



## Keio Business School

# A Personnel Allocation Problem in a Japanese Electric Manufacturer: Examining Algorithmic Solutions

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### Questions

1. Consider whether a personnel allocation planned by the researcher-proposing DA algorithm can be an effective way to solve a personnel problem for this manufacturer, referring to the theory explained in the body (and Appendix 4). 15
  
2. Compare the personnel allocations planned by the researcher-proposing DA algorithm, the division-proposing DA algorithm, and the Boston mechanism, referring to the numerical data shown in Appendices 1, 2 and 3. 20
  
3. As of October 2018, a medical trainee matching is the only example of the application of the (trainee-proposing) DA algorithm to real practice in Japan. Infer what happens when a Japanese company introduces DA algorithms in its personnel allocation, with reference to brief notes in Appendix 5 on what happened in the medical system in Japan. 25
  
4. What kind of things do we have to care about, in introducing DA algorithms to personnel allocation problems? Consider this question taking employment practices that are commonly observed in Japanese companies into account.
  
5. In effect, what kind of companies or industries can obtain good results when they apply DA algorithms to their personnel allocation problems? 30

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