



Universidad de Guadalajara
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Subject: Software Configuration Management

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How to make a decision based on total budget, timeline, HR and restrictions of the project?

Project resources: room for any dimensions: time, budget, hr, infrastructure, policies or guidelines (internal and external)

CR	Time	Budget	HR	Mandatory by the government (national or international)	Internal policies	Effort	Opportunities	Total score
1.- Electronic payments	3	3	5	0	5	3	5	24
2.- Rewards	3	5	5	0	5	3	3	24
3.- Facial recognition	1	1	3	0				13

Time scale(1..5): {minimal : 2 weeks, 5}, { medium : 3-6 weeks, 3}, {maximum : 7 weeks or more, 1}

Minimal	Medium	Maximum
2 weeks	3-6 weeks	7 weeks or more
5 points	3 points	1 point

Budget scale(1..5): {low : 10% , 5} , {medium, 11%-25%, 3}, { high: 26% or more, 1},

Low	Medium	High
10%	11-25%	26% or more
5 points	3 points	1 point

HR Risk scale (1..5): {low (prof, available), 5} , low(no prof, available), medium (no prof, not available) critical (prof, no available)

Low	Low	Medium	Critical
prof, available	no prof, available	no prof, not available	prof, no available
5 points	5 points	3 points	1 points

Mandatory : {yes, 35} , {no, 0}

Yes	No
35 points	0 points

Internal policies: {comply: 5}, {no comply, 0}

Comply	No comply
35 points	0 points

Effort: {high: complicated task , 1}, {medium: regular workload ,3}, { low: minimal workload, 5}

Low	Medium	High
Minimal workload	Regular workload	Complicated
5 points	3 points	1 point

Opportunities: {minimal:1} {low: 2}, {medium: 3}, {high: 5}

Minimal	Low	Medium	High
1 point	2 points	3 points	5 points

Interpretation of the Ranking Matrix

Electronic Payments (24 points):

- Technical Feasibility: Requires API integration and database adjustments, but within our current capabilities.
- Time Considerations: Development will take approximately 4 weeks.
- Effort Level: Medium complexity, manageable within the existing workload.
- Recommendation: Approved for implementation due to high feasibility and benefits.

Rewards Program (24 points):

- Technical Feasibility: Involves creating a points tracking system in the database and backend logic, which our team can implement.
- Time Considerations: Estimated 3-week development timeline.
- Effort Level: Moderate but achievable, with potential for scaling.
- Recommendation: Viable but requires further evaluation on reward logic and scalability.

Facial Recognition (13 points):

- Technical Feasibility: Requires AI-based facial recognition implementation, which exceeds our current skill set and infrastructure.
- Time Considerations: Requires at least 6 weeks of development, potentially delaying other key deliverables.
- Effort Level: High complexity, requiring additional resources and expertise.
- Recommendation: Not recommended for current implementation due to high cost, complexity, and regulatory constraints.

Conclusion

- Prioritize Electronic Payments for immediate development due to its strong impact on system efficiency and automation.
- Evaluate the feasibility of Rewards, considering user engagement potential and workload distribution.
- Postpone Facial Recognition as it presents significant challenges beyond our current resources and expertise.