**Synful Computing – Project Update**

**Transcript**

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**Introduction**

Thank you for taking the time to come to this presentation for the Project Update of the Synputer model for EDC and consumers. This update is meant to explain what has been going on in this project with the various milestones that have been arrived at along with some of the challenges that we are currently experiencing.

This presentation comes in the form of a: Project Milestones, Original Budget, the original specifications, The Requirement Table, Costed Project Plan, Timeline and Going Forward.

**Project Milestones**

I believe that it is only right that we address the specific milestones that were achieved during this project. The first was the base Synputer model. Through a large amount of testing by our team of architects and engineers we were able to deliver a working machine with specifications that considered various factors. We then sent these specifications to the buyer EDC. They indicated to us that they were not happy with the system that we had provided and so we took time to go back and try and figure out how we can address this. We were then able to bring the Synputer 2.0 which addressed all the issues highlighted by EDC however, this came at an increased cost that will be touched upon later in this presentation. We thus have the intention of sending this order to EDC in due course. This will also impact on the market as we will have two different models of Synputer provided to the consumers. One will be the base model that was developed, and the second will be the model that considers the requirements put forth by EDC.

**Original Budget**

First, I would like to talk about the original budget for the project and what has occurred during that period as a means giving a good understanding of this Project.

In the Original Budget the Total Expenses that we were working with amounted to five hundred thousand pounds (£500,000). At the time of crafting this budget I the project manager considered the cost of Labor which came up £229,150, Materials cost which came up to £220,850 and any overhead which came up to £50,000. This budget was in line to simply break even with the order made by EDC for 2000 machines at £250 per machine.

Upon the project’s commencement the engineering team highlighted several issues that greatly impacted the cost of the materials that we purchased. With this in mind the team began to do their best to be able to provide a machine that would satisfy the requirements of EDC even though it seemed to have gone over the budget.

**Original System Specifications**

The system specifications that we had sent to EDC were as follow: A 68008 CPU, 4 glue chips, 2 32KB ROM, 4 32KB RAM chips, mono sound which was soldered to the board, 2 Syn cartridge drivers, 1 serial port (sc100), 1 joystick (sc150), a desktop case with internal integrated keyboard, running HB/OS. It also has a custom composite video port that allows for a standard display of 512 by 256 display, with 32 colors. Finally, we also included 4 cartridges (2 for BASIC and 2 for EZ-SUITE) along with a printed manual that covers basic operation, an introduction to Hyperbasic and a full list of keywords. This all cost £208.55 for materials and software for 1 machine. The labor remains at the cost it was during the production of the prototype and can be seen as cost that can change overtime but for the purpose of the budget of this project, it will remain fixed. We have 1000 already in production.

**Requirements Table for EDC.**

Upon receipt of the requirements EDC wanted we have made a few changes to the machine that not only meet the requirements, but some would say exceed them.

1. The first requirement was for an industry standard Operating System (OS). The HyperBasic OS that the company provides certainly meets industry standards. One of the main reasons we chose to go with our own OS was down to looking at what the consumers want now. The Micro-Computer Consultants (MCC) OS was looked at but turned down due to consumers wanting to move away from CLI-based systems of which the MCCOS was purely. The CPM68k was also seen as too cumbersome for consumers, and this was shut down.
2. The second was for an external keyboard connector which we have provided with two (2) IOP-J SC150 2ch that supports keyboard, mouse, and joystick. This allows for users to dual use keyboard, mouse and joystick or a combination of these things. Many consumers have indicated a want to be able to play games on their computers and thus we decided to add this feature. This also has the added benefit of allowing for a better user interface.
3. A 512Kb RAM was requested and so we decided to change the CPU from a 68k8 to a 68k which provided a maximum of 16MB of RAM that users can take advantage of. This system comes with 4 512Kb ram for the system for a maximum of 2MB. This will allow users to seamlessly run applications on the system without much worry about crashes.
4. The fourth requirement was for a removable media drive functionality which was already in the system. This functionality allows for the reliability in the storage and transfer of data. We want users to use this machine for a long time and to do that we believed they needed the ability to do that.
5. The fifth requirement was for SCSI Expansion Capability and thus we have to say No to for various reasons such as basic functionality, cost, and plain feasibility. This board does not provide the same number of slots as the A83-S and we saw no reason to have to tweak the system even more to accommodate an extra board as this could result in an already great mounting cost on our end.
6. The sixth requirement was for a 68000 CPU or Upgradable. I must say that we are very proud to say that we have included a 68k series CPU that is top of the line and very fast. The board that we have is also socketed and this allows for the swapping of CPU’s should consumers want to upgrade their system.
7. The seventh requirement called for 2 Serial Ports (RS422/RS485) which we did include with two (2) IOP-J SC100 2ch MPX serial ports. This allows for the connection to legacy hardware or industrial equipment using RS422/RS485 protocols. The various connectivity’s this offers more than makes up for not including the expansion board.
8. The final requirement that we will touch on is the need for GUI support, which I am pleased to state that this system has been outfitted with the right connection ports and software to do so. This requirement was seen as highly integral as many competitors have allowed for this in their system, and we believe that it will allow for consumers to have ease of use and enhance productivity.

**Costed Project Plan**

At this point I must reiterate what was stated prior. The budget that we were working with at the time was gone over. To obtain the materials that we needed for the original specifications, would cost £208.55. This made it so that the total cost to obtain the materials for the 2000 machines had gone up to £417,100.00. When the cost of labor was also considered, the total cost to provide the 2000 machines had jumped to £646,250.00. This means that with the current machines we would provide EDC with would unfortunately have a loss of £146,250.00. Meeting the requirements that they also asked for would encourage this amount to go up in material cost. Currently we would have to obtain the 68000 CPU at a total cost of £25.00, 2 additional ports to support keyboard, mouse joystick and RS422/RS485 at a total cost of £22.00. This would bring our total cost for the materials needed to £260.55. Accounting for 2000 machines, that would result in a material cost of £521,100.00. Considering a labor of £229,150.00 this would result in a loss of £250,250.00.

Since we have already produced 1000 machines, it is our belief that we should role out the base Synputer Machine to consumers at £399.00 and thus our time on making a different model for EDC should be one where we do it from the ground up in a sense.

**Timeline**

The model for EDC would not take as much time as the original due to the fact that a lot of the time that was spent on creating the original model took into account a lot of fault finding and various other reviews. Using Expert Judgement, it has been extrapolated that the time taken to create another model would need less staff i.e. we could cut back on the Agency Hardware Architect and Software Architect. Also, since we have already created 1000 machines in the original model, this would mean that to create the upgraded model would only need minor tweaks that could be easily done. In Expert Judgment, the project would only take another 46 weeks to provide the full 2000 machines to EDC. However, with the use of Program Evaluation and Review Technique (PERT) we can evaluate a few things. Firstly, we will establish an Optimistic time 46 weeks. Secondly, we establish a Most Likely time of 56 weeks. Lastly, we will establish a Pessimistic time of 75 weeks. With these in consideration, we believe that we can provide EDC with the requested models in 57 weeks.

**Going Forward**

With what has been presented so far, I would like to take the last segment to speak about what our options may in fact be.

As was outline in the Cost Project Plan with the cost of materials needed, the base model of the Synputer should be made available to consumers as this will allows us to at the very least operate at a profit. Marketing has already taken a pre-order of 3000 for the model at a price of £399.00. This would mean a revenue of £1,197,000.00. There have already been 1000 machines produced with a further 2000 necessary to fulfill this pre-order. With the cost of the base materials at £208.55, this would mean it would cost £625,650.00 for the materials and the same labor cost of £229,150.00 for a total cost of £854,800.00. Bearing in mind that the labor cost will most certainly drop as we continue to produce machines, this would mean that if all pre-orders are fulfilled, then the profit would likely be £342,200. This is a much better option to use the materials to redesign the model for EDC. Also, the machines upgraded with the EDC specifications can also be sold at a higher price of £599.00 and marketed as a premium model.

**Conclusion**

In closing I can understand the feeling of frustration in having to spend more money on the EDC requirements, however I hope the points I have made above will allow us to see the net positive effect that it can have in the long run. Originally, we had promised to provide a system that met the specifications that EDC had outlined and so to avoid the loss due to a lawsuit and in reputation, I believe we should front this cost at present.

I believe that we have gone through everything that we have set up to do today and once again I would like to thank you for attending.