## A plane delay... seen from an academic perspective (part 2)

By <mark>João</mark> on May 20, 2013 at 10:00 am Posted In: <mark>Ch 20 - Managing Quality & Time</mark>

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In last week's post, I shared a personal story about a plane delay. In a nutshell: a technical problem, detected before boarding in Lisbon, required having a replacement aircraft being rushed from Barcelona to Lisbon; during the waiting time, I got a light snack; and a few days later I received an email from the airline company.

The point of the story was to invite you to use it to identify Costs of Quality, both explicit and implicit. Here is my view (from a non-expert on the industry!):

- 1. External failure costs:
  - Repair cost (parts, labour, other direct and indirect costs)
  - Costs due to the plane extended stay in Lisbon and the lengthier boarding process
  - Cost of the replacing plane trip (fuel, crew, airport charges, etc)
  - "Indirect" costs related with the replacing plane transfer (its rushed transfer to Lisbon may have disrupted a planned trip to elsewhere, hence implying additional costs)
  - Costs of Public-Relations (PR) activities to lessen customer badwill and restore reputation providing a snack during waiting time; designing and processing email sent to customers (the email had a strong emphasis on strengthening the perception of safety)
  - Opportunity costs due to customer badwill, in spite of taken measures, which may lead to lower future revenues (less sold tickets / unwillingness to pay higher prices)
- 2. Internal failure costs:
  - Internal failure usually refers to when defects in processes, product and services are detected in appraisal activities *before* delivery to customers. Since this quality problem did have an impact on customers (in terms of delay, not – fortunately! – during the flight), I've opted to classify all failure / non-conformance costs as external, rather than internal. Typical activities such as those to expedite operations, reinspect, and correct the cause of failure, could be mentioned (e.g.: it might have been possible to fix the door in 6 hours; but such a delay could be considered excessive, so they transferred another aircraft to expedite the process)
- 3. Appraisal costs:
  - Costs incurred in the inspection which (fortunately!) identified the problem
- 4. Prevention costs:
  - The story does not illustrate this point. However, the email request for feedback on how the delay was handled refers to a prevention activity on a different area: preventing quality costs in airport customer service.