

**UNIVERSIDAD TECNOLÓGICA DE**

**SAN LUIS RIO COLORADO**

**PRACTICA 10**

**MTRO. RICARDO ALEJANDRO SOTO MORALES**

**ALUMNO: VICTOR MANUEL GALVAN COVARRUBIAS**

**ING. EN DESARROLLO Y GESTIÓN DE SOFTWARE**

San Luis Rio Colorado, Sonora Mar. 2022

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|  | **RISK AREA** | **KIND OF RISK** | **ROLE** | **Po** | **Mf** | **RISK SCALE** | **PLAN OF PREVENTION** | **ACTION PLAN** | **COST** |
| 4 | HUMAN RESOURCES RISK | NON-ATTENDANCE | PROGRAMMER | 2 | 4 | **8** | Attendance bonus | Delegate activities to the analyst | $15,000 |
| 11 | HUMAN RESOURCES RISK | SABOTAGE |  | 2 | 4 | **8** | Responsibility matrix | Delegate role activities to another role | $30,000 |
| 12 | HUMAN RESOURCES RISK | LACK OF KNOWLEDGE |  | 3 | 3 | **9** | Trainings | Hire an expert to train in whatever is required | $ 15,000.00 |
| 23 | FINANCIAL RISK | INCREASE IN TAXES |  | 3 | 4 | **12** | Fund to mitigate inflation and tax increase | Adjust costs | $50,000 |
| 29 | TECHNICAL RISK | MISUSE OF TECHNOLOGIES |  | 3 | 3 | **9** | Deliver regulations to employees to prevent misuse of equipment | Punish the misuse of the development team to those who do not comply with the established agreements | $5,000 |
| 31 | POLITICAL RISK | CHANGE OF SCOPE AND OBJECTIVES |  | 2 | 4 | **8** | Validate during the analysis stage that the scope and objectives are correct with the client. | Sign agreements to avoid change of scope and objectives in the development stage | $15,000 |
| 38 | DEVELOPMENT RISK | HIDDEN FAILURES IN PROGRAMMING CODE AND DATA BASES |  | 2 | 4 | **8** | Deliver the complete documentation to the database team | Hire an expert who supports the database | $10,000 |
| 40 | DEVELOPMENT RISK | IMPLEMENTATION FAILURES |  | 3 | 4 | **12** | Generate the necessary documentation to correctly carry out the implementation | Designate the developers in the implementation | $30,000 |
| 44 | HUMAN RESOURCES RISK | MEDIOCRE ANALYSIS |  | 2 | 4 | **8** | Verify with the clerk and with the administrator the generated S.R.S | Hire a senior analyst for support | $20,000 |
|  |  |  |  |  |  |  |  | BUDGET | 190,000 |

**RIESGO**

RIESGO ES LA PROBABILIDAD DE UN EVENTO INDESEABLE Y EL EFECTO DE LA CONSECUENCIA DE DICHO EVENTO

LA FORMULA MAS SIMPLE PARA SU CALCULO ES LA SIGUIENTE

R = Po x Mf

**Po = PROBABILIDAD DE OCURRENCIA**

**Mf = MAGNITUD DEL DAÑO (IMPACTO DEL EVENTO)**

PARA CALCULAR LOS VALORES SE DEBERÁN DE TOMAR LAS SIGUIENTES ESCALAS

|  |  |  |
| --- | --- | --- |
| **ESCALA** | **PO** | **MF** |
| **1** | POCO PROBABLE | LEVE |
| **2** | PROBABLE | MODERADO |
| **3** | FRECUENTE | ALTO |
| **4** | MUY FRECUENTE | CATASTROFICO |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **PO** |  |  |  |  |  |
| **4** | **4** | **8** | **12** | **16** |  |
| **3** | **3** | **6** | **9** | **12** |  |
| **2** | **2** | **4** | **6** | **8** |  |
| **1** | **1** | **2** | **3** | **4** |  |
|  | **1** | **2** | **3** | **4** | **MF** |
|  |  |  |  |  |  |
|  | **INACEPTABLE** | | 1 |
| **RIESGO=** | **IMPORTANTE** | | 2 |
|  | **MODERADO** | | 3 |
|  | **TOLERABLE** | | 4 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **RISK AREA** | **KIND OF RISK** | **ROLE** | **Po** | **Mf** | **RISK SCALE** | **PLAN OF PREVENTION** | **ACTION PLAN** | **COST** |
| 1 | HUMAN RESOURCES RISK | NON-ATTENDANCE | ADMINISTRATOR | 1 | 4 | **4** | Attendance bonus | Delegate activities to the analyst |  |
| 2 | HUMAN RESOURCES RISK | NON-ATTENDANCE | ANALYST | 1 | 3 | **3** | Attendance bonus | Delegate activities to the administrator |  |
| 3 | HUMAN RESOURCES RISK | NON-ATTENDANCE | DESIGNER | 2 | 2 | **4** | Attendance bonus | Delegate activities to the tester |  |
| 4 | HUMAN RESOURCES RISK | NON-ATTENDANCE | PROGRAMMER | 2 | 4 | **8** | Attendance bonus | Delegate activities to the analyst | $15,000 |
| 5 | HUMAN RESOURCES RISK | NON-ATTENDANCE | DATA BASE | 1 | 4 | **4** | Attendance bonus | Delegate activities to the programmer |  |
| 6 | HUMAN RESOURCES RISK | NON-ATTENDANCE | TESTER | 1 | 2 | **2** | Attendance bonus | Delegate activities to the analyst |  |
| 7 | HUMAN RESOURCES RISK | NON-ATTENDANCE | CLERK | 1 | 1 | **1** | Attendance bonus | Delegate activities to the tester |  |
| 8 | HUMAN RESOURCES RISK | NON-ATTENDANCE | TECHNICAL SUPPORT | 1 | 3 | **3** | Attendance bonus | Delegate activities to the clerk |  |
| 9 | HUMAN RESOURCES RISK | NON-ATTENDANCE | ADMINISTRATIVES | 3 | 2 | **6** | Attendance bonus | Delegate activities to the analyst |  |
| 10 | HUMAN RESOURCES RISK | CONFLICTS |  | 2 | 3 | **6** | Work meetings and problem solving | Emergency meeting for conflict resolution |  |
| 11 | HUMAN RESOURCES RISK | SABOTAGE |  | 2 | 4 | **8** | Responsibility matrix | Delegate role activities to another role | $30,000 |
| 12 | HUMAN RESOURCES RISK | LACK OF KNOWLEDGE |  | 3 | 3 | **9** | Trainings | Hire an expert to train in whatever is required | $ 15,000.00 |
| 13 | HUMAN RESOURCES RISK | INFORMATION LEAK |  | 1 | 4 | **4** | Confidentiality agreements | Take legal action |  |
| 14 | HUMAN RESOURCES RISK | INTERNAL ROBBERY |  | 1 | 4 | **4** | Hire someone new team members | Take legal action |  |
| 15 | HUMAN RESOURCES RISK | LOW PERFORMANCE |  | 2 | 3 | **6** | Compromise agreements with the staff | Use coaching |  |
| 16 | FACILITIES RISK | FIRE |  | 1 | 4 | **4** | Safety signs and fire extinguishers | Follow legal measures |  |
| 17 | FACILITIES RISK | EARTHQUAKE |  | 1 | 4 | **4** | Safety signs and training videos | In case of damage to the workspace, relocate the office |  |
| 18 | FACILITIES RISK | EXTERNAL ROBBERY |  | 1 | 4 | **4** | Safety videos | Increase surveillance and security devices in case the company is at risk of the incident happening again |  |
| 19 | FACILITIES RISK | CYCLONE |  | 1 | 4 | **4** | Safety signs and training videos | Evacuate and follow the measures established by the government |  |
| 20 | FACILITIES RISK | OBSOLET HARDWARE |  | 2 | 3 | **6** | Validate that the hardware that was purchased is what is needed | Buy the required hardware |  |
| 21 | FACILITIES RISK | DEFECTIVE FACILITIES |  | 1 | 3 | **3** | Check the facilities | Repair the facilities before starting the development of the project |  |
| 22 | FINANCIAL RISK | MONEY TRAFFIC OR THEFT |  | 1 | 4 | **4** | Monetary penalties | Take legal action |  |
| 23 | FINANCIAL RISK | INCREASE IN TAXES |  | 3 | 4 | **12** | Fund to mitigate inflation and tax increase | Adjust costs | $50,000 |
| 24 | FINANCIAL RISK | BREACH OF PAYMENTS |  | 1 | 4 | **4** | Check total budget | Remuneration of 3% for the breach of the company for all workers |  |
| 25 | FINANCIAL RISK | DEVALUATION OR INFLATION OF THE CURRENCY |  | 2 | 3 | **6** | Comply with the times established in the schedule | Adjust the salary of the employees to the percentage of devaluation that is had |  |
| 26 | TECHNICAL RISK | HACKING ATTEMPT |  | 1 | 3 | **3** | Follow the measures established for the development | Increase security so that another incident does not occur again |  |
| 27 | TECHNICAL RISK | LICENSES NOT AUTHORIZED |  | 2 | 3 | **6** | Verify that the licenses that are necessary for development have been acquired | Pay the fine to the company and acquire the license |  |
| 28 | TECHNICAL RISK | NO TECHNOLOGY PLAN |  | 1 | 3 | **3** | Verify that the technology plan is correct and elaborated | Prepare the technology plan based on the project |  |
| 29 | TECHNICAL RISK | MISUSE OF TECHNOLOGIES |  | 3 | 3 | **9** | Deliver regulations to employees to prevent misuse of equipment | Punish the misuse of the development team to those who do not comply with the established agreements | $5,000 |
| 30 | TECHNICAL RISK | EQUIPMENT FAILURE |  | 1 | 3 | **3** | Verify that the purchased equipment is in the best conditions | Make the necessary repairs and if it is not possible to acquire new equipment |  |
| 31 | POLITICAL RISK | CHANGE OF SCOPE AND OBJECTIVES |  | 2 | 4 | **8** | Validate during the analysis stage that the scope and objectives are correct with the client. | Sign agreements to avoid change of scope and objectives in the development stage | $15,000 |
| 32 | POLITICAL RISK | STAFF STRIKE |  | 1 | 3 | **3** | Sign agreements to avoid change of scope and objectives in the development stage | Take legal action |  |
| 33 | POLITICAL RISK | WAR |  | 1 | 4 | **4** | Government training videos | Follow the instructions indicated by the government |  |
| 34 | POLITICAL RISK | EXPROPRIATIONS |  | 1 | 4 | **4** | Work following the regulations and laws established by the government | Follow government instructions |  |
| 35 | POLITICAL RISK | EXTERNAL SANCTIONS |  | 1 | 4 | **4** | Work following the regulations and laws established by the government | Follow government instructions |  |
| 36 | DEVELOPMENT RISK | PLANNING MISTAKES (PROCESSES & TIMES) |  | 2 | 3 | **6** | Validate all documentation generated for planning | Redo the planning |  |
| 37 | DEVELOPMENT RISK | DISABLED ANALYSIS |  | 1 | 4 | **4** | Keep the analytics team or analyst motivated | Find new staff and delegate activities to the administrator |  |
| 38 | DEVELOPMENT RISK | HIDDEN FAILURES IN PROGRAMMING CODE AND DATA BASES |  | 2 | 4 | **8** | Deliver the complete documentation to the database team | Hire an expert who supports the database | $10,000 |
| 39 | DEVELOPMENT RISK | TESTING FAILURES |  | 2 | 3 | **6** | Have very well established functional and non-functional requirements | Document and correct testing errors |  |
| 40 | DEVELOPMENT RISK | IMPLEMENTATION FAILURES |  | 3 | 4 | **12** | Generate the necessary documentation to correctly carry out the implementation | Designate the developers in the implementation | $30,000 |
| 41 | DEVELOPMENT RISK | FAILURES IN CONTRACT |  | 1 | 4 | **4** | Legally verify the contract presented | Legally resolve any discrepancy or conflict resulting from the contract |  |
| 42 | TECHNICAL RISK | INCORRECT TIMES IN SCHEDULES |  | 1 | 3 | **3** | Check the times established in the schedule | Hire more staff so that the development of the software is in the established times |  |
| 43 | HUMAN RESOURCES RISK | LACK OF KNOWLEDGE IN THE METHODOLOGY |  | 2 | 3 | **6** | Interview staff before being hired | Training videos |  |
| 44 | HUMAN RESOURCES RISK | MEDIOCRE ANALYSIS |  | 2 | 4 | **8** | Verify with the clerk and with the administrator the generated S.R.S | Hire a senior analyst for support | $20,000 |
| 45 | HUMAN RESOURCES RISK | LACK OF ORGANIZATION IN THE DEVELOPMENT TEAM |  | 2 | 3 | **6** | Training videos and supervision | Apply company regulations |  |
| 46 | HUMAN RESOURCES RISK | INSUFFICIENT DEVELOPMENT TEAM |  | 1 | 3 | **3** | Hire the required members | Hire more trained staff |  |
| 47 | DEVELOPMENT RISK | SUPPLIER FAILURES |  | 2 | 3 | **6** | Compromise agreements | Take legal action |  |
|  |  |  |  |  |  |  |  | **BUDGET** | $190,000 |