Entry for the Widget Awards 20XX

Category: Best Innovation in Widget Technology

Applied Clever Ideas Limited

The Widget App

About the organisation:

Applied Clever Technologies is a small (50 person) company based In Hampshire. Founded in 1973 it was created to serve the then new widget industry by two engineering graduates. Over the last 40 years it has grown into a globally recognised specialist company, exporting throughout the world. Its latest innovation is the Widget App.

The issues: The arrival of smart phone technology has not normally be used in the widget industry, but 18 months ago a problem presented itself in attempting to size and inspect difficult to access widgets. Widgets have an average lifespan of 3 years, but are often used in difficult to get to places. This can result in dangerously old widgets being left in place or a failure to spot corroded or worn widgets. Furthermore it is difficult to assess the type of the widget used as often the correct documentation is missing, and this results in labour intensive, expensive and potentially unsafe inspections by operatives.

The solution:

18 months ago Applied Clever Technologies was contracted to inspect the 10,000 widgets used nationally by Very Big Corporation. These were often in remote rural locations and by the nature of the high tension power cables, difficult to access. The company started to manually inspect the widgets using dedicated teams, but it soon became aware that the project would require much greater resource or overrun unless another solution was found.

Using research that had earlier been conducted into the manufacturing process, our team began to develop a process that could use an electronic imaging to detect faults during production and create a handheld unit to do the same. Although a wholly workable solution the unit was expensive, uneconomic to be used in quantity and required intensive training for the operators.

The project had hit an impasse, until one of the research team was using a smartphone to photograph a model railway locomotive for his daughter. The idea came to him that the phone could be used with a simple attachment to measure the distance of the shot, and thus the size of any item.

Using this data, together with a simple set of criteria for corrosion and wear could create a simple way to assess widgets in place. With this idea the research team started to build an App and

Comment [Mark Evan1]: Clear indication of Awards, year and category.

Comment [Mark Evan2]: Name of nominee

Comment [Mark Evan3]: Name of product, service or person(s).

Comment [Mark Evan4]: Introduction to the company/organisation

Comment [Mark Evan5]: Statement of the issue to be overcome/considered.

Comment [Mark Evan6]: Tell the STORY. Include the need for the solution, the setbacks and challenges, and describe how these were met and overcome. simple 'slip-on' lens attachment that that could replicate the handheld inspection device at a fraction of the cost.

Eventually a complete online resource of widget type, faults and sizes was created, that the App could access and collate. The results could then be exported to Excel to create a correct set of documentation for each site.

Trails showed the device to be more accurate than a manual inspection, and following testing and approval by the Ministry of Widgets, Widget App was launched and used by organisation in September 2013.



Widget App on an iphone with protective cover for outdoor use.

Outcomes:

The initial result was that Widget App completed the task for Very Big Corporation a full six months ahead of time. But there were other impressive outcomes too:

- The project to inspect 10,000 widgets was completed a full six months ahead of time.
- The project established a widget replacement rate of 2% nearly double that shown in previous surveys, so it can demonstrate a having created a greater safety factor.
- The wastage rate of incorrect widget replacement has been cut by 50%.
- The impact to the environment has been independently assessed by the University of Oxbridge to potentially save 23% of the carbon use of conventional widget replacement during this programme.

The App has also proved to be very easy to use, with our estimated week of training being cut to two days for each operator due to the intuitive controls, and this has saved both time and

Comment [Mark Evan7]: Pictures and graphs can be useful, but please clearly label them, and only use sparingly to illustrate points.

Comment [Mark Evan8]: Detail the outcomes and use figures. Bullet points are fine.

Comment [Mark Evan9]: Highlight wider impacts

resources. Several components of the system currently hold international patents, and the success of the system means that we have opened up places for 6 new employees already.

Stakeholder view:

Widget App has reduced human error in our programme and created a faster and safer environment. So far we have managed to upgrade our network half a year early, bringing reduced costs to our users and a faster service. We whole heartedly endorse this nomination and believe that this innovation has the potential to change the widget industry for the better. We wish the company the best with their development of the product, and have already signed a three year contract for widget inspection with them.

John Brown-Smith COO Very Big Corporation

Building on the result:

Despite being designed for a particular project, Widget App has now been used across the sector, with 15 companies in 12 countries using the technology, including free licences given to the charity Widget Aid for use in developing areas. Despite the success of the product, it has been continually refined, and the latest release is version 2.5, which has used extensive customer feedback to make calibration easier and more precise.

Furthermore, the basic technology is now being developed in partnership with St Swithin's Hospital for remote assessment of injuries in developing areas. Other applications in assessment of common manufactured goods are also being considered.

Future versions of the App will also be able to overlay regional temperature information and highlight any know issues of climate exposure to each site survey, sending this information immediately by 4G to a central database.

Summary

Widget App has changed the way in which the widget industry works. It has created a more reliable, economic and safer was to assess the condition of organisations networks, and helped provide this service to needed areas across the world. For a 50 person company we have truly managed to punch above our weight, and truly feel that this nomination should be seriously considered as the Best Innovation in Widget Technology.

Submitted byAdam Stevens CEO Applied Clever Ideas Limited 07678 08975 **Comment [Mark Evan10]:** Add endorsement where relevant and useful

area in which to tell the judges about what has happened since the initial development.

Comment [Mark Evan11]: This is an

Comment [Mark Evan12]: The place to sum up the issues, results and reasons to win. Don't be shy!

Comment [Mark Evan13]: Contact details for questions or clarification of points

Appendix

PWP 215 550 osc Н MDD. MOD 558 1 AMR AMP Π. 530 536 29 513 0 ILTER 26 44 0 III. 45 AME MOTOR 56 MOTOR DET POS. 8 LOGI 48

Complex diagram of electro-mechanical lens operation and feedback to sensor.

Comment [Mark Evan14]: The place additional information to which the judges MIGHT refer for understanding, but that will not be used for scoring.