | <b>Live Register<br/>Cyclone Industries Ltd<br/><a href="http://www.liveregister.co.uk">www.liveregister.co.uk</a></b>      | <b>M H Systems<br/><br/><a href="http://www.mhsystems.co.uk">www.mhsystems.co.uk</a></b>   | <b>Nationwide Retail Systems<br/><br/><a href="http://www.nrsLtd.co.uk">www.nrsLtd.co.uk</a><br/><a href="http://www.trust-e.co.uk">www.trust-e.co.uk</a></b>      | <b>Vericool<br/>Anteon Ltd<br/><a href="http://www.vericool.co.uk">www.vericool.co.uk</a></b>   |
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| <b>Years continuously supplying Cashless Catering Systems to schools?</b>   | 5 years   | 4 years  | 11 years   | 5 years   |
| <b>Financial &amp; Business Standing?</b>   | 5 staff   | 12 staff<br>£800K  | 41 employees<br>£3M.   | 16 employees  |
| <b>Has Company traded under another name?</b>   | No  | No   | No   | Yes<br>Anteon ( UK ) Ltd until April 2008   |
| <b>Has company been bought out or bought out another cashless system?</b>   | No  | No   | No   | No  |
| <b>Which Regions do you supply and from which locations?</b>  | England and Wales.  | UK Support from Kent, North London and Carlisle  | UK   | UK<br>Headquarters in Peterborough  |
| <b>Intention to continue in this market and maintain cashless systems?</b>  | Yes   | Yes  | Yes  | Yes   |
| <b>How does system collate sales data on menu choices and how could this be used to help Secondary School meet nutritional standard from 1<sup>st</sup> September 2009?</b> | Still unclear what is expected and there is an information gap. The system does report on meal item sales over time period. | Sales recorded against each pupil. Schools can create up to 32,000 products with different set of point values. Can be configured to record the diet of pupil. | System can create menu schedules for the whole school year, which ensures that schools sell the correct product to the pupils for nutrition and analysis purposes. | System identifies each item purchased and stores on school database. A number of reports can be obtained. Currently developing an automatic link with Saffron nutritional software. |

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| <b>Company</b>  | <b>Live Register<br/>Cyclone Industries Ltd</b><br><a href="http://www.liveregister.co.uk">www.liveregister.co.uk</a>                                       | <b>M H Systems</b><br><a href="http://www.mhsystems.co.uk">www.mhsystems.co.uk</a>   | <b>Nationwide Retail Systems</b><br><a href="http://www.nrsLtd.co.uk">www.nrsLtd.co.uk</a><br><a href="http://www.trust-e.co.uk">www.trust-e.co.uk</a>                       | <b>Vericool<br/>Anteon Ltd</b><br><a href="http://www.vericool.co.uk">www.vericool.co.uk</a>   |
| <b>How is the system compatible with Nutritional Software Systems and Management Information Systems?</b> | Not done anything yet. Future integration is planned based on the schools requirements.   | CHIPS is compatible with all Nutritional Software and MIS such as Nutmeg, SIMS and CMIS  | Compatible with Saffron, Nutmeg and Crisp nutritional analysis systems. Technical Partners with Capita SIMS and Serco giving schools a seamless link with their MIS packages | Working with Saffron nutritional software whilst looking to work with other providers. System has seamless link to both SIMS.net and Serco facility but can also be used with other MIS providers. |
| <b>System for identifying (ID) pupils/customers?</b>  | Proximity Card<br>Pin Number<br>Fobs<br>Biometric - fingerprint<br>Touch screen with photograph   | Biometric fingerprint<br>Smart card<br>Proximity<br>Pin number<br>Touch screen with photograph<br>Would strongly advise against swipe card.  | Swipe Card<br>Smart Card<br>Proximity Card<br>Pin Number<br>Fobs<br>Biometric - fingerprint<br>Touch screen with photograph  | Biometric fingerprints<br>Pin Numbers  |
| <b>How does system ensure anonymity for Free Meal Pupils at the point of sale?</b>                        | System offers anonymity at point of sale but school caterers prefer to know who the free meal pupils are so they can get them to spend their full allowance | Value of Free Meal is put on the pupil account automatically every day. When pupil purchases a meal, the value is deducted discreetly from the free meal purse and is displayed in very light grey on the till screen which is | No difference at the point of sale and point of sale operator is completely unaware so protects pupil's anonymity.   | The FSM allowance is set in the options menu and automatically added to students balance each day. The FSM data is not displayed at the point of sale.   |

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|  |   | facing the operator.   |  |  |
| <b>What is the speed of processing customer sales through each point of sale?</b>                        | Variable based on operator performance but at least 8 sales per minute is common.                                     | 18 meals per minute per till   | 10 -15 pupils per minutes  | 12 – 15 pupils per minutes but dependent on the number of items bought by each pupil.  |
| <b>Company</b>   | <b>Live Register<br/>Cyclone Industries Ltd</b><br><a href="http://www.liveregister.co.uk">www.liveregister.co.uk</a> | <b>M H Systems</b><br><a href="http://www.mhsystems.co.uk">www.mhsystems.co.uk</a> | <b>Nationwide Retail Systems</b><br><a href="http://www.nrsltd.co.uk">www.nrsltd.co.uk</a><br><a href="http://www.trust-e.co.uk">www.trust-e.co.uk</a>       | <b>Vericool<br/>Anteon Ltd</b><br><a href="http://www.vericool.co.uk">www.vericool.co.uk</a>   |
| <b>Can the system maintain a minimum of 4 second transaction, at any device during the peak loading?</b> | Yes.  | Yes  | Yes  | Yes, but is dependant on speed of school network.  |
| <b>How does the cashless system link with other school systems?</b>                                      | SMS, Facility, RM Integris, e1, ParentPay.  | Uses standard software such as XML, ODBC, web services, CSV file drop.             | Trust-e links to a range of other systems including Library systems, Registration systems, Door Entry systems, Printing systems and Child Behaviour systems. | Dynamic link to SIMS and Serco Facility MIS. Once installed the biometrics can be used for multi-lesson registration and school reception modules. |
| <b>Number of individual schools supplied with cashless systems?</b>                                      | 30 schools.   | 30 schools   | 500 schools  | 59 schools with a further 60 + pending   |
| <b>Individual schools in maintenance contract?</b>   | 30 schools.   | 30 schools   | 500 schools  | All installed schools have an annual software support contract.  |
| <b>Local Authority Contracts?</b>  | None  |  | Croydon, Derbyshire, Kirklees, Leeds PFI, and Plymouth PFI.  | None but have been selected as a preferred supplier.   |

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| <b>Local Authority maintenance contracts?</b>   | None   |  |  | None   |
| <b>Cash Loading Capabilities?</b>   | Re-valuation<br>Cash Loaders<br>Manual input of cheques and notes<br>Direct Debit via LA/School portal<br>On-line payment facility | Re-valuation<br>Cash Loaders<br>Manual input of cheques and notes<br>Direct Debit via LA/School portal<br>On-line payment facility | Revaluation Units (Coins and Notes)<br>Manual input of cheques<br>Online payment facilities - Credit Cards<br>PayPoint outlets   | On-line payments via ParentPay.<br>Revaluation units ( coins and notes)<br>Manual input of cash and cheques via the admin system.              |
| <b>Company</b>  | <b>Live Register<br/>Cyclone Industries Ltd</b><br><a href="http://www.liveregister.co.uk">www.liveregister.co.uk</a>              | <b>M H Systems</b><br><a href="http://www.mhsystems.co.uk">www.mhsystems.co.uk</a>   | <b>Nationwide Retail Systems</b><br><a href="http://www.nrsLtd.co.uk">www.nrsLtd.co.uk</a><br><a href="http://www.trust-e.co.uk">www.trust-e.co.uk</a>                   | <b>Vericool<br/>Anteon Ltd</b><br><a href="http://www.vericool.co.uk">www.vericool.co.uk</a>   |
| <b>Is data integrity backed up and preserved at all times so that nothing is lost in the event of a power failure or system failure. Is this transaction tracking or your own solution?</b> | Yes. SQL Server 2005.  | Yes<br>This is our own solution  | Built into the system is a full audit trail included into which every transaction either at the point of sales, revaluation unit, online or at the back office computer. | All data collected is stored on a dedicated database, located on the school server and backed up by the school to ensure no loss of integrity. |
| <b>Does the system have a provable reconciliation with fully accountable data?</b>  | Yes. Double entry accounting system with full transaction history.   | Yes  | Yes.   | Yes. Comprehensive audit trail providing reconciliation of all data collected on transactions.   |
| <b>Are user and technical manuals provided?</b>   | Yes.   | Yes  | Yes  | Yes  |
| <b>How variable are the contract specifications you receive from Local Authorities and Schools.</b>   |  | Extensive although there are remarkable similarities between LEA's in close proximity to each other                                | 80% of specifications are similar. Recent application requests have included requests for centralisation of data, nutrition analysis, stock                              | Specifications vary considerably and systems are bespoke to individual schools.  |

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|   |   |  | wastage, labour management, menu schedules and pre-order meals.  |  |
| <b>Cost of Cashless Catering System to included type of pupil ID system, hardware, software, implementation, training and licence costs</b> |   | Each price band could be many different configurations.<br><br>Includes Biometric or Smart card.<br><br>Includes hardware, software, implementation, training and licence costs. | Includes pupil ID type, hardware, software, implementation, training and licence costs. Includes back office PC and printer.                           | Includes installation and configuration of Point of Sale and Re-valuation units and installation of software, database and administrator onto existing school system. All software licences and enrolment of students and staff. Included laptop with enrolment software web cam and scanner for future years.<br>Go-Live assistance |
| <b>Company</b>  | <b>Live Register Cyclone Industries Ltd</b><br><a href="http://www.liveregister.co.uk">www.liveregister.co.uk</a> | <b>M H Systems</b><br><a href="http://www.mhsystems.co.uk">www.mhsystems.co.uk</a>   | <b>Nationwide Retail Systems</b><br><a href="http://www.nrsLtd.co.uk">www.nrsLtd.co.uk</a><br><a href="http://www.trust-e.co.uk">www.trust-e.co.uk</a> | <b>Vericool Anteon Ltd</b><br><a href="http://www.vericool.co.uk">www.vericool.co.uk</a>   |
| <b>£7K - £12K</b>   |   | Approx 2 to 3 Point of Sale Terminals<br>1 Re-valuation unit<br>On-line payments<br>Biometric or Smart card  | Would provide a biometric, card or pin system for 500 + pupils with 4 Point of Sale terminals and 2 re-valuation units.                                | Small to medium sized school up to 1200 students depending on equipment required.  |
| <b>£13K- £18K</b>   | For an average sized secondary school   | Approx 3 - 5 tills<br>1 or 2 Re- valuation units<br>On-line payments<br>Biometric or Smart card  | Would provide a biometric, card or pin system for 750 - 1250 pupils with 5 Point of Sale terminals and 3 re-valuation units.                           | Medium sized school- up to 1300 students. Depends on number of Point of Sale and re- valuation units required.   |
| <b>£19K – £24K</b>  |   | Approx 4 - 6 tills<br>1 to 4 Re- valuation units<br>On-line payments<br>Biometric or Smart card  | Would provide a biometric, card or pin system for 1250 - 1750 pupils with 8 Point of Sale terminals and 4 re-valuation units.                          | Large school with up to 1800 student<br>Depends on number of Point of Sale and re- valuation units required.   |



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| <b>£25K - £30K</b>   |   |   | Would provide a biometric, card or pin system for 1750 - 2500 pupils with 9 Point of Sale terminals and 4 re-valuation units.                          |  |
| <b>How much do you charge for training or is this included in the costs?</b> | Included  | Included in purchase price  | Included in the purchase price. Additional training is £495 per day  | Training for all catering staff and cashless catering administrator is included in the purchase price.   |
| <b>Company</b>   | <b>Live Register Cyclone Industries Ltd</b><br><a href="http://www.liveregister.co.uk">www.liveregister.co.uk</a> | <b>M H Systems</b><br><a href="http://www.mhsystems.co.uk">www.mhsystems.co.uk</a>                    | <b>Nationwide Retail Systems</b><br><a href="http://www.nrsltd.co.uk">www.nrsltd.co.uk</a><br><a href="http://www.trust-e.co.uk">www.trust-e.co.uk</a> | <b>Vericool Anteon Ltd</b><br><a href="http://www.vericool.co.uk">www.vericool.co.uk</a>   |
| <b>What do you charge for the yearly maintenance contract?</b>               | £1k to £3k depending on quantity of units.  | A 8 -10% of contract value  | Depends on the number of terminals installed in the school   | 1 <sup>st</sup> years annual support licence included in the purchase price. Maintenance contract price is dependent on the number of products used by the school. |
| <b>What do you include in the maintenance contract?</b>                      | Software upgrades, on site hardware warranty and telephone support with remote access.                            | On-line dial-in instant PC to Pc support and training, Telephone support and 3 years hardware support | Is an all parts and labour onsite warranty.  | Annual support licence that provides helpdesk support and software updates   |

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| <b>How do you help schools to select and purchase a suitable Cashless Catering System?</b> | Demonstration which defines the schools requirements followed by a site visit be the engineer to confirm installation details | Analyse schools existing process and establish what the aims are. Assess system expandability with other systems to be linked.<br>Assess staff skill level and provide school with another school using the system. | Through discussion about what the schools wishes to achieve and the benefits they want.   | Will visit schools and provide a demonstration of the biometric software. Arrange site visit to schools who have the system. Discuss in detail the schools requirements and how best they can be met. |
| <b>How do you help schools to install and implement a Cashless Catering System?</b>        |   | Do everything from data transfer, set up configuration and a free GO Live support. Train schools to run the system themselves.  | Discuss requirements and demonstrate system. Advise on equipment location and BECTA guidelines. Select preferred pupil ID system and methods to collect money, on-site or on-line via a PayPoint outlet.<br>Identify links to other systems in school (library, door entry, registration) | Provide draft letters and information to inform parents about the Biometric systems. Conduct a site survey and produce an installation plan. Attend parent's evenings to demonstrate the system.      |
| <b>Company</b>   | <b>Live Register<br/>Cyclone Industries Ltd</b><br><a href="http://www.liveregister.co.uk">www.liveregister.co.uk</a>         | <b>M H Systems</b><br><a href="http://www.mhsystems.co.uk">www.mhsystems.co.uk</a>  | <b>Nationwide Retail Systems</b><br><a href="http://www.nrsltd.co.uk">www.nrsltd.co.uk</a><br><a href="http://www.trust-e.co.uk">www.trust-e.co.uk</a>  | <b>Vericool<br/>Anteon Ltd</b><br><a href="http://www.vericool.co.uk">www.vericool.co.uk</a>  |
| <b>How do you support the Cashless Catering System year on year?</b>                       | Largely through phone helpline included in the maintenance contract.  | On-line dial-in instant Pc to PC support and Training, Telephone support and use the Toshiba 3 years hardware support service staffed with 143 engineers.   | By monitoring school and government requirements and improve the software accordingly.  | Helpline staffed from 8.30am – 5pm.<br>Provide all software updates   |

## Appendix C Analysis of surveys from Secondary Schools

| <b>Q1. School Name</b>   |                       |
|--------------------------|-----------------------|
|                          |                       |
| <b>Answer Options</b>    | <b>Response Count</b> |
|                          | 84                    |
| <b>answered question</b> | 84                    |
| <b>skipped question</b>  | 14                    |

| <b>Q2. School Type</b>                                 |                          |                       |
|--|--------------------------|-----------------------|
| <b>(Please tick more than one answer if necessary)</b> |                          |                       |
|  |                          |                       |
| <b>Answer Options</b>                                  | <b>Response Percent</b>  | <b>Response Count</b> |
| <b>1 Primary</b>                                       | 2.0%                     | 2                     |
| <b>2 Secondary</b>                                     | 100.0%                   | 98                    |
| <b>3 Sixth Form College</b>                            | 6.1%                     | 6                     |
|  | <b>answered question</b> | 98                    |
|  | <b>skipped question</b>  | 0                     |

| <b>Q3. Does your school currently operate a cashless system for catering services?</b> |                          |                       |
|--|--------------------------|-----------------------|
|  |                          |                       |
| <b>Answer Options</b>  | <b>Response Percent</b>  | <b>Response Count</b> |
| Yes  | 54.1%                    | 53                    |
| No ( <i>Referred to Q19</i> )  | 29.6%                    | 29                    |
| Considering in the near future ( <i>Referred to Q19</i> )                              | 16.3%                    | 16                    |
|  | <b>answered question</b> | 98                    |
|  | <b>skipped question</b>  | 0                     |

| <b>Q4. How many years have you been running a cashless system?</b> |                          |                       |
|--|--------------------------|-----------------------|
|  |                          |                       |
| <b>Answer Options</b>  | <b>Response Percent</b>  | <b>Response Count</b> |
| 1 Year   | 23.4%                    | 11                    |
| 2-5 Years  | 46.8%                    | 22                    |
| 6-10 Years   | 27.7%                    | 13                    |
| 11 + Years   | 2.1%                     | 1                     |
|  | <b>answered question</b> | 47                    |
|  | <b>skipped question</b>  | 51                    |

| <b>Q5. How much did it cost to install your cashless catering system?</b>   |                         |                       |
|---|-------------------------|-----------------------|
| <b>Answer Options</b>   | <b>Response Percent</b> | <b>Response Count</b> |
| 0K – 6K   | 12.8%                   | 6                     |
| 7K – 12K  | 17.0%                   | 8                     |
| 13K – 18K   | 17.0%                   | 8                     |
| 19k - 24k   | 31.9%                   | 15                    |
| 25-30K  | 4.3%                    | 2                     |
| Over 30K  | 2.1%                    | 1                     |
| <b>Other (please specify)</b>   | 14.9%                   | 7                     |
| Don't have that information<br>Not sure<br>Installed by the county council don't know the cost<br>In total around 9k but this also included retail tills for the uniform shop<br>Put in as part of PFI build.<br>Don't know, installed by caterers<br>It was part of a new catering contract negotiations |                         |                       |
| <b>answered question</b>  |                         | 47                    |
| <b>skipped question</b>   |                         | 51                    |

| <b>Q6. What were the main reasons for considering cashless systems?<br/>(Please tick more than one answer if necessary)</b> |                         |                       |
|---|-------------------------|-----------------------|
| <b>Answer Options</b>   | <b>Response Percent</b> | <b>Response Count</b> |
| Shorter queues  | 61.7%                   | 29                    |
| Faster transactions   | 66.0%                   | 31                    |
| Removal of free school meals stigma   | 76.6%                   | 36                    |
| Monitoring facility for healthy meals   | 57.4%                   | 27                    |
| Improve turnover  | 34.0%                   | 16                    |
| Aid to menu planning  | 10.6%                   | 5                     |
| Enable parents to pay by cheque, bank notes or on-line  | 61.7%                   | 29                    |
| Ensure dinner money is actually spent on a school meal  | 66.0%                   | 31                    |
| Opportunity to restructure lunch time service and arrangements  | 12.8%                   | 6                     |
| Reduced administration costs  | 12.8%                   | 6                     |
| Nutritional data  | 21.3%                   | 10                    |
| Reduced wastage   | 6.4%                    | 3                     |
| Ease of pupil use   | 53.2%                   | 25                    |
| Incentive/reward scheme use   | 14.9%                   | 7                     |
| Reduces bullying  | 48.9%                   | 23                    |
| Central control   | 21.3%                   | 10                    |
| Central reporting   | 29.8%                   | 14                    |
| <b>Other (please specify)</b>   | 4.3%                    | 2                     |
| Speedier traffic through pos<br>System was put in by PFI provider, Interserve FM through Eden Foods                         |                         |                       |

|                          |    |
|--------------------------|----|
| <b>answered question</b> | 47 |
| <b>skipped question</b>  | 51 |

| <b>Q7. Who is the manufacturer of your current system?</b>   |                         |                       |
|--|-------------------------|-----------------------|
| <b>Answer Options</b>  | <b>Response Percent</b> | <b>Response Count</b> |
| Counter Solutions Ltd  | 0.0%                    | 0                     |
| CRB Solutions – Impact System  | 6.4%                    | 3                     |
| Cunninghams - Impact System  | 29.8%                   | 14                    |
| Easy Trace System  | 6.4%                    | 3                     |
| Emos   | 0.0%                    | 0                     |
| Fidelity   | 2.1%                    | 1                     |
| Girovend G2 System   | 0.0%                    | 0                     |
| Gladstone Education  | 4.3%                    | 2                     |
| Infineer - MIDAS & Net 3 System  | 2.1%                    | 1                     |
| Live Register  | 8.5%                    | 4                     |
| M H Systems  | 0.0%                    | 0                     |
| Nationwide Retail Systems  | 6.4%                    | 3                     |
| Sharp Retail Systems   | 4.3%                    | 2                     |
| Systopia   | 0.0%                    | 0                     |
| Vericool   | 4.3%                    | 2                     |
| Cavendish Communications   | 0.0%                    | 0                     |
| TransAct Payment Systems   | 2.1%                    | 1                     |
| Hands - Catering Solutions   | 0.0%                    | 0                     |
| <b>Other (please specify)</b>  | 23.4%                   | 11                    |
| Seltrax<br>Uniware<br>Heroes<br>Uniware<br>Don't know<br>PCS now in liquidation<br>LCR Quick Dine<br>A-Z<br>Don't know - administered by caterers<br>Plastic Card Services (recently gone into administration)<br>Hero Systems |                         |                       |
| <b>answered question</b>   |                         | 47                    |
| <b>skipped question</b>  |                         | 51                    |

| <b>Q8. What type of system do you currently use?</b> |                         |                       |
|--|-------------------------|-----------------------|
| <b>Answer Options</b>                                | <b>Response Percent</b> | <b>Response Count</b> |
| Pupil pin number                                     | 10.6%                   | 5                     |
| Swipe card magnetic                                  | 40.4%                   | 19                    |
| Swipe card Mifare                                    | 8.5%                    | 4                     |
| Biometric e.g. fingerprint                           | 44.7%                   | 21                    |
| POS photograph                                       | 4.3%                    | 2                     |

|                                |       |    |
|--------------------------------|-------|----|
| Radio-frequency identification | 0.0%  | 0  |
| Cash Loader (Coins only)       | 2.1%  | 1  |
| Cash Loader (Coins and Notes)  | 21.3% | 10 |
| Other (please specify)         | 2.1%  | 1  |
| Key                            |       |    |
| <b>answered question</b>       |       | 47 |
| <b>skipped question</b>        |       | 51 |

| <b>Q9. How are monies collated for your cashless catering system?</b> |                         |                       |
|---|-------------------------|-----------------------|
| <b>Answer Options</b>   | <b>Response Percent</b> | <b>Response Count</b> |
| Parent Pay  | 31.9%                   | 15                    |
| World Pay   | 2.1%                    | 1                     |
| Other online Method (If so please state in comment box)               | 4.3%                    | 2                     |
| Cash  | 89.4%                   | 42                    |
| Cheque  | 83.0%                   | 39                    |
| BACS  | 0.0%                    | 0                     |
| Direct Debit  | 0.0%                    | 0                     |
| Other (please specify)  | 4.3%                    | 2                     |
| cash loader<br>Cash is paid onto cards via cash loader in the school  |                         |                       |
| <b>answered question</b>  |                         | 47                    |
| <b>skipped question</b>   |                         | 51                    |

| <b>Q10. What problems, if any, have you experienced in the use of a cashless catering system?</b>  |                         |                       |
|--|-------------------------|-----------------------|
| <b>Answer Options</b>  | <b>Response Percent</b> | <b>Response Count</b> |
| No problems  | 25.5%                   | 12                    |
| Ease of pupil use  | 8.5%                    | 4                     |
| Risks e.g. ID fraud  | 4.3%                    | 2                     |
| Lack of training   | 14.9%                   | 7                     |
| Equipment failure  | 48.9%                   | 23                    |
| Poor after-sales care  | 12.8%                   | 6                     |
| Lease arrangements   | 4.3%                    | 2                     |
| No problems  | 14.9%                   | 7                     |
| Other  | 14.9%                   | 7                     |
| Admin time<br>slow to input name from finger print<br>revalue units are located in stupid position<br>Thumb print recognition for a small percentage of students is poor<br>Pupil data updating<br>Going live June 2009<br>The system has been unreliable and the maintenance extremely poor |                         |                       |
| <b>answered question</b>   |                         | 47                    |
| <b>skipped question</b>  |                         | 51                    |

| <b>Q11. How user friendly would you rate the system?</b>  |                          |                       |
|---|--------------------------|-----------------------|
| <b>1 to 5 with 1 being poor and 5 being excellent.</b>  |                          |                       |
| <b>Answer Options</b>   | <b>Response Percent</b>  | <b>Response Count</b> |
| 1 Poor  | 2.2%                     | 1                     |
| 2   | 4.4%                     | 2                     |
| 3   | 28.9%                    | 13                    |
| 4   | 42.2%                    | 19                    |
| 5 Excellent   | 22.2%                    | 10                    |
| <b>Comments</b>   |                          | 5                     |
| <p>It would be good to link in to the school's facility where by if a student leaves then it is done automatically and not have to wait for the year end mapping to take students off.</p> <p>Excellent don't know how we would manage without it.</p> <p>Additional features coming on line top help with reporting and marketing to target groups</p> <p>From a pupil perspective it has been excellent, from a catering staff perspective it has been average.</p> <p>To be decided.</p> |                          |                       |
|   | <b>answered question</b> | 45                    |
|   | <b>skipped question</b>  | 53                    |

| <b>Q12. How would you rate the reliability of the system?</b>  |                          |                       |
|--|--------------------------|-----------------------|
| <b>Answer Options</b>  | <b>Response Percent</b>  | <b>Response Count</b> |
| 1 Poor   | 2.2%                     | 1                     |
| 2  | 15.6%                    | 7                     |
| 3  | 20.0%                    | 9                     |
| 4  | 44.4%                    | 20                    |
| 5 Excellent  | 17.8%                    | 8                     |
| <b>Comments</b>  |                          | 5                     |
| <p>CRB are great.</p> <p>You will need to ensure that the server is of adequate standard.</p> <p>When we have had problems VeriCool have always been very responsive and quick to locate and correct any fault.</p> <p>To be decided.</p> <p>Significant and frequent problems in first year after install (e.g. all students suddenly being charged VAT, all students suddenly being credited with free school meals) System getting more reliable.</p> |                          |                       |
|  | <b>answered question</b> | 45                    |
|  | <b>skipped question</b>  | 53                    |

| <b>Q13. How would you rate the after sales service?</b> |                         |                       |
|---|-------------------------|-----------------------|
| <b>Answer Options</b>                                   | <b>Response Percent</b> | <b>Response Count</b> |
| 1 Poor  | 8.9%                    | 4                     |

|   |       |    |
|---|-------|----|
| 2   | 8.9%  | 4  |
| 3   | 33.3% | 15 |
| 4   | 26.7% | 12 |
| 5 Excellent   | 22.2% | 10 |
| <b>Comments</b>   |       | 9  |
| <p>Don't know.<br/> CRB are great.<br/> Can't comment, as it's not our system.<br/> Good response to any problems.<br/> Until the company went into administration we were the first school to install their system, We received a very advantageous deal and were used as a reference site.<br/> Always available and happy to help and advise.<br/> To be decided.<br/> Staff are unhelpful and often rude.<br/> Poor at first, much improved now .</p> |       |    |
| <b>answered question</b>  |       | 45 |
| <b>skipped question</b>   |       | 53 |

| <b>Q14. How would you rate the product overall?</b>  |                         |                       |
|--|-------------------------|-----------------------|
| <b>Answer Options</b>  | <b>Response Percent</b> | <b>Response Count</b> |
| 1 Poor   | 4.4%                    | 2                     |
| 2  | 6.7%                    | 3                     |
| 3  | 26.7%                   | 12                    |
| 4  | 40.0%                   | 18                    |
| 5 Excellent  | 22.2%                   | 10                    |
| <b>Comments</b>  |                         | 3                     |
| <p>LCR are always available if I need to talk.<br/> To be decided.<br/> System management software not easy to use. System reports poor, e.g. no report to tell us number of students using the canteen at break or lunch, no gross margin analysis, just lists of transactions.</p> |                         |                       |
| <b>answered question</b>   |                         | 45                    |
| <b>skipped question</b>  |                         | 53                    |

| <b>Q15. Would you recommend this system to other schools?</b>   |                         |                       |
|---|-------------------------|-----------------------|
| <b>Answer Options</b>   | <b>Response Percent</b> | <b>Response Count</b> |
| Yes   | 86.7%                   | 39                    |
| No  | 13.3%                   | 6                     |
| <b>Comments</b>   |                         | 12                    |
| <p>Admin view - no, teacher view - yes, student view – yes.<br/> I do not know how it compares to other systems.<br/> CRB have been good with us as a school but I have looked at other systems which were quicker and better but it came down to the cost of putting another brand new system in.<br/> We have had three other schools come to site to view system for themselves.</p> |                         |                       |



|  |    |
|--|----|
| <p>As it is great for the students, but I would recommend full training and refreshers courses are available locally.</p> <p>Needs to be set up so that all relevant people can view the data produced. Otherwise the catering team can be waiting days for information necessary for their ordering and menu management.</p> <p>No longer available, but would recommend a cashless system.</p> <p>We have already done so.</p> <p>I am in favour of cashless catering; I just would not recommend this company.</p> <p>Cashless system idea is very effective and useful to us and pupil's High annual maintenance costs with Cunninghams for mediocre service level, and if damaged by pupils this is not covered. We are about to have a new system as part of the BSF programme.</p> <p>Although I have heard anecdotally that other systems also have significant problems. I could not recommend the system, but equally I would not tell anyone to discount it as an option.</p> |    |
| <b>answered question</b>   | 45 |
| <b>skipped question</b>  | 53 |

|  |                         |                       |
|--|-------------------------|-----------------------|
| <p><b>Q16. Do you use the information from the system for anything else other than managing the provision of school meals?</b></p> <p><b>(Please select as many answers as applicable)''</b></p>   |                         |                       |
| <b>Answer Options</b>  | <b>Response Percent</b> | <b>Response Count</b> |
| Nutritional analysis   | 15.6%                   | 7                     |
| Take up data   | 62.2%                   | 28                    |
| Pupil profile (meal analysis)  | 33.3%                   | 15                    |
| Parental feedback  | 46.7%                   | 21                    |
| Food ordering  | 8.9%                    | 4                     |
| Menu planning  | 17.8%                   | 8                     |
| None   | 8.9%                    | 4                     |
| Other  | 15.6%                   | 7                     |
| <p>Turnover<br/>           Have plans to do more but only installed last Oct<br/>           We haven't had any info back from Eden as yet<br/>           Caterers use it for several of the above<br/>           To be decided<br/>           Not yet<br/>           VAT reporting to LA</p> |                         |                       |
| <b>answered question</b>   |                         | 45                    |
| <b>skipped question</b>  |                         | 53                    |

|  |                         |                       |
|--|-------------------------|-----------------------|
| <p><b>Q17. Can parents receive a report on the eating habits of their child?</b></p> |                         |                       |
| <b>Answer Options</b>  | <b>Response Percent</b> | <b>Response Count</b> |
| Yes  | 88.9%                   | 40                    |
| No   | 11.1%                   | 5                     |
| <b>answered question</b>   |                         | 45                    |

| <b>Q18. How is this information passed on to parents?</b>   |                         |                       |
|---|-------------------------|-----------------------|
| <b>Answer Options</b>   | <b>Response Percent</b> | <b>Response Count</b> |
| Information is not relayed to parents   | 2.6%                    | 1                     |
| Email   | 21.1%                   | 8                     |
| Pupil post  | 26.3%                   | 10                    |
| Mailed letter   | 52.6%                   | 20                    |
| Internet access   | 2.6%                    | 1                     |
| Other (please specify)  | 36.8%                   | 14                    |
| Termly reports - posted home with students report<br>When requested<br>By phone<br>Not done yet<br>Upon request hard copy printout handed to parent"<br>Verbally to remove possibility of information loss<br>On request, by printout<br>Provided as a hard copy on request<br>Internet access is due to be introduced soon<br>By request only - printout and letter<br>To be decided<br>ON REQUEST<br>If they ask<br>By phone – info only provided if parent asks at present |                         |                       |
| <b>answered question</b>  |                         | 38                    |
| <b>skipped question</b>   |                         | 60                    |

| <b>Q19. If you do not currently have a cashless system, what reasons have prevented you from installing one?</b>  |                         |                       |
|---|-------------------------|-----------------------|
| <b>Answer Options</b>   | <b>Response Percent</b> | <b>Response Count</b> |
| Budgetary constraints   | 69.0%                   | 29                    |
| Data protection issues  | 4.8%                    | 2                     |
| Parental issues   | 4.8%                    | 2                     |
| Lack of information   | 16.7%                   | 7                     |
| Unsure of benefits  | 11.9%                   | 5                     |
| Associated risks  | 2.4%                    | 1                     |
| Procurement issues  | 4.8%                    | 2                     |
| No reason   | 7.1%                    | 3                     |
| Other (please specify)  | 21.4%                   | 9                     |
| Waiting for it to be provided under BSF.<br>Not ready to proceed.<br>Changeover with catering companies had given us other catering priorities but now we can progress. Have been considering a system for about 4 years. Finally installed ParentPay this year so will now move on to cashless catering this summer. |                         |                       |

|  |    |
|--|----|
| Poor facilities and organisation.<br>Looking to buy this term.<br>We are currently investigating it.<br>Possibility of funding from County & Nutrition Software compatibility.<br>We have a very busy and small canteen and therefore it has taken a while to implement.<br>We are in the process of organising it though.<br>Cost.<br>Possibility of becoming an Academy in September 2009. |    |
| <b>answered question</b>   | 42 |
| <b>skipped question</b>  | 56 |

|  |                         |                       |
|--|-------------------------|-----------------------|
| <b>Q20. Thank you for taking the time to complete this survey.</b>   |                         |                       |
| <b>Would you consider participating in further research regarding cashless systems to help other schools?"</b> |                         |                       |
|  | <b>Response Percent</b> | <b>Response Count</b> |
| <b>Answer Options</b>  |                         |                       |
| Yes  | 57.8%                   | 48                    |
| No   | 42.2%                   | 35                    |
| <b>answered question</b>   |                         | 83                    |
| <b>skipped question</b>  |                         | 15                    |

## Appendix D: Further analysis of schools systems

| Who is the manufacturer of your current system? | How much did it cost to install your cashless catering system? | How many years have you been running a cashless system? | What type of system do you currently use?     | How are monies collated for your cashless catering system? | What problems, if any, have you experienced in the use of a cashless catering system? | How user friendly would you rate the system? (1 to 5 with 1 being poor and 5 being excellent. (additional comments)  | How would you rate the reliability of the system? | How would you rate the after sales service? | How would you rate the product overall? | Would you recommend this system to other schools?   | Can parents receive a report on the eating habits of their child? |
|---|--|---|---|--|---|--|---|---|---|---|---|
| A-Z   | 7K – 12K   | 2-5 Years   | Pupil pin number                              | Cash, Cheque   | Lack of training, Equipment failure   | 4  | 4   | 3   | 4                                       | Yes, Needs to be set up so that all relevant people can view the data produced. Otherwise the catering team can be waiting days for information necessary for their ordering and menu management. | Yes   |
| CRB Solutions – Impact System                   | 0K – 6K  | 6-10 Years  | Swipe card magnetic; Cash Loader (Coins only) | Cash, Cheque   | Equipment failure   | 3, would be good to link to the school's facility where by if a student leaves then it is done automatically and not have to wait for the year end mapping to take students off. | 4   | 3   | 3                                       | Yes, crb have been good with us as a school but I have looked at other systems which were quicker and better but it came down to the cost of putting another brand new system in.                 | Yes   |

|  |   |  |  |   |  |   |  |  |  |  |  |
|--|---|--|--|---|--|---|--|--|--|--|--|
| <b>CRB Solutions – Impact System</b>                   | Installed by the county council don't know the cost                   | 11 + Years   | Swipe card magnetic                                | Cash, Cheque  | No problems  | <b>5</b> , Excellent, Excellent don't know how we would manage without it   | <b>5</b> Excellent, CRB are great                        | <b>5</b> Excellent, CRB are great                  | <b>5</b> Excellent                             | Yes  | Yes  |
| <b>Who is the manufacturer of your current system?</b> | <b>How much did it cost to install your cashless catering system?</b> | <b>How many years have you been running a cashless system?</b> | <b>What type of system do you currently use?</b>   | <b>How are monies collated for your cashless catering system?</b> | <b>What problems, if any, have you experienced in the use of a cashless catering system?</b> | <b>How user friendly would you rate the system?</b><br>1 to 5 with 1 being poor and 5 being excellent (additional comments) | <b>How would you rate the reliability of the system?</b> | <b>How would you rate the after sales service?</b> | <b>How would you rate the product overall?</b> | <b>Would you recommend this system to other schools?</b> | <b>Can parents receive a report on the eating habits of their child?</b> |
| <b>CRB Solutions – Impact System</b>                   | 7K – 12K  | 6-10 Years   | Swipe card magnetic; Cash Loader (Coins and Notes) | Parent Pay, Cash, Cheque  | No problems  | <b>4</b>  | <b>4</b>   | <b>5</b> Excellent                                 | <b>5</b> Excellent                             | Yes  | Yes  |
| <b>Cunninghams - Impact System</b>                     | 19k - 24k   | 2-5 Years  | Biometric e.g. fingerprint                         | Cash, Cheque  | Ease of pupil use, Lease arrangements, admin time  | <b>4</b>  | <b>3</b>   | <b>3</b>   | <b>4</b>                                       | Yes  | Yes  |
| <b>Cunninghams - Impact System</b>                     | 19k - 24k   | 6-10 Years   | Pupil pin number                                   | Cash, Cheque  | Ease of pupil use  | <b>3</b>  | <b>4</b>   | <b>3</b>   | <b>3</b>                                       | Yes  | Yes  |
| <b>Cunninghams - Impact System</b>                     | 19k - 24k   | 1 Year   | Swipe card Mifare, Biometric e.g. fingerprint      | Parent Pay  | Equipment failure  | <b>4</b>  | <b>4</b>   | <b>4</b>   | <b>4</b>                                       | Yes  | No   |

|  |   |  |  |   |  |  |  |  |  |  |  |
|--|---|--|--|---|--|--|--|--|--|--|--|
| <b>Cunninghams - Impact System</b>                     | 19k - 24k   | 1 Year   | Biometric e.g. fingerprint                                       | Cash, Cheque  | Equipment failure  | 5 Excellent  | 4  | 5 Excellent  | 5 Excellent                                    | Yes  | Yes  |
| <b>Cunninghams - Impact System</b>                     | Over 30K  | 1 Year   | Biometric e.g. fingerprint                                       | Cash, Cheque  | Lack of training, equipment failure, Pupil data updating                                     | 4, pupil perspective it has been excellent. catering staff perspective it has been average                               | 4  | 3  | 4  | Yes  | Yes  |
| <b>Who is the manufacturer of your current system?</b> | <b>How much did it cost to install your cashless catering system?</b> | <b>How many years have you been running a cashless system?</b> | <b>What type of system do you currently use?</b>                 | <b>How are monies collated for your cashless catering system?</b> | <b>What problems, if any, have you experienced in the use of a cashless catering system?</b> | <b>How user friendly would you rate the system? 1 to 5 with 1 being poor and 5 being excellent (additional comments)</b> | <b>How would you rate the reliability of the system?</b> | <b>How would you rate the after sales service?</b> | <b>How would you rate the product overall?</b> | <b>Would you recommend this system to other schools?</b> | <b>Can parents receive a report on the eating habits of their child?</b> |
| <b>Cunninghams - Impact System</b>                     | 7K – 12K  | 2-5 Years  | Swipe card magnetic, POS photograph Cashloader (Coins and Notes) | Parent Pay, Cash, Cheque  | Equipment failure  | 4  | 3  | 4  | 4  | Yes  | Yes  |
| <b>Cunninghams - Impact System</b>                     | 13K – 18K   | 1 Year   | Biometric e.g. fingerprint                                       | Parent Pay, Cash,   | Going live June 2009   | 3, To be decided   | 3, To be decided   | 3, To be decided                                   | 3, To be decided                               | Yes  | Yes  |
| <b>Cunninghams - Impact System</b>                     | 13K – 18K   | 2-5 Years  | Biometric e.g. fingerprint                                       | Parent Pay, Cheque  | No problems  | 5 Excellent  | 5 Excellent  | 5 Excellent  | 5 Excellent                                    | Yes  | Yes  |
| <b>Cunninghams - Impact System</b>                     | 7K – 12K  | 6-10 Years   | Swipe card magnetic  | Cash, Cheque  | No problems  | 4  | 4  | 4  | 4  | Yes  | Yes  |

|  |   |  |  |   |  |  |  |  |  |   |  |
|--|---|--|--|---|--|--|--|--|--|---|--|
| <b>Cunninghams - Impact System</b>                     | 19k - 24k   | 1 Year   | Biometric e.g. fingerprint                       | Cash, Cheque  | Equipment failure  | 5 Excellent  | 4  | 5 Excellent  | 5 Excellent                                    | Yes   | Yes  |
| <b>Cunninghams - Impact System</b>                     | 25-30K  | 1 Year   | Biometric e.g. fingerprint                       | Cash, Cheque  | Equipment failure  | 4  | 4  | 4  | 4  | Yes   | No   |
| <b>Cunninghams - Impact System</b>                     | 0K – 6K   | 6-10 Years   | Swipe card magnetic                              | Cash  | Equipment failure, Poor after-sales care   | 3  | 2  | 1 Poor, Staff are unhelpful and often rude         | 2  | Yes, Cashless system idea is very effective and useful to pupils and us. High annual maintenance costs with Cunninghams for mediocre service level, and if damaged by pupils this is not covered. We are about to have a new system as part of the BSF programme. | Yes  |
| <b>Who is the manufacturer of your current system?</b> | <b>How much did it cost to install your cashless catering system?</b> | <b>How many years have you been running a cashless system?</b> | <b>What type of system do you currently use?</b> | <b>How are monies collated for your cashless catering system?</b> | <b>What problems, if any, have you experienced in the use of a cashless catering system?</b> | <b>How user friendly would you rate the system? 1 to 5 with 1 being poor and 5 being excellent (additional comments)</b> | <b>How would you rate the reliability of the system?</b> | <b>How would you rate the after sales service?</b> | <b>How would you rate the product overall?</b> | <b>Would you recommend this system to other schools?</b>  | <b>Can parents receive a report on the eating habits of their child?</b> |
| <b>Cunninghams - Impact System</b>                     | 19k - 24k   | 2-5 Years  | Biometric e.g. fingerprint                       | Parent Pay  | Equipment failure  | 4  | 4  | 3  | 5 Excellent                                    | Yes   | Yes  |
| <b>Cunninghams - Impact System</b>                     | 0K – 6K   | 2-5 Years  | Swipe card magnetic                              | Cheque  | Equipment failure  | 3  | 3  | 3  | 3  | Yes   | Yes  |

|  |   |  |  |   |  |  |  |  |  |   |  |
|--|---|--|--|---|--|--|--|--|--|---|--|
| <b>don't know</b>                                      | not sure  | 1 Year   | Biometric e.g. fingerprint   | Cash, Cheque  | Ease of pupil use, Equipment failure, slow to input name from finger print                   | 3  | 2  | 3, don't know                                      | 2  | Yes   | Yes  |
| <b>Don't know - administered by caterers</b>           | Don't know, installed by caterers   | 2-5 Years  | Swipe card magnetic  | Cash, Cheque  | No problems  | 5 Excellent  | 5 Excellent  | 4  | 4  | Yes   | Yes  |
| <b>Easy Trace System</b>                               | in total around 9k but this also included retail tills for the uniform shop | 2-5 Years  | Biometric e.g. Fingerprint, POS photograph Cash loader (Coins and Notes) | Parent Pay, Cash, Cheque  | Lack of training   | 3  | 3  | 2  | 3  | Yes, As it is great for the students, but I would recommend full training and refreshers courses are available locally. | Yes  |
| <b>Easy Trace System</b>                               | It was part of a new catering contract negotiations                         | 2-5 Years  | Swipe card magnetic, Cash Loader (Coins and Notes)                       | Cash  | No problems  | 4  | 4  | 3  | 4  | Yes   | No   |
| <b>Who is the manufacturer of your current system?</b> | <b>How much did it cost to install your cashless catering system?</b>       | <b>How many years have you been running a cashless system?</b> | <b>What type of system do you currently use?</b>                         | <b>How are monies collated for your cashless catering system?</b> | <b>What problems, if any, have you experienced in the use of a cashless catering system?</b> | <b>How user friendly would you rate the system? 1 to 5 with 1 being poor and 5 being excellent (additional comments)</b> | <b>How would you rate the reliability of the system?</b> | <b>How would you rate the after sales service?</b> | <b>How would you rate the product overall?</b> | <b>Would you recommend this system to other schools?</b>  | <b>Can parents receive a report on the eating habits of their child?</b> |
| <b>Easy Trace System</b>                               | 13K – 18K   | 1 Year   | Biometric e.g. fingerprint   | Parent Pay, Cash,   | Risks e.g. ID fraud  | 4  | 4  | 3  | 3  | Yes, WITH SOME RESERVATION  | Yes  |



|                            |           |            |                     |                          |   |             |   |   |   |   |     |     |
|----------------------------|-----------|------------|---------------------|--------------------------|---|-------------|---|---|---|---|-----|-----|
| <b>Fidelity</b>            | 0K – 6K   | 6-10 Years | Swipe card magnetic |                          | Ease of pupil use   | <b>2</b>    | <b>2</b>  | <b>2</b>                                    | <b>3</b>  | Yes   | Yes |     |
| <b>Gladstone Education</b> | 13K – 18K | 6-10 Years | Swipe card Mifare   | Parent Pay, Cash, Cheque | Cash is paid onto cards via cash loader in the school.                          | No problems | <b>4</b>  | <b>4</b>                                    | <b>4</b>  | <b>4</b>  | Yes | Yes |
| <b>Gladstone Education</b> | 7K – 12K  | 2-5 Years  | Swipe card Mifare   | Cash, Cheque             | Risks e.g. ID fraud, Lack of training, Equipment failure, Poor after-sales care | <b>3</b>    | <b>2</b> , Significant and frequent problems in first year after install (e.g. all students suddenly being charged VAT, all students suddenly being credited with free school meals). System getting more reliable. | <b>3</b> , Poor at first, much improved now | <b>3</b> , System management software not easy to use. System reports poor, e.g. no report to tell us number of students using the canteen at break or lunch, no gross margin analysis, just lists of transactions. | No, Although I have heard anecdotally that other systems also have significant problems. I could not recommend the system, but equally I would not tell anyone to discount it as an option. | Yes |     |

| Who is the manufacturer of your current system? | How much did it cost to install your cashless catering system? | How many years have you been running a cashless system? | What type of system do you currently use? | How are monies collated for your cashless catering system? | What problems, if any, have you experienced in the use of a cashless catering system?  | How user friendly would you rate the system? 1 to 5 with 1 being poor and 5 being excellent (additional comments) | How would you rate the reliability of the system? | How would you rate the after sales service? | How would you rate the product overall?                        | Would you recommend this system to other schools?                                 | Can parents receive a report on the eating habits of their child? |
|---|--|---|---|--|--|---|---|---|--|---|---|
| <b>Hero Systems</b>                             | 0K – 6K  | 2-5 Years   | Swipe card magnetic                       | Cash, Cheque   | Equipment failure, Poor after-sales care, Lease arrangements, The system has been unreliable and the maintenance extremely poor. | <b>3</b>  | <b>1</b> Poor                                     | <b>1</b> Poor                               | <b>1</b> Poor  | No, I am in favour of cashless catering; I just would not recommend this company. | Yes   |
| <b>Heroes Systems</b>                           | 19k - 24k  | 6-10 Years  | Swipe card magnetic                       | Cash, Cheque   | Lack of training, Equipment failure, Poor after-sales care   | <b>1</b> Poor   | <b>2</b>  | <b>1</b> Poor                               | <b>1</b> Poor  | No  | Yes   |
| <b>Infineer - MIDAS &amp; Net 3 System</b>      | 19k - 24k  | 2-5 Years   | Swipe card magnetic                       | Cash, Cheque   | Equipment failure  | <b>3</b>  | <b>2</b>  | <b>3</b>                                    | <b>3</b>   | Yes   | Yes   |
| <b>LCR Quick Dine</b>                           | 13K – 18K  | 2-5 Years   | Swipe card magnetic                       | Cash, Cheque   | No problems  | <b>5</b> Excellent  | <b>5</b> Excellent                                | <b>5</b> Excellent                          | <b>5</b> Excellent, LCR are always available if I need to talk | Yes   | Yes   |

|  |   |  |  |   |  |  |  |  |  |  |  |
|--|---|--|--|---|--|--|--|--|--|--|--|
| <b>Live Register</b>                                   | 7K – 12K  | 1 Year   | Biometric<br>e.g.<br>fingerprint   | Parent<br>Pay   | No problems  | 4  | 5 Excellent  | 4  | 5 Excellent                                    | Yes  | Yes  |
| <b>Who is the manufacturer of your current system?</b> | <b>How much did it cost to install your cashless catering system?</b> | <b>How many years have you been running a cashless system?</b> | <b>What type of system do you currently use?</b>                         | <b>How are monies collated for your cashless catering system?</b> | <b>What problems, if any, have you experienced in the use of a cashless catering system?</b> | <b>How user friendly would you rate the system? 1 to 5 with 1 being poor and 5 being excellent (additional comments)</b> | <b>How would you rate the reliability of the system?</b>           | <b>How would you rate the after sales service?</b> | <b>How would you rate the product overall?</b> | <b>Would you recommend this system to other schools?</b>                         | <b>Can parents receive a report on the eating habits of their child?</b> |
| <b>Live Register</b>                                   | 19k - 24k   | 2-5 Years  | Biometric<br>e.g.<br>fingerprint   | Parent<br>Pay,<br>Cash,<br>Cheque                                 | No problems  | 5 Excellent  | 5 Excellent  | 4  | 5 Excellent                                    | Yes, We have had three other schools come to site to view system for themselves. | Yes  |
| <b>Live Register</b>                                   | 13K – 18K   | 2-5 Years  | Pupil pin<br>number  | Cash,<br>Cheque   | Thumb print<br>recognition<br>for a small<br>percentage of<br>students is<br>poor            | 4  | 4, You will need to ensure that the server is of adequate standard | 5 Excellent, Good response to any problems         | 4  | Yes  | Yes  |
| <b>Live Register</b>                                   | 19k - 24k   | 2-5 Years  | Biometric<br>e.g.<br>Fingerprint,<br>Cash Loader<br>(Coins and<br>Notes) | Cash,<br>Cheque   | No problems  | 4  | 4  | 4  | 4  | Yes  | Yes  |
| <b>Nationwide Retail Systems</b>                       | 13K – 18K   | 6-10 Years   | Pupil pin<br>number,<br>Swipe card<br>magnetic                           | Cash,<br>Cheque   | No problems  | 5 Excellent  | 5 Excellent  | 5 Excellent  | 4  | Yes  | Yes  |

|  |   |  |  |   |  |  |  |  |  |  |  |
|--|---|--|--|---|--|--|--|--|--|--|--|
| <b>Nationwide Retail Systems</b>                       | Put in as part of PFI build.  | 1 Year   | Pupil pin number; Biometric e.g. Fingerprint       | Cash  | Ease of pupil use, Lack of training, Equipment failure, revalue units are located in stupid position | 2  | 3  | 3, can't comment as it's not our system            | 2  | No   | No   |
| <b>Who is the manufacturer of your current system?</b> | <b>How much did it cost to install your cashless catering system?</b> | <b>How many years have you been running a cashless system?</b> | <b>What type of system do you currently use?</b>   | <b>How are monies collated for your cashless catering system?</b> | <b>What problems, if any, have you experienced in the use of a cashless catering system?</b>         | <b>How user friendly would you rate the system? 1 to 5 with 1 being poor and 5 being excellent (additional comments)</b> | <b>How would you rate the reliability of the system?</b> | <b>How would you rate the after sales service?</b> | <b>How would you rate the product overall?</b> | <b>Would you recommend this system to other schools?</b> | <b>Can parents receive a report on the eating habits of their child?</b> |
| <b>Nationwide Retail Systems</b>                       | 25-30K  | 1 Year   | Biometric e.g. fingerprint                         | Parent Pay  | No problems  | 3  | 3  | 3  | 3  | Yes  | Yes  |
| <b>PCS now in liquidation</b>                          | 19k - 24k   | 2-5 Years  | Swipe card magnetic, Cash Loader (Coins and Notes) | Cash, Cheque  | Equipment failure  | 5 Excellent  | 3  | 2  | 4  | Yes  | Yes  |

|  |   |  |  |   |  |  |  |  |  |  |  |
|--|---|--|--|---|--|--|--|--|--|--|--|
| <b>Plastic Card Services-recently gone into administration</b> | 0K – 6K   | 6-10 Years   | Swipe card magnetic, Cash Loader (Coins and Notes) | Cash, Cheque  | No problems  | 4  | 4  | 4, Until the company went into administration. We were the first school to install their system, we received a very advantageous deal and were used as a reference site. | 4  | No, No longer available, but would recommend a cashless system | Yes  |
| <b>Seltrax</b>   | Don't have that information   | 2-5 Years  | Cash Loader (Coins and Notes) key                  | Cash, Cheque  | Equipment failure  | 3  | 2  | 4  | 3  | Yes, admin view - no, teacher view - yes, student view - yes   | Yes  |
| <b>Sharp Retail Systems</b>                                    | 7K – 12K  | 6-10 Years   | Swipe card Mifare                                  | Parent Pay  | No problems  | 4  | 5 Excellent  | 5 Excellent  | 4  | Yes  | No   |
| <b>Who is the manufacturer of your current system?</b>         | <b>How much did it cost to install your cashless catering system?</b> | <b>How many years have you been running a cashless system?</b> | <b>What type of system do you currently use?</b>   | <b>How are monies collated for your cashless catering system?</b> | <b>What problems, if any, have you experienced in the use of a cashless catering system?</b> | <b>How user friendly would you rate the system? 1 to 5 with 1 being poor and 5 being excellent (additional comments)</b> | <b>How would you rate the reliability of the system?</b> | <b>How would you rate the after sales service?</b>   | <b>How would you rate the product overall?</b> | <b>Would you recommend this system to other schools?</b>       | <b>Can parents receive a report on the eating habits of their child?</b> |
| <b>Sharp Retail Systems</b>                                    | 13K – 18K   | 2-5 Years  | Biometric e.g. fingerprint                         | World Pay   | No problems  |  |  |  |  |  |  |

|                                 |           |            |   |                           |  |  |   |  |                    |  |     |
|---------------------------------|-----------|------------|---|---------------------------|--|--|---|--|--------------------|--|-----|
| <b>TransAct Payment Systems</b> | 19k - 24k | 6-10 Years | Swipe card magnetic                                       | Parent Pay                | Equipment failure  |  |   |  |                    |  |     |
| <b>Uniware</b>                  | 7K – 12K  | 2-5 Years  | Biometric e.g. fingerprint                                | Cash, Cheque, cash loader | Equipment failure  | <b>4</b>   | <b>4</b>  | <b>2</b>   | <b>4</b>           | Yes  | Yes |
| <b>Uniware</b>                  | 19k - 24k | 6-10 Years | Swipe card magnetic, Cash Loader (Coins and Notes)        | Cash, Cheque              | Lack of training, Equipment failure, Poor after-sales care | <b>3</b>   | <b>3</b>  | <b>1</b> Poor  | <b>3</b>           | No, I do not know how it compares to other systems | Yes |
| <b>Vericool</b>                 | 19k - 24k | 2-5 Years  | Biometric e.g. Fingerprint, Cash Loader (Coins and Notes) | Cash, Cheque              | No problems  | <b>5</b> Excellent   | <b>4</b>  | <b>5</b> Excellent                                       | <b>5</b> Excellent | Yes  | Yes |
| <b>Vericool</b>                 | 19k - 24k | 2-5 Years  | Biometric e.g. fingerprint                                | Parent Pay                | No problems  | <b>4</b> , Additional features coming on line top help with reporting and marketing to target groups | <b>4</b> , When we have had problems VeriCool have always been very responsive and quick to locate and correct any fault. | <b>4</b> , Always available and happy to help and advise | <b>4</b>           | Yes, We have already done so                       | Yes |

## Appendix E: Cashless Catering Supplier Contact List

| Company   | Contact                                    | Email  | Telephone   | Mobile                          | Written Surveys Sent          | Surveys returned              |
|---|--|--|---|---------------------------------|-------------------------------|-------------------------------|
| Easy Trace System <a href="http://www.easytrace.co.uk">www.easytrace.co.uk</a>  | Liam Pakel<br>Tim Baker                    | <a href="mailto:liam@easytrace.co.uk">liam@easytrace.co.uk</a><br><a href="mailto:tim.baker@easytrace.co.uk">tim.baker@easytrace.co.uk</a>   | 01256 479 279                                     | 07768 714 091                   | 11/3/09<br>17/3/09            | <b>YES</b><br><b>12/3/09</b>  |
| Girovend G2 System<br><a href="http://www.girovend.co.uk">www.girovend.co.uk</a>  | Julie Moran<br>Tony Clough                 | <a href="mailto:Julie.moran@girovend.com">Julie.moran@girovend.com</a><br><a href="mailto:Tony.clough@girovend.com">Tony.clough@girovend.com</a>   | 0162 864 5057                                     | 07786 313 599                   | 11/3/09<br>17/3/09            | <b>No response</b>            |
| Gladstone Education<br><a href="http://www.gladstone-education.com">www.gladstone-education.com</a>   | Mark Roger<br>Andy Cooke<br>Martin Fallows | <a href="mailto:mroger@gladstonerm.com">mroger@gladstonerm.com</a><br><a href="mailto:acooke@gladstone-education.com">acooke@gladstone-education.com</a><br><a href="mailto:mfallows@gladstone-education.com">mfallows@gladstone-education.com</a> | 0141 773 5900<br>01491 20 10 10<br>01491 20 10 10 | 07812 340 826<br>07720 41 64 07 | 11/3/09<br>17/3/09<br>24/3/09 | <b>Yes</b><br><b>27/3/09</b>  |
| Impact System (CRB Solution & Cunninghams) <a href="http://www.crbsolutions.co.uk">www.crbsolutions.co.uk</a><br><a href="http://www.cunninghams.co.uk">www.cunninghams.co.uk</a> | Russell Hawes<br>Alan Vigers               | <a href="mailto:russell@crbsolutions.co.uk">russell@crbsolutions.co.uk</a>   | 0131 440 6100<br>01564 829999                     | 07734 333 253<br>07811 240 306  | 11/03/09<br>17/3/09           | <b>YES</b><br><b>19/02/09</b> |
| Infineer<br><a href="http://www.infineer.com">www.infineer.com</a>  | Jimmy Roberts                              | <a href="mailto:jroberts@infineer.com">jroberts@infineer.com</a>   | 02891 4760 22                                     | 07767 443 249                   | 11/3/09<br>17/3/09<br>24/3/09 | <b>YES</b><br><b>24/3/09</b>  |

|  |                |  |                  |               |                               |  |
|--|----------------|--|------------------|---------------|-------------------------------|--|
| Live Register<br><a href="http://www.liveregister.co.uk">www.liveregister.co.uk</a>                    | Mark McMorran  | <a href="mailto:mark@cycloneindustries.co.uk">mark@cycloneindustries.co.uk</a>   | 01509 261 179    |               | 11/3/09                       | <b>YES</b><br><b>12/3/09</b>                   |
| M H Systems<br><a href="http://www.mhsystems.co.uk">www.mhsystems.co.uk</a>                            | David Hesketh  | <a href="mailto:jon@mhsystems.co.uk">jon@mhsystems.co.uk</a><br><a href="mailto:davidh@mhsystems.co.uk">davidh@mhsystems.co.uk</a> | 01732 367 227    | 07754 653 931 | 11/3/09<br>17/3/09<br>24/3/09 | <b>YES</b><br><b>24/3/09</b>                   |
| <b>Company</b>   | <b>Contact</b> | <b>Email</b>   | <b>Telephone</b> | <b>Mobile</b> | <b>Written Surveys sent</b>   | <b>Surveys completed and returned</b>          |
| Nationwide Retail Systems<br><a href="http://www.nrsltd.co.uk">www.nrsltd.co.uk</a>                    | David Paylor   | <a href="mailto:dpaylor@nrsltd.com">dpaylor@nrsltd.com</a>   | 01226 732 200    |               | 11/3/09<br>17/3/09            | <b>YES</b><br><b>16/3/09</b><br><b>17/3/09</b> |
| Sharp Retail Systems<br><a href="http://www.sharpretailsystems.co.uk">www.sharpretailsystems.co.uk</a> | Mark Saunders  | <a href="mailto:mark@sharpretailsystem.co.uk">mark@sharpretailsystem.co.uk</a>   | 01823 331166     |               | 11/3/09<br>17/3/09<br>24/3/09 | <b>Not taken part</b>                          |
| Vericool<br><a href="http://www.vericool.co.uk">www.vericool.co.uk</a>                                 | Graham Housby  | <a href="mailto:ghousby@vericool.co.uk">ghousby@vericool.co.uk</a>   | 0845 838 2410    | 07764 261 567 | 16/3/09<br>17/3/09            | <b>YES</b><br><b>19/3/09</b>                   |