

solving in the case study company, indicates the extent and intensity of usage is definitely at its maximum for a 'weak market test'. This demonstrates a promising start on the generalizability of the RCAN logic as well as the SSQC software.

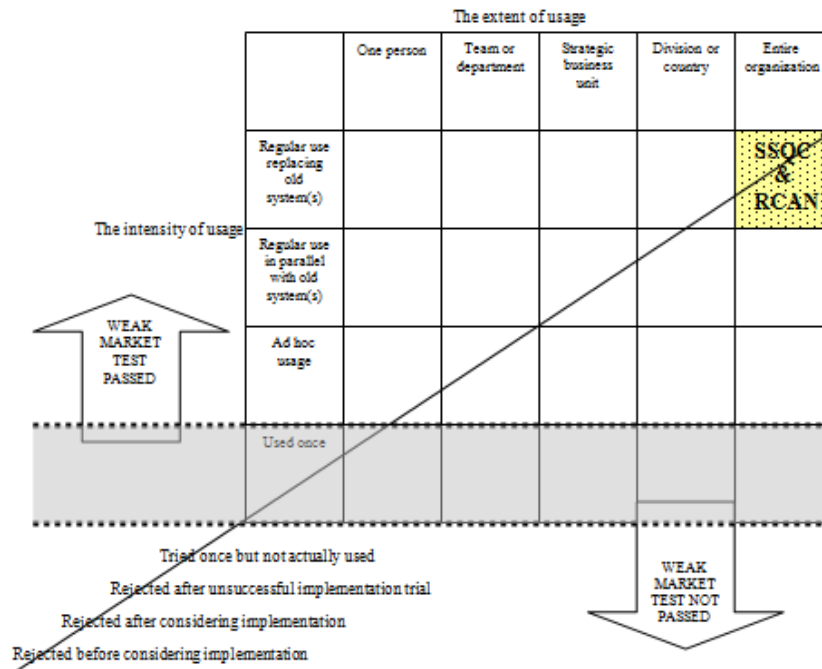


Fig. 5. The Constructive Research Approach Results

IV. CONCLUSIONS

In conclusion, it can be seen that a novel root cause analysis tool has been developed in this research as reported and explained in the paper. The devised root cause analysis tool comprises of the RCAN logic (Root Cause Analytic Network) and the software, namely SSQC (Spreadsheet for Quality Control). The tool was successfully validated in the case study company of sugar industry. A list of select potential root causes of problem has been identified and, once measures to eliminate those root causes were taken, the implementation results show that the sugar yield increases significantly and, from the results of the constructive research approach, it can also be concluded that the 'weak market test' is passed for the case unit was evidently willing to adopt the SSQC software with its RCAN logic for tackling the recurring problem of low sugar yield.

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