AI INTEGRATION DEMONSTRATION AT THE AHP BASED MOBILE APP DECISION MENTOR

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Highlights

- Proposal for Demonstration session on integration of Artificial Intelligence (AI) at the AHP based mobile app Decision Mentor
- Covering AI added value for AHP based operation of Decision Mentor
- Duration of demonstration will be 15 minutes or standard time allocated for a paper presentation and interaction. The interaction timing is dependent of the interest from the audiences and up to the time managed by the session chair.
- AI integrated on AHP based application Decision Mentor adds productivity on strategic decision analysis approaches with simplifying criteria and choices identifying processes with added support to interact with AI in the process of decision analysis

ABSTRACT

Proposal is for a demonstration session on Integration of Artificial Intelligence (AI) at the Analytic Hierarchy Process (AHP) based mobile app Decision Mentor. The live app demonstration covering technical as well as practical side. In the practical side, how the value is added AHP implementation will be demonstrated. In the technical side, which AI model is used, how connected with the AI resources to add value on AHP implementation etc. AI integrated on AHP based application Decision Mentor adds productivity on strategic decision analysis approaches with simplifying criteria and choices identifying processes with added support to interact with AI (use of feature AI Mentor) in the process of decision analysis are the value addition or take away to the participations on the session. AHP implementation at Decision Mentor is presented in the Box below.

Keywords: AI, AHP, Productivity, Decision Making, Decision Mentor

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Box: AHP Implementation at Decision Mentor
1.0 Populating Decision Problem in the App Create new decision by tapping + sign at bottom center of the app, then write decision problem at given space **\<New Decision\>** **Step 1: Add Criteria**; Tap at the **\<Add Criteria\>**, looking at the criteria, it indicates "complete" with three criteria, one needs look, and edit as needed, add or delete or edit the App recommended criteria (**Powered by AI**) tapping **\<Edit Criteria\>** button; finalize criteria, once done, taping to **\<Done Adding Criteria\>**, one can add up to five criteria on free version. **Step 2: Add Choices**; Tap at the **\<Add Choices\>**, conduct similar as of Step 1 for Choices **Note: Adding criteria and choices are powered by AI (brainstorming); further, one can use AI Mentor in the process of identifying Criteria and Choices**
2.0 Pairwise Comparison for Criteria and Choices Decision Makers input is making judgement with Criteria and Choices **Step 3: Prioritize** **Rank Criteria:** Conduct pairwise comparison to Criteria **Rank Choices:** Conduct pairwise comparison / rating of Choices looking at each Criteria till comparing for all Criteria tapping to \<**Next**\> **Consistency** checking can be done by clearing **\<Ignore Inconsistency\>** button seen at top right corner.
3.0 Results of Decision Analysis When the three steps are completed, the **\<Show Results\>** button becomes active 3.1 When **\<Show Results\>** is tapped, one can see, ranking of Choices with its percentage of weight in a Donut 3.2 One can see choices ranking with each criterion by tapping **\<How the choices are ranked\>** 3.3 One can see the criteria weight generated by tapping **\<How the criteria was ranked\>**, presented in graphical form of spider diagram 3.4 **Sensitivity Analysis** can be conducted by switching to **\<Criteria Ranked\>** by tapping it as seen on top right, and then need to tap **\<Try adjusting priority your way\>** at the bottom; then one can see changes in choice ranking with the changes made to criteria weights.
4.0 Additional Features 4.1 The decision analyzed can be published, to share at the Decision Mentor app home section, which appears to all registered app users. 4.2 One can also share the decision analysis made to specific person via web link by available means at the internet (email, messenger, Viber WhatsApp etc. 4.3 The advantage of shared decision analysis is opportunity to other registered users, if one finds useful to him/her, can duplicate the decision analysis, adjust priority with own pairwise comparison and see result, get the informed decision insights.

Source: Decision Mentor Creators (The Authors of the Proposal)

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