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INTRODUCING THE TEAM

Team AIB Racing is an F1 in Schools team from St. Muredach's College. We are the first team from our school to enter the competition and are competing as a newcomer team and school this year. Our team consists of four students aged 16 and 17 from the West of Ireland. Our aim is to showcase the best Ireland has to offer in terms of science, technology and innovation.

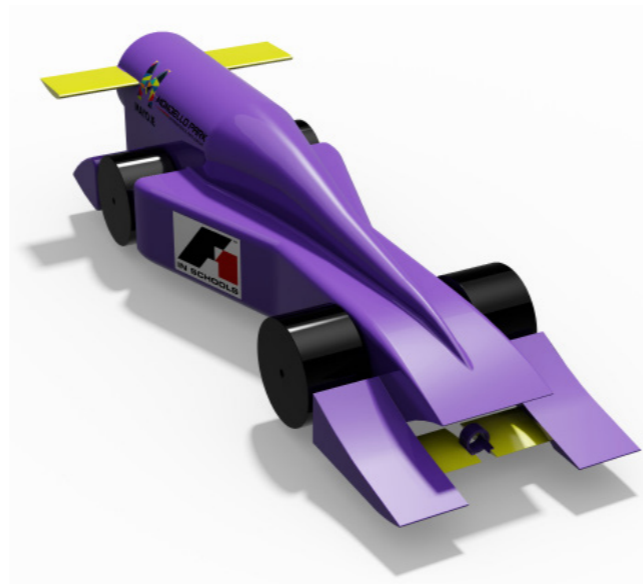
ENTERPRISE TEAM

As part of their critical contributions to the project, Robert (Sponsorship and PR) and Paul (Graphic Design) took the lead in relation to the Enterprise section of the project. However Aaron (Team Manager) and Enda (Manufacturing and Resources) both had critical contributions to this area, as their roles overlapped into the areas of Project Management and Pit Display design. Robert was the key figure in our dealings with sponsors and other partners. Paul's role was focused on creating a strong team identity and portraying this through the medium of graphics and the pit display design. Paul and Robert had numerous role interactions in the branding and project management areas.

PORTFOLIO STRUCTURE

We have structured our portfolio to demonstrate the journey we undertook during the course of the Enterprise section of the project. This journey evolved with five key stages:

- **Understanding Roles:** Organise a team management structure, clear roles, a good understanding of the role and skills each team member has and a solid methodology for solving any problems which may arise.
- **Plan and Manage:** This is the most critical stage - without a solid foundation, any future work would be rendered useless. It was necessary to develop an action plan, budget, schedule and resource management structure.
- **Building the Brand:** Develop a strong brand identity, core principles and clear vision for our team to approach sponsors with professionalism and confidence.
- **Sponsorship and Marketing:** Create sponsor strategy, sponsor packs, discuss ROI and make a strategic plan of action for approaching sponsors. Write media packs and develop a network of marketing contacts, whilst developing creative marketing techniques.
- **Presentation:** Design and develop pit display after considering the resources gained and identity we have forged. Endeavour to represent our work in the best possible way.



COMPETITION REVIEW

After the National Finals we held a post-competition evaluation of our performance in the enterprise area for the season. The purpose of this review was to identify weak points in our project which needed to be addressed. Here we have listed some of the observations made and the associated improvement action:

- Our social media and marketing scores lacked consistency in the Regional and National Finals. To remedy this, we applied a number of innovative social media analysis techniques which quadrupled our reach, while we also employed a number of creative marketing tools.
- Our Pit Display at the National Finals was somewhat untidy in places, and lacked a professional touch. We collaborated with an exhibition stand company to bring our new graphics and design ideas to life.
- The team's brand identity was often lost due to a number of issues - the pit, uniforms, graphics and social media profiles. To remedy this we applied uniform branding across all documents, social media and our Pit Display, whilst we tailored our shirts to feature our purple colours.
- Role interactions were not fully present at the National Finals. We expanded the scope of Paul and Enda's roles to resolve this.



TEAM STATEMENT

Team AIB Racing is a unique, skillful and determined team. Comprised of four individuals, each with a strong skill set and a new perspective, we aim to become the F1 in Schools World Champions for 2015. Our team is built on a core of friendship, hard work and an unrelenting desire to reach our common goal. These assets have been proven through our critical contributions, role interactions and positive outcomes.

AARON HANNON

TEAM MANAGER



Aaron was elected as Team Manager due to his passion for the project when he first pitched it to the rest of the team. Aaron also takes responsibility for the area of design, and collaborates with Enda in the field of physical testing as part of their role interaction. As Team Manager, Aaron is responsible for task delegation and overseeing the smooth running of the project. Aaron's critical contributions to the project include the design and development of our World Finals car, creating innovative car features and developing a network of collaboration contacts.

PAUL FLYNN

GRAPHIC DESIGN



Paul was selected for the Graphic Design role due to his abilities in ICT, excellence in communications and critical thinking skills. Paul was responsible for a number of challenging areas of the project including the design, manufacture and logistics of the Pit Display and creating an effective brand identity which would make us memorable, easy to identify and showcase our project in a professional manner. He was not daunted by the scale of the challenge however, and his critical contributions involved working on our new website, creating our Pit Display and overhauling our graphics.

ROBERT GRIMES

SPONSORSHIP



Robert was a clear fit for the Sponsorship and PR role, due to his background in public speaking and effective communication skills. He is in charge of getting potential sponsors on board, orchestrating our social media presence and setting up collaborations with established industrial leaders. He liaised with Aaron and Paul to manage our resources and project scope. Robert's critical contributions include developing a large sponsor base which has funded our participation, using innovative analysis to benefit our social media and engaging with media outlets to market our brand.

ENDA FLANAGAN

MANUFACTURING



Enda has always had a strong practical skill set and has excelled in the fields of Woodwork and Technology, thus making him the perfect candidate for the role of head of manufacturing. Enda was also made responsible for purchasing and sourcing merchandise, equipment and other resources. Through his role in manufacturing, Enda worked with Aaron to bring our fastest car yet to life using clever production techniques. Enda's critical contributions to the team include constantly sourcing materials for use, performing scrutineering reports and the manufacture of our car.

INTRODUCTION

Project Management, as outlined on our introductory page, is a critical phase in carrying out any process or project. We started out by identifying a number of areas we needed to address in our wide-ranging Enterprise process to achieve T.Q.M.

- Project Scope
- Time Management
- People Management
- Resources
- Communications
- Risk Analysis
- Finance

With these seven key areas to address in mind, we set about developing our plan for managing the project as part of the Enterprise process.

SCOPE

Our ultimate objective is to become World Champions of the F1 in Schools challenge for the 2014/15 season. We set a number of other milestones and smaller goals which we wished to achieve over the course of the competition. These included doubling our social media reach and engagement, developing a large sponsor base and winning the Fastest Car award at the World Finals. By attempting to achieve these smaller goals, we were able to work towards our overall end goal.



TIME MANAGEMENT

Time is a limiting factor in terms of achieving project scope, and thus the scope has to be aligned with the allotted time. To ensure maximum efficiency for the best chance of achieving our goals, we employed the use of Gantt charts and the project management app Asana. Asana allowed us to implement the SMART (Specific, Measurable, Achievable, Realistic, Timeframe) approach when allocating tasks to team members, which again helped us apply the limiting factor of time to our project scope. When using Asana, team members could assign tasks, view their own to-do list and view the performance of the entire team in relation to the tasks which had been assigned. This allowed for increased efficiency thus allowing us to reach further in our project scope.

T.Q.M.

At the centre of all of these limiting factors, innovative solutions and the all-important project scope is Total Quality Management. This comprehensive approach to project management takes into account and balances all limiting factors, while also seeking to improve the quality of our output. This is done through ongoing evaluations and gathering feedback, both of which are used to refine and improve output.

PEOPLE MANAGEMENT

Ensuring each team member was satisfied with their workload and didn't feel overwhelmed by the scale of the project was an important factor which needed careful management and constant evaluation. If a team member isn't satisfied, our collective productivity falls, which places further limits on our project scope.

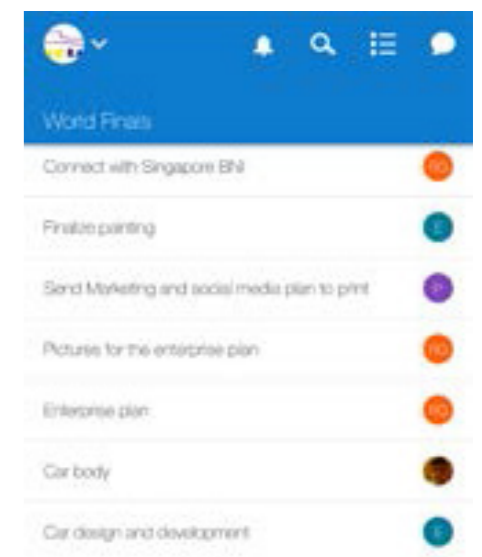
To mitigate against this we have put a strong methodology in place for dealing with problems within the team setup. Each team member is always encouraged to have their say, and our effective use of communications ensures that constructive criticism is shared openly. Our team understands that we are all working towards a common goal which helped put this structure in place.

RESOURCES

Stock-taking, ensuring materials were available and keeping the team supplied with uniforms, testing material and other items was an important task to manage. To ensure an astute purchasing policy, we check our resources each week and as a result have advance notice of when new materials are required. We also looked at resources which we would require, and partnered with local specialists such as Connacht Print and Signs, who sponsor all of our printed materials.

COMMUNICATIONS

Strong, effective communication is a fundamental requirement of any successful team. Our team maintained constant contact through our private instant messaging group, our private document sharing email (docs.teamaibracing@gmail.com) and regular team meetings. These channels of communication provided a platform for us to reach decisions quickly and ensure everyone remained informed. We used Google Drive and other email applications for the purpose of file sharing.



RISK ANALYSIS

As stated on the previous page, one of our main team goals was to exhibit Total Quality Management (TQM) in all areas of the competition. In order to do this we drew up a risk matrix covering all areas that needed to be addressed. We feel that this has given us an extra edge and has helped us achieve our goals to date. It also ensured we remained aware of any potential problems we could face, and served as an evaluation process of our project.

| Risk Description | Severity | RoC | Risk Score | Risk response | Severity | RoC | Risk Score |
|---|----------|-----|------------|---|----------|-----|------------|
| Initial Risk Assessment | | | | Post Response Risk Assessment | | | |
| Design Risk | | | | | | | |
| Poorly Designed Car | 5 | 5 | 25 | Engage with technical advisors on a regular basis and continue to track test the car | 3 | 2 | 6 |
| Failure of Car Components | 5 | 2 | 10 | Continue Quality Control assessments of products to ensure no faulty parts are utilised | 3 | 1 | 3 |
| Car does not comply with competition rules | 5 | 3 | 15 | Adhere to all competition requirements, take strict measurements of car components | 4 | 2 | 8 |
| Manufacturing | | | | | | | |
| Manufacturing Processes Too Slow | 4 | 4 | 16 | Ensure final designs sent for manufacture on time and within deadlines | 3 | 2 | 6 |
| Problems with Delivery of Parts | 4 | 3 | 12 | Order parts from a reliable supplier and well in advance of required date | 3 | 2 | 6 |
| Mistakes in Manufacturing Process | 5 | 3 | 15 | Establish reliable line of communication with chosen manufacturer, update regularly | 4 | 2 | 8 |
| Competition | | | | | | | |
| Failure to meet submission dates | 5 | 5 | 25 | Utilise project management software to highlight key dates | 5 | 3 | 15 |
| Non-compliance with portfolio guidelines | 4 | 4 | 16 | Ensure all team members are satisfied with adherence to guidelines | 4 | 1 | 4 |
| Team Branding | | | | | | | |
| Failure to market our team brand effectively | 3 | 4 | 12 | Identify and work with appropriate collaboration partners | 3 | 2 | 6 |
| Human Resources Risks | | | | | | | |
| Relatively Inexperienced Management | 5 | 5 | 25 | Identifying training requirements and appropriate consultants with skill sets | 5 | 2 | 10 |
| Over-Reliance on Technical Advisors and Mentors | 4 | 4 | 16 | Extend support network, ensure team is not dependent on a small number of people | 4 | 2 | 8 |
| Financing Risk | | | | | | | |
| Difficulty Raising Finance | 5 | 5 | 25 | Identify a number of potential interested investors by utilising our combined contacts | 5 | 3 | 15 |
| Cash Flow Problems | 5 | 5 | 25 | Ensure robust monitoring process and plan timing of expenditure carefully | 4 | 2 | 8 |
| Sponsor Dissatisfaction | 3 | 3 | 9 | Ensure all sponsors are marketed to the best of our abilities to maximise ROI | 2 | 1 | 2 |
| Broader Economic Climate Risks | | | | | | | |
| Travel costs higher than anticipated | 4 | 4 | 16 | Conduct thorough research to obtain the best value flights | 2 | 2 | 4 |
| Poor Currency Exchange Rates | 3 | 5 | 15 | Monitor the exchange rates and convert when quoted rate is most favourable | 3 | 3 | 9 |

Risk Score 16-25 ■
 Risk Score 8-15 ■
 Risk Score 1-7 ■

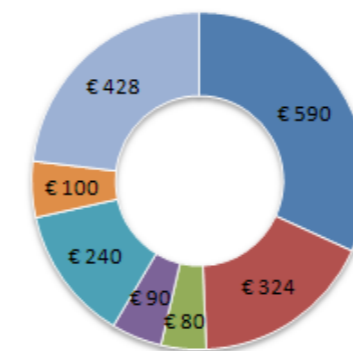
FINANCE

In order to budget for upcoming expenses such as car parts, team kit, pit display, flights, accommodation and merchandise, we established a list of potential finance and expenditure costs to be incurred by the team, by producing a projected budget on Excel. When any monies in were received, they were lodged to our bank account which was set up by our title sponsor AIB. This robust system of budgeting ensured our accounting was accurate and well planned. Through this system of comprehensive financial management our fundraising goal was made more achievable.

Our sponsorship campaign was extremely successful. However, to ensure we efficiently used the resources at hand to enhance our project scope, we developed a spending plan with a visual representation for presentation purposes. Two examples of such spending plans are detailed below for Marketing and Engineering. Investigating our expenditure in this manner ensured we received the best value for money, as each euro spent was scrutinised.

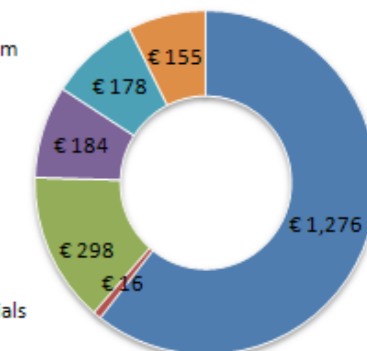


MARKETING



- Competition Uniform
- Casual Uniform
- Jackets
- Competition Prizes
- Gifts
- BNi Mornings
- Promotional Materials

ENGINEERING



- Bearings
- Copper Foil
- SLS Manufacturing
- F1 Model Blocks
- Race Canisters
- Carbon Fibre Rod



BRAND IDENTITY

TEAM NAME

Our team naming rights were used as a creative and innovative marketing tool which would further entice potential sponsors to come on board. Allied Irish Bank (AIB) decided to come on board as our main sponsors in early September 2014 and thus the name Team AIB Racing was created to enhance the Return on Investment we were able to provide them with.

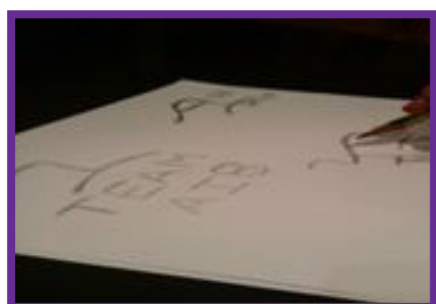
COLOUR SCHEME

The next step in developing our brand identity was to establish a robust, unique and attractive colour scheme. To represent AIB as main sponsors, we incorporated purple (C 50, Y80, M0, K0) into our colour scheme as our primary colour. To create bright highlights and an aesthetically pleasing look, we added an accent of yellow (C5, Y0, M90, K0) to our branding. Our third colour is a smooth charcoal (C0, M0, Y0, K88) which complements our primary and secondary colours. Using CYMK co-efficients was important to ensure our branding did not become confused and one clear vision was presented.



LOGO DEVELOPMENT

With a team name, clear set of ideals and a robust colour scheme, the next step in our brand development was the creation of our logo. A logo is extremely important for portraying the brand as professional, allowing it to be easily identified and providing an image by which to remember our team. We worked with local graphic designers and our own in-house software to develop our logo graphics. The process started out with a number of sketches, which evolved into digital portrayals of the logo with full colour. In the end, we had a number of versions of our logo which suited our brand identity and could be used in any scenario.



TEAM UNIFORM

The presentation of our brand to the World Finals audience is critical. The first aspect of our branding people will see, and form an opinion on, is our team uniform. Due to the changeable weather conditions (both in Ireland and Singapore!) we will encounter, we have developed three team branded uniforms for use.

Our team jackets bear our team logo and the F1 in Schools logo, so we can be easily identified and associated with the competition at any time.



Our casual uniform consists of a white polo shirt with sponsor names, and matching shorts. This provides sponsor ROI and a neat professional look.



Our competition uniform was developed with maximum ROI for sponsors and brand identity considerations in mind. We chose to use high quality white shirts for practical reasons, which we then had tailored to incorporate accents of our purple colours. The shirts were then embroidered with sponsor logos which were arranged in order of sponsorship hierarchy. To accompany these shirts we have used slim fitting black trousers and matching black shoes.



BRANDED GRAPHICS

We used Adobe Photoshop, Illustrator and InDesign to create our graphics for all of our documentation. We used versions of these graphics with the same stripe patterns on our Pit Display, social media and promotional flyers. Having a standard, official graphic for all of our documentation helped with our uniform branding across all project elements. We also have a typography policy, which states Arkitech Medium and Calibri are the fonts we use.



MERCHANDISE

To bring our brand to life, we developed a number of branded promotional items. These included hats, cups, keyrings, pens and mouse mats. This branded merchandise meant people we met could bring our brand identity with them, thus spreading our reach and increasing the amount of people who became aware of the science and technology community in the West of Ireland. Our merchandise will be distributed further at the World Finals.

INTRODUCTION

As outlined in our budget, we had a fundraising goal of €32,000. As reaching this goal would be quite a daunting task, we put a sponsor hierarchy into place with appropriate ROI based on the sponsorship investment received. We developed a standard sponsorship letter, presentation and procedure which allowed us to amass over 50 different individual sponsors.

SPONSOR PACKS

Our financial and benefit-in-kind sponsorship hierarchy had four different levels - platinum, gold, silver and bronze (see below).

However, rather than approaching sponsors with details of each pack, we felt it was easier to maximise investment by discussing the details of any potential sponsorship first, and the potential returns on investment to be gained, before allocating a sponsor to a certain category. After each meeting the team evaluated our progress and returned to the sponsor with details of their return on investment and a sponsorship agreement.

- **Platinum Sponsors:** Logo featured on World Finals car. Prominent logo location on team uniform and prioritised on our team website and other documentation. Frequent mentions on social media, interviews and at promotional events.
- **Gold Sponsors:** Logo featured less prominently on official team uniform and heavily featured on team website. Mentions on social media, media interviews and at promotional events.
- **Silver Sponsors:** Logo locations on casual uniform and website. Thanked on social media and at promotional events.
- **Bronze Sponsors:** Logo locations on team website if desired. This category was mostly applicable to people who gave personal donations, the majority of whom opted not to avail of ROI.

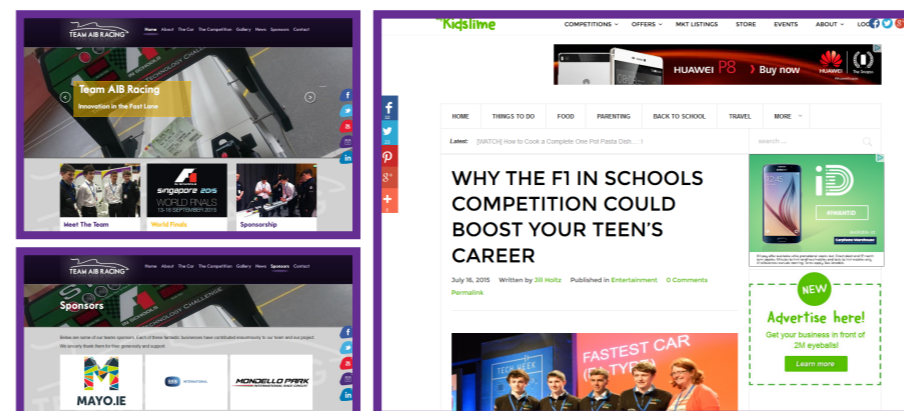


MAYO.IE

Our key sponsors, Mayo.ie, came on board to support the team, both as the main sponsors of the team financially, and in the form of advice and guidance from marketing experts. Mayo.ie aims to connect people from Mayo living all across the world and promote Mayo as a location for investment and as a tourism brand. This suited our brand perfectly. As part of our partnership, Mayo.ie organised a mentoring session with Ms. Louise McDonnell, their expert in the field of marketing. This allowed us to improve both our social media and marketing activities.

ENTERPRISE PARTNERS

Attik Designs, MyKidsTime, AIB and Connacht Print and Signs were some of our main enterprise partners. Attik Designs, a web design company, helped us create our website and set up a Content Management System for us to update the site. MyKidsTime, a blog which gives parents ideas for activities to do with their children, published numerous posts supporting our team to the 460,000 people who like their Facebook page, thus increasing our social media reach. They also featured an article on their site about our brand and the F1 in Schools competition entitled “Why the F1 in Schools Competition Could Boost Your Teen’s Career”. AIB provided us with banking services, free accounting and banking advice, while Connacht Print and Signs were on hand to provide free printing and graphic design help.



MEDIA

Media coverage, both locally and nationally, is the pinnacle of achievement in terms of Return on Investment for sponsors. To this end, we have endeavoured to achieve as much media coverage as possible. The highlight of this was a two page feature article in the Western People newspaper which we organised for Martin Birrane, owner of Mondello Park, when he came to visit our track. Other media coverage included:

- 4 interviews on MidWest Radio (listenership of 100,000)
- 3 interviews on community radio stations (combined listenership 35,000)
- 1 interview on Irish TV
- 2 features in the Connaught Telegraph (readership 12,000)
- 9 features in the Western People (readership 60,000)
- 1 feature in the Connacht Tribune (readership 20,000)
- 1 feature on the Irish Tech News (reach of 12,000)
- 1 feature on MyKidsTime (reach of 450,000)
- 1 feature on LookWest.ie (reach of 7,000)
- 1 feature on Irish Car and Travel

TEAM WEBSITE

An important part of our Return on Investment package was our website. Potential sponsors often referred to our website before meeting us, so creating a strong impression was also key. We collaborated with Attik Designs (see left, Enterprise Partners) to create a new-look, highly professional website which featured our sponsor logos in a prominent location as well as promoting our unique brand. We used our social media pages to drive traffic to our website. Sponsor logos on our home page were linked straight to the sponsors’ websites, which allowed for more return on investment for each individual sponsor. The website has been designed for ease of use, where users can easily engage with content from different stages of our journey to the World Finals whilst retaining ROI as a priority.

MARKETING PROCESSES

As a team, we strove to develop a strong brand identity throughout the community through the use of creative marketing techniques. Furthermore, we used these marketing opportunities to link to our sponsor return on investment. Each marketing platform discussed on this page was used as an opportunity to drive up our return on investment statistics and to maximise sponsor satisfaction. The use of our sponsor-branded clothing and business cards helped us to achieve this goal.

F1 FOR PRIMARY SCHOOLS

We developed a number of brand principles as seen in our extra marketing booklet. Our second principle, "Set an Example" was one of the factors which encouraged us to engage in F1 in Schools programme marketing. It was important to us, as newcomers, to spread the influence of F1 in Schools and encourage STEM subjects in Ireland, specifically the west. Our F1 for Primary schools campaign aimed to introduce children between the ages of 5 and 12 to the worlds of science, technology, engineering and maths, all linked into the work done by an F1 in Schools team. Our campaign reached over 1500 students in the West of Ireland.



B.N.I.

As part of his critical contributions, Robert formed a hugely successful partnership with Business Networking International, which gave us the opportunity to speak to over 200 business people in our region. We were then invited to the National BNI Convention, where we were asked to partake in their annual golf tournament, give a presentation and promote our brand to the 300 members present. Here we were introduced to many contacts in various businesses across the nation which allowed us to market F1 in Schools alongside securing sponsorship. The BNI in Ireland were impressed with our work, and they established a connection with BNI Singapore on our behalf. We have arranged to visit chapters in Singapore, which has given us the perfect opportunity to gain ROI for sponsors such as ESB International and Mayo.ie.



SOCIAL MEDIA

As outlined in our Social Media and Marketing document, we had utilised numerous social media platforms to engage with target audiences and boost sponsor ROI. This free marketing tool has allowed us to engage with many different sections of the community which we could not otherwise access.



CLIONA'S FOUNDATION

Another creative marketing tool we used was our partnership with Cliona's Foundation. This is a charity which provides financial assistance to the parents of terminally ill children to help cover their costs. The work of the foundation is very close to the hearts of our team members. We struck up a partnership with the foundation, where we agreed to place their logo on our car and promote them on our social media profiles. In return, the foundation gave us their support on their social media pages.



PROMOTIONAL EVENTS

We promoted our brand, our sponsors and grew our reach in our community by organising a number of events. We also participated in events which are held annually in the region.

- At the Ballina Salmon Festival we distributed promotional leaflets and ran a car park on two occasions to fundraise.
- At the Bonniclon Agricultural Show (second largest in the country) we promoted our brand to the public and met a number of famous faces.
- At the Enniscrone Show we ran our "Guess the Number of Balloons in the Car" competition. We filled a rally car to the brim with branded balloons, which attracted a lot of attention allowing us to raise our profile.
- We organised two successful cake sales which raised a large amount of funds for our team. This also granted us brand exposure to target markets we had not yet reached.
- We ran a successful fundraising night in a local family restaurant at which we also gave a presentation and a talk about our project.



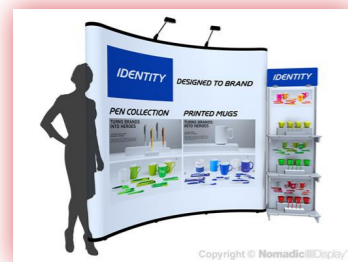
DESIGN GUIDANCE

We collaborated with Damien Fee of Nomadic Display whom we consulted about our Pit Display and graphics. We worked with him to learn about the best ways to lay out and represent all of our content across our Pit Display, in a clear, concise and aesthetically pleasing way.

Outcome: As a result of this we developed and furthered our existing skills in Photoshop, InDesign and Illustrator, allowing us to portray the content we wanted more clearly, as well as enhance our brand and our brand image as a professional and innovative team.

DESIGN DEVELOPMENT

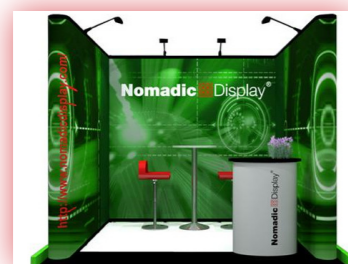
We knew that our Pit Display had to be informative, eye catching and include interactive multimedia. We developed a range of ideas about which we made a final decision after considering the team's identity, budget constraints, setup time and regulations.



The curved stand design is modern and tidy. However, we felt it did not use the space efficiently. It also did not fit within our budget constraints.



A 3 metre long counter for the Pit Display looked modern and stylish. However, it was far too expensive so we decided we to source a cheaper alternative.



The back structure for the Pit Display gave support to the posters. We were unable to pursue this option due to the prohibitive cost.



We explored the option of exhibiting one car in our display box and using two long banners with our team colours to portray our brand image.



We developed pit graphics to portray our professional brand image and lighting to make the stand lively and vibrant. However it appeared blank in some areas.



The final design is very tidy, easy to transport and erect. It is modern, stylish and portrays our brand well, while also fitting within our budget and complying with rules.

DESIGN EVOLUTION



REGIONAL FINALS

As newcomers to the competition we went with a simple design that incorporated our team colours and branding into the Pit Display. Our design was focused on promoting our sponsors and the community aspect of our brand. However, we lacked experience in Pit Display design at this stage and the design failed to incorporate enough multimedia, while also being relatively untidy.



NATIONAL FINALS

For the National Finals, we included more multimedia and technology into the Pit Display. We adapted our graphic design from the Regional Finals while retaining the prominence of our purple and yellow brand colours and sponsor logos. The design again focused on our community brand and the sponsors who had supported us. However this design was very bulky and difficult to transport and erect.



WORLD FINALS

Our new Pit Display has updated, high quality graphics which emphasise our team branding, the Irish flag and our sponsors' logos. The evolution of our display shows that we have retained our proud community brand focus, while we have constantly striven to improve and showcase our professionalism.

GRAPHICS



We wanted to continue our strong team identity right through our Pit Display whilst including informative content using clear graphics and enhanced use of ICT. We developed our new, modern and professional graphics using Adobe Illustrator and arranged our content using Adobe InDesign. Our posters concentrate on an excellent render of our World Finals car and a number of key elements including marketing, sponsorship and design analysis elements. We incorporated a widescreen monitor and an iPad 2 which displayed interactive content to engage visitors. We also included our sponsors' logos on the stand providing more sponsor Return on Investment.

MANUFACTURE

To manufacture our Pit Display we engaged in a number of processes. As stipulated in the design process, the stand had to be erected within a specified time frame. The counter was manufactured from thin aluminium frames which fit together in a specific order. Our posters were printed using a high quality inkjet printer on thick paper. To manufacture the counter front, a heavy poster was printed with magnetic strips on the back for ease of assembly. Our display box was tailored to fit our three display cars and produced from Perspex sheets. A set of thumbscrews were manufactured to assemble the box safely. Lighting strips were then added to the counter to complete the display.



LOGISTICS

We made a number of provisions in our design process, manufacture and planning to ensure the smooth transportation of our goods to the World Finals. We collaborated with Nomadic Display in Ireland and Singapore to ensure the stand would be delivered to the venue on the correct date and that all required shipping procedures would be adhered to. To facilitate this, our Pit Display was designed and manufactured to be collapsible and thus easy to transport. We also ensured our pit graphics and designs were created and printed well in advance of the competition.

TECHNOLOGY AND MULTIMEDIA

Integrating technology and multimedia is an important aspect for any high-achieving Pit Display. However, it has to be well planned to be effectively incorporated into the design. We considered a range of different options, but decided to work with an iPad 2 and a widescreen monitor for displaying a range of content related to the project in an innovative, interactive way. We integrated a wireless mouse and speaker into the Pit Display to improve the levels of interaction users could have with the stand. To eliminate any possible risk of damage to technology and multimedia elements while being transported to the World Finals, we sought the assistance of Concepts Asia, the official exhibition partner to the competition. They provided the technology required for rental for the entire event. This also reduced our costs and the amount of material we needed to include in our pallet. We designed fittings to ensure the technology was well integrated into the Pit Display.

SAFETY

Safety was of paramount importance with regard to our Pit Display. We considered a variety of potential risks, including:

- Use of hammers, power tools and saws
- Sharp edges on the Pit Display causing injury
- Injury due to working at heights
- People with epilepsy being exposed to dangerous amounts of flashing lights

Our Pit Display only needs Allen keys to construct, which makes it very easy and safe to assemble. Our design process has ensured our Pit Display has rounded edges and does not require any assembly at height. As a result, the risk of injury is greatly reduced. We have removed all flashing light displays to minimise the risk of anyone suffering epileptic seizures near our Pit Display.

ROLES

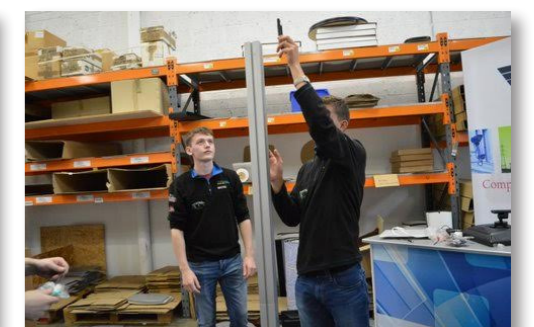
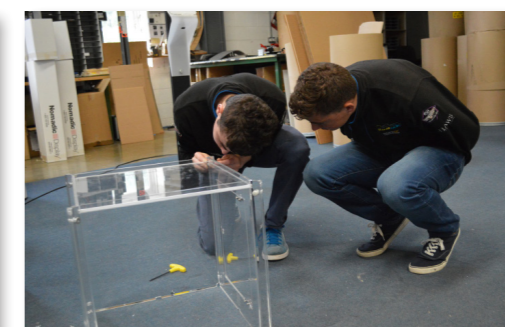
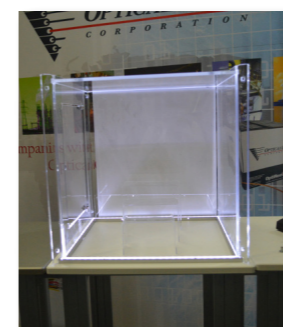
To maximise time efficiency, we delegated specific roles to everybody.

Aaron is responsible for setting up all electrical devices e.g. extension cord, laptop, computer and iPad. He also supervises the erection of the stand, to make sure it is completed in accordance with pre-determined instructions.

Enda works with Paul and Robert in setting up the posters and erecting the counter. He is also responsible for setting up the television along with the LED light strips.

Paul works with Enda and Robert in setting up the posters and erecting the counter. He is also in charge of assembling the Perspex box which displays the cars.

Robert works with Paul and Enda in setting up the posters and erecting the counter. He also takes responsibility for arranging merchandise in the display unit.



SETUP AND TEAM WORK

In our original setup of the team and planning, we strove to give ourselves a solid foundation for success. We utilised the skills of each team member to ensure a high quality end product. However, we continued to evaluate and improve this area with examples of this including:

- Setting up our “Design Team” and “Enterprise Team”. When creating our final submissions for the World Finals, understanding which team members had more role interactions with each other and more critical contributions to one aspect of the project ensured we were more efficient and allowed for the two portfolios to be created simultaneously.
- We identified the limit on pages in the portfolios as a potential problem. However, developing our extra engineering booklet enabled us to communicate more background information in a professional, organised manner even if it didn’t make it into the final portfolio.

PROJECT MANAGEMENT

Managing a project of this scale is in many ways an ongoing process, and as such requires a lot of continued evaluation linked to improvement actions. Some of our evaluations and improvements include:

- Although we had numerous project management factors considered and processes completed, we felt we had no strong methodology for balancing all of the factors. We then introduced Total Quality Management - a robust methodology where feedback and constant evaluation allow us ensure the balance of the factors we have achieved is sustainable and how to adjust accordingly.
- Our communications strategy was mainly based on face-to-face meetings at the beginning. However, over the course of the summer period, it became difficult to ensure that each member and mentor was present so we added instant messaging and file sharing services to our plan.

BRAND IDENTITY

Creating an eye-catching and highly effective brand identity is an extremely difficult task. However, using the following improvement actions we were able to achieve that.

- Our social media profiles didn’t fit together as a clear portrayal of what our brand stood for. To remedy this we sought the advice of Louise McDonnell from Mayo.ie. This led to us creating our graphics for social media which gave our brand a professional and uniform look across all platforms.
- Our colours were often slightly changed due to settings on various computers and programs used. To eliminate this problem and improve our brand identity we created a strict colour policy which was based on the CMYK co-efficients of each of our brand colours.

SPONSORSHIP AND MARKETING

After the National Finals we strove to improve on our sponsorship and marketing scores, as outlined on Page 1 (see Competition Review). Throughout both processes we had a number of evaluations which we then sought to improve upon:

- Our original team website was outdated and did not fit the brand image we wanted to portray. This was improved through partnering with Attik Designs, to whom we transferred our domain and collaborated with to create a website befitting of the professionalism we endeavour to show.
- At the beginning of our World Finals bid, our local marketing was limited to distributing flyers and related materials. However, we decided we needed to be more pro-active and entice people to come to us looking for more information. Examples of this include our cake sales, which were an incentive for people to support our team, and our “Guess How Many Balloons” contest.

PIT DISPLAY

Again, the Pit Display was one of the areas we singled out after the National Finals for significant improvement. We implemented the following improvement actions in response to the evaluations we made over the course of the project:

- We felt that the time limit placed on erecting the pit display could limit the designs we wished to implement. As an improvement action we worked with Nomadic Display to produce an easy to assemble stand and created a plan with a specific role for each team member to maximise efficiency.
- Our original design focus didn’t include enough technology or multimedia, so we explored options for screen hire at the competition. This meant we could incorporate technology without the worry of transportation, and begin to focus on implementing it into the design process.

FINAL SUMMARY

Our team has developed, matured and learned many new skills over the course of this competition. We have successfully managed, funded and marketed a huge project which has changed our lives and our future career focus. We aim to stay involved in F1 in Schools in some capacity after the finals, to give something back to the competition which has provided us with the rollercoaster journey of a lifetime. Although we are united in our desire to become World Champions and have worked long hard hours to provide the best possible chance of achieving that, we know we can be suitably proud of what we have achieved and the genuine, lasting bond our team has formed.