**FEASIBILITY ANALYSIS MATRIX**

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| --- | --- | --- | --- | --- |
| *Feasibility Criteria* | *Weight* | *Candidate 1* | *Candidate 2* | *Candidate 3* |
| Description |  | Purchase an  existing system. | Write a new in-house  application using C#  and Microsoft Office  Access for a database. | Improve the current  system to fit the user’s  needs. |
| Operational  Feasibility | 15% | Lack of integrated  features. Does not  fulfill complete  business’  requirements.  Score: 65 | Fully supports  user-required  functionality.  Score: 100 | Due to the manual  system and lack of  technical and real-time  information system  this could pose as a  problem.  Score: 100 |
| Cultural Feasibility | 15% | Same as candidate  2, however since  the program is  commercial it  should have better  documentation for  training purposes.  Score: 85 | Users could possibly  find the new system  challenging and  frustrating to learn and  deal with.  Score: 80 | Users may find the  existing system to be  slow and ineffective.  Score: 90 |
| Technical Feasibility | 30% | Purchased system  will only be more  suited by making  add-on for the  software. This  requires constant  development as  updates are  released and will  cause unwanted  down-time within  the system (risk in  loss of profit).  Score: 70 | Proposed solution  requires coding an  application in C#  (.Net). The technical  staff has extensive  background in C#  (.Net), due to its  popularity for GUI  based applications,  external resources are  widely available .  Score: 95 | The current users of  the are comfortable  and knowledgeable  with the existing  system, however  management is  concerned about the  current analogue  system in terms of  flexibility to grow and  adapt to possible  business expansion.  Score: 85 |
| Economic Feasibility  Payback:  Net Present Value: | 20% | After the second year  R7400  Score: 80 | After the first year  R7500  Score: 85 | After the first year  R3900  Score: 65 |
| Schedule Feasibility | 10% | Less than 4  months.  Score: 85 | 5-12 months.  Score: 65 | 5 months.  Score: 75 |
| Legal Feasibility | 10% | No foreseeable  problems.  Score: 100 | No foreseeable  problems.  Score: 100 | No foreseeable  problems.  Score: 100 |
| Weighted Score | 100% | 78 | 89 | 84.5 |

**COST BENEFIT ANALYSIS**

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| --- | --- | --- | --- | --- | --- | --- |
| Cash Flow Description | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Total |
| Development cost  Operation & maintenance cost | (5400) | (2000) | (2800) | (1700) | (1800) |  |
| Discount factors for 12% | 1.0 | 0.89 | 0.8 | 0.71 | 0.64 |  |
| Time adjusted costs  Cumulated time adjusted costs | (5400)  (5400) | (1780)  (7180) | (2240)  (9420) | (1207)  (10627) | (1152)  (11779) | (11779) |
| Benefits from new system operation | 0 | 7500 | 7700 | 8700 | 10400 |  |
| Discount factors for 12% | 1.0 | 0.89 | 0.8 | 0.71 | 0.64 |  |
| Time adjusted benefits  Cumulated time adjusted benefits | 0  0 | 6675  6675 | 6160  12835 | 6177  19012 | 6656  25668 | 25668 |
| Cumulated lifetime time adjusted costs + benefits | (5400) | (505) | 3415 | 8385 | 13889 | 13889 |