# About Us - David

### [David]

Hello! We here in Group 3 want to welcome you to our presentation and demonstration, and we're extremely grateful for your taking the time today. First - a bit about us. We are a group of keen Educationalists, Engineers, and Calculator Fanciers **[or maybe that's just me?...]** who recognise that current Computing education in schools is leaving students lacking in applicable and useful skills and experience, and that the current market is failing to fill the needs of these students and their teachers.

Given the large increase in attention being paid by Government to STEM education, including Computing, we see that it is critically important for schools to have access to tools that are approachable and simple, yet be powerful enough for teachers and learners to be able to explore the Art of Computer Programming through lessons and projects throughout their Secondary education.

We also believe that creativity is key to learning - as Andreas Schleicher of the OECD says, "a lot of learning technology makes learning not richer but more scripted". Our approach has been guided by the principle of avoiding this perceived rigidity that plagues many of the applications in our space, to provide an excellent, flexible, learning platform.

### **Our Product - David**

We are building a novel way of Teaching and Learning Computing fundamentals. Our solution pairs an intuitive graphical interface with a powerful runtime engine supporting two of the most popular languages in professional use today - Python and JavaScript (with the possibility to support many more on request) - to provide a flexible learning platform for modern Computing education, allowing educators to easily flow from teaching programming fundamentals in the earlier stages of education, to exploring graphical application development at the GCSE and A-Level stages.

We are building our Solution using a combination of Personal Experience, consultations with Educators, and through the application of Academic research. Through our own experience, we know that the Pre-University Computing education does not provide an adequate base for, even, further study in the area; intra-company consultation has found that the shared experience of Computing pre-university is consistent in it's poor quality right across the country, typically beginning with ["]teaching["] Scratch for the first several years, progressing to something akin to terminal Fizz-Buzz as a project at the end of the course - getting only slightly better at A-Level. Consultations with educators by both ourselves and organisations such as the Royal Society, has illuminated the lack of good tools for teaching Computing and for enabling the crucial development of new Pedagogical methods - despite Computing now being a required subject in England.

This situation gave us the initial idea and impetus for Our Product, with our view being that a new approach to the practical teaching and learning experience is required.

Our solution also requires no set-up and provides the same environment across all platforms, ensuring that students have a consistent experience, whether at school or home, and removing the burden from teachers by providing a consistent target for examples and assignments - regardless of the machines available to either the institution or student.

This is extremely important to us, as many institutions and individuals across the world are unable to afford the latest machines - a fact that has become even more obvious through the pandemic - but it is important that they should not be locked out of Computing education going forward.

### **Target Market - Peter**

The target market for SuperPres is the education sector - specifically the Computing Education area - at least initially.

Our Solution is designed as a tool to teach Programming Principles to students who are new to the art. As a low-code development environment, it is meant to be a stepping-stone between simple drag-and-drop tools, such as Scratch or App Inventor, and more realistic programming environments such as C++, C Sharp, Java, and the like.

This will allow students to learn useful aspects of programming whilst creating something more interactive than text in the console - without having to learn arcane build and configuration systems, and relatively complex libraries such as GTK for C, TK for Python or Swing/JavaFX for Java.

Students will be able to quickly create graphical applications without having to worry about complicated setup and initialization code, and manipulation of complex structures - which often serves to put students off of programming if they can't understand it, and places far more burden on teachers, teaching not only the critical fundamentals but also the ins-and-outs of a particular toolkit.

### **Competitors - Peter**

The main competitors we have identified in this sector are MIT's Scratch and App Inventor, and Codecademy. Scratch/App Inventor are visual drag and drop based environments that allow users to create simple graphical applications with logic blocks that are used to control images in a scene that the user can draw to. It works in a vaguely similar way to how SuperPres is designed to work, but SuperPres is designed to allow the construction of non-trivial, complex, applications, and allows for actual programming to be done by the user in two widely-used languages - where Scratch is extremely simplistic, of limited value for teaching all but the most basic logic, and aggravating to attempt to make anything slightly non-trivial - making our solution a more useful and realistic platform than Scratch, whilst comfortably fitting into this market space.

Codeacademy is a code teaching platform that allows for students to learn a multitude of programming languages at a wide array of levels, from the very basics of commenting and arithmetic operations, all the way up to learning about artificial intelligence.

It is a good resource for budding professionals to learn how to code, it's not overly useful for students in schools because the material is often written for individual study, it provides no material for the UK curriculum, and provides little opportunity for Teachers to produce their own teaching material.

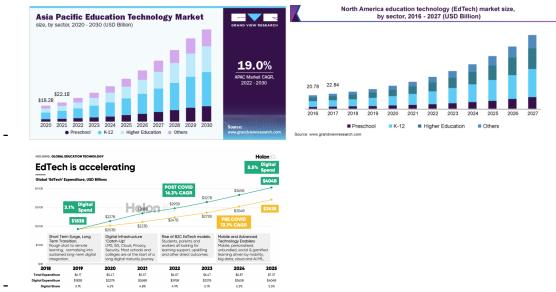
What we are hoping for with SuperPres is to motivate students to enjoy coding through our easy to use graphical scripting tools, teaching them and allowing them to make something for themselves at the same time, whilst providing teachers (who

might themselves be just learning to programme!) the ability to easily create National Curriculum compliant teaching material using a tool that fits easily into the National Centre for Computing Education's PRIMM (Predict-Run-Investigate-Modify-Make) teaching framework.

## **Opportunities in Target Market - Sam**

<u>Global</u>

- Education technology as an industry was valued at £106 billion in 2021.
- Expected to grow to a total value of \$368bn-\$406bn by 2025 Barclays.
- Total global expenditure on EdTech expected to double from 2020-2025.
- EdEech expenditure to rise from 4.2% to 5.5% (of all education expenditure) from 2020-2025.



#### The UK

- UK edtech market valued at almost £3.5billion bringing £292m into the economy
- 2019 year-on-year growth was 17.9%
- 2020 (pandemic) year-on-year growth was 71.5% Vs 18% global growth
- 56% increase in EdTech jobs

#### Where do we see the financial space in our market segment for SuperPres?

Education technology as an industry worldwide was valued at £106 billion in 2021 and is expected to surpass \$368 billion by 2025.

In 2020, the total global expenditure on EdTech was \$227billion and was expected to double by 2025. Currently, as of 2022, the total global expenditure is \$255 billion, and so is well on its way to reach this target. Also, the share of digital expenditure in the education sector as a percentage of the total expenditure is set to rise from 4.2% to 5.5% over the same time period - meaning technology and software is becoming more sought after and important within the education sector, demonstrating that the market has space for SuperPres.

We plan to initially market our Offering in the UK, where the EdTech market is currently valued at £3.5 billion and provides roughly £292 million for the UK economy and is only set to grow further as we recover from The Pandemic.

During Corona, the UK sector saw a Year-On-Year growth of over 70%, compared to the rest of the world where the rate was only 18%, showing the extremely rapid rate that EdTech is growing and being popularised in the UK education sector. Even before this staggering year, the growth rate in 2019 was roughly 18% - equal to the global average during the pandemic, again displaying the popularity of this sort of

tech in the UK.

Another display of the increasing popularity of EdTech is that from 2020 to 2021, there was a 56% increase in advertised roles within the sector which demonstrates the growth potential of companies in the area, and demonstrating also that gaps still exist in the market, which we aim to target.

### **Marketing - Pat**

Our first step in getting people to know about SuperPres will be to attend local events and trade shows in and around the North of England - such as the IT Showcase in Sheffield. This will allow us to meet and speak to potential customers to strengthen our brand image.

As well as getting potential customers to hear our name, we will also get to hear direct feedback from our audience, to be able to better aim the product towards them in future updates. At these shows, there is potential to make deals and gather/give out contact details for potential clients, to begin partnerships.

We definitely see that it is important to build relationships with educational institutions in our local region as this allows us to gain an initial small customer-base, which provides both some initial cash-flows and, more importantly, invaluable initial user feedback to allow us to tailor our offering to be more competitive and attractive to future clients.

We will also employ aggressive web SEO techniques, along with non-traditional online Guerrilla Marketing, to heighten our presence online allowing potential customers to be easily directed towards our product without needing to be in attendance at a trade show, and to seek to maximise our impact with the minimum of budgetary outlay.

In this vein, we would also seek to have editorial content published in National education-industry magazines such as Education Today, Educate, or Education Technology as a cheaper, but often more effective, alternative to a traditional magazine advert.

Our next phase would see us attending larger trade shows both in Britain and abroad, such as Bett UK or edTechX. This will further increase SuperPres' visibility to a wider range of clients both nationally and internationally. We would also consider targeted physical advertising such as posters and radio, as well as appearance at and some sponsorship of industry conferences.

This phase is envisioned to be entered in the medium to long term, as we initially focus on building our customer-base to provide the stability required to pursue more and larger clients.

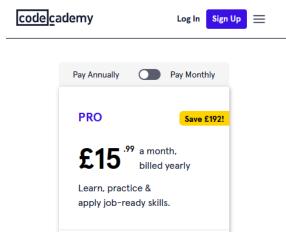
### More about the product - Peter

The scope for SuperPres is vast – its limits are based solely on the user's creativity and abilities, although that's not to say you have to be an expert in scripting to use the product. In classrooms, it's designed to be used as a step up from simplistic logic based drag and drop applications like Scratch, to teach students programming graphical applications without having to deal with complicated libraries, which a beginner possibly wouldn't be able to understand, and definitely wouldn't enjoy.

Our Users are free to create as they like. Non-trivial applications such as Calculators can be quite easily created, and with built in functions to handle arithmetic, logic, and data-passing between elements on a card applications with user inputs can be created with ease.

And this is *only* considering the scripting features of our platform! The ability to create scenes on cards with shapes, video, audio, text and images also allow for multimedia presentations to be created, and the use of a stack of cards allows for SuperPres to be used in a similar fashion to PowerPoint, although with better automation and interactivity than is possible through Microsoft's limited macro system.

# **Pricing - Boris**



As a side by side with our competitors such as Codecademy, and considering SuperPres being the new challenger, we expect to place our licence at a price of £9.99 per month per seat, which is significantly lower than the £15.99 monthly per user cost for Codecademy.

At this price-point, we expect to see a 9.73% profit margin from the first stage of our sales strategy while recovering healthily from the expense incurred during the main development stage.

Profitability	
Price of subscription	£9.99
Annual sell price of subscription	£119.88
Annual infrastructure cost per subscription	£0.12
Labour cost per subscription	£8.38
Overhead recovery per subscription	£99.72
Net profit per subscription	£11.67
Percentage profit	9.73%

To ensure our business stays competitive, as well as to keep hold of and support our first group of customers, our licence is to be offered as an annual subscription in the first stage to provide our company with the budget to continue supporting our customer-base and keeping the business running.

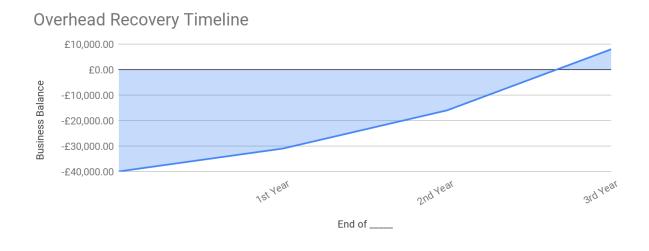
All the above is subject to change overtime, as SuperPres builds out from the initial customer-base and moves on to the next stages of our sales and marketing strategy. In the short term, we also intend to permit subscribers to pay monthly, as we see that this will increase the accessibility of our Product.

### **Expected Revenue - Boris**

From our current marketing strategy for the upcoming year, we are looking at possibly reaching out to at least three different high schools, introducing SuperPres into their new Key-stage 3 and 4 Computer Science syllabus. Expecting a single year group of roughly 25 students and between two and three teaching staff per-school, we are targeting to distribute licences for 75 seats in our first year. This will bring a base revenue of £1,351.85.

Gross profit and losses	1st Year	2nd Year	3rd Year	Total
Target subscriptions	75	125	200	400
Annual gross	£8,991.00	£14,985.00	£23,976.00	£47,952.00
Annual infrastructure cost	£9.00	£15.00	£24.00	£48.00
Annual revenue	£874.97	£1,458.28	£2,333.25	£4,666.50
Annual overhead recovery	£8,116.03	£13,526.72	£21,642.75	£43,285.50
Business Balance	-£30,944.50	-£15,959.50	£8,016.50	£8,016.50

In the next couple years, not only to continue provide our service to the existing customer, but also to do our best to introduce SuperPres to other educational institutions with the feedbacks and collaboration from our existing customers. The current target is to made in total 400 licences contract within the first three year of the sale period which bring the business to break even before the 4th quarter of the 2nd year.



### The Future - Sam

Future work we would undertake can, really, be summed up in these four points

- 1. Extend functionality
- 2. Networking
- 3. A full low-code end-user development platform
- 4. Release of more pre-designed applications

Our immediate next stage of development will be to improve any of the current functionality of SuperPres, based upon any feedback provided by current users. We also currently have Alpha code that allows us to implement networking, allowing SuperPres applications to communicate with one another to allow distributed presentations, which is not currently in a demonstrable state but will be released within the next few releases of SuperPres.

Our next plan for updates to our platform will be to release it as a full low-code end-user development tool, as well as simply a teaching tool.

Users with little prior experience of programming will be able to easily and quickly build the tools they require and desire using our simple graphical tools and then easily share them with colleagues and friends, greatly increasing productivity in the workplace and beyond.

We will release more pre-designed applications, to show more of the functionality of SuperPres in a useful, pre-packaged, form.

This will include creating interactive slide-shows from pre-designed elements, in which students will be able to automatically follow and manoeuvre around a lecturer's slides at their own discretion. We will also seek to include our own pre-designed learning materials which less confident educators can use in delivering their lessons.

The materials are envisioned to be designed to leverage the full power of our platform, catering for students throughout the Primary and Secondary school stages, ensuring that all students have the opportunity to have a consistent high-quality learning experience in this increasingly important area.

### Demo - David

So, to demonstrate some of the power of our platform and concept, I sat in the pub the other evening and created the following demonstration application. It's, err, a reverse-polish notation calculator - complete with included help, and most of the functions you'd expect from a Scientific or basic Engineering calculator. I'd also like to note, if you've not already realised, that this presentation was built with our Product.