Second Hand

Risk Management

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12/17/20

IT Project Management

Contents

Risk Registry

Positive Risks

#	Rank	Name	Description	Category	Type	Root cause	Trigger	Risk Owner	Probability	Impact	Status
R6	1	Platform	Professionally designed platform with optimized backend processing may distinguish the business from competitors	Technology	Positive	Consistently achieving set business/financial goals	Platform performance, design, eager to improve fame and user acquisition	Mike, Charlie	9	7	In progress
R2	2	User feedback	Getting feedbacks from users may assist on developing varied customer segmentation techniques	Other	Positive	Modelling business strategies based on user preferences	Product improvement, understanding users, obtaining testimonials and reviews	James, Richard	4	10	Waiting
R4	3	Advertisement	Advertisement of the platform over social media may both increase the sales rate and push other people to raise awareness on wastefulness	Other	Positive	Willing to get more sales and interaction from/with target audience	Driving targeted traffic to the platform, rapidly increasing ROI rate on social media ads, gaining insights into users	Emma	10	3	In progress
R8	4	Monthly discounts	Offering monthly discounts on certain products under the control of owner	Financial	Positive	Engaging sellers into business at an optimum time to increase sales	Boosting CLV, analyzing post-purchase user behavior	James, Finn	2	6	Open
R10	4	Return/Refund policy	Having smooth and trusted return/refund policy may let customers to carry out confident shopping	Other	Positive	Willing to observe an enhancement in the user satisfaction and user list	Changed buyer mind, late shipping, putting return/refund procedure into action upon buyer request	Altun, James	4	3	Open

Negative Risks

#	Rank	Name	Description	Category	Type	Root cause	Trigger	Risk Owner	Probability	Impact	Status
R1	1	Security threat	Cyber attacks, hacking may lead to the disfunctioning of the platform	Technology	Negative	Poor security requirement collection and set-up	Attackers' interest on IT infrastructure, client lists, financial details of business	Sabina	9	8	Open
R12	2	Database failure	Loss of non-volatile memory/data	Technology	Negative	Sync backup mechanism	Unsolved configuration bugs, system crash, user errors, sabotage to data, hardware or software facilities, network/power failure, natural disasters	Sabina	7	10	In progress
R11	3	System failure	Unexpected system failures may lead to downtimes, crashes, as a result, customer disputes	Technology	Negative	Lack of precaution in development and post-delivery	Code errors, traffic overloads - DDoS attacks, PaaS and DNS provider downtime, hosting expiration	System admin, Mike, Charlie and Özgür	7	9	In progress
R3	4	User privacy	Personal data breach (financial details, login credentials) may result decline in the platform reputation and user list	Technology	Negative	Poor security requirement collection and set-up	Cyber attack(s)	Sabina	3	10	In progress
R5	4	Budget overrun	Spending more than estimated amount of money to complete the project	Financial	Negative	Inaccurate OPEX/CAPEX planning	Deviating from design decisions, estimation errors in high-level requirements, schedule extension/compression, inefficient stakeholder communication	Sabina	3	10	Open
R7	5	Time excess	Delay in the fulfillment of WBS tasks may jeopardize to meet the delivery date	Other	Negative	Weak OPA/EEF consideration, insufficient work done by team members	Deviating from design decisions, estimation errors in high-level requirements, schedule extension, inefficient stakeholder communication, health issues	Sabina	3	9	Open
R13	6	Shipping delay	Exceeding the previously defined period may result in customer dissatisfaction	Other	Negative	İrresponsibility of transport service	Lack of available shipping vehicles	I - Bernard; II - Sabina, Altun	5	5	Open
R9	7	SEO measures	SEO measures may have rapid change anytime in which considerable drop in platform traffic and financial loss may be observed	Technology	Negative	Changed SEO measures to the search queries that are compatible with the content of the platform	Accessability failure to content by SE, change in hierarchical structure of platform, giving irrelevant keywords (combinations) for search queries, lack of backlinks - trustworthiness	System admin	2	8	Open
R14	8	USD rate	Increment in USD rate	Financial	Negative	Economic activity and outlook of US	Higher interest rates, political and economic stability and the demand for US goods and services	Finn	3	3	Open

Qualitative/Quantitative Analysis

Evaluation has been done according to expert judgement, benchmarking, and analogous estimation. Giving cost estimations of some risks for quantitative analysis by the existing statistics was not applicable.

P – probability

I – impact

#	Name	Reason
R1	Security threat	There is an estimated cyber-attack every 39 seconds and they cost small businesses 115-120K on average; therefore, P = 9 and I = 8
R2	User feedback	Most users (25/26) do not bring up their satisfaction/complaints, they stay/leave the business without a word. However, according to statistics, businesses that reply to at least 25% of reviews see an average revenue increase of 35% which may lead to hitting BEO before estimated time; therefore, P = 4 and I = 10
		Average probability that a business may encounter a data breach has been increased to 27.7% compared to last year's 25.6% according to Ponemon

R3	User privacy	Institute and IBM Security global survey and the cost of each breached record is ~$250, if the average is taken, then the cost remarkably exceeds the budget and may result in the cancellation of the project; therefore, P = 3 and I = 10
R4	Advertisement	To grab the attention of market and users, advertisement is a powerful tool to use to show its positive effect on the sales rate and customer acquisition; using it in the right time and place may bound the revenue by 20-25% every year; therefore, P = 10 and I = 3
R5	Budget overrun	Although large IT projects run 45% over budget on average, with proper budget planning the risk is not likely to occur easily; whereas, in case of occurrence, the project will not be funded and cancelled; therefore, P = 3 and I = 10
R6	Platform	The probability of the risk to occur is high because the platform will be designed and developed according to the latest trends as well as following the recent standards of design decisions of backend and processing. More competitive the platform is, the more the platform reputation and monthly income will increase; therefore, P = 9 and I = 7
R7	Time excess	It is highly unlikely that the risk will occur because the WBS has been created with experts and team members to give the proper time estimation though 7% of large IT projects run over time; in case of occurrence, need for financial resource increases to mitigate the impact; therefore, P = 3 and I = 9
R8	Monthly discounts	It is not guaranteed that all/majority of sellers are always in favor of reducing the price of products through their lifetime in the business; if monthly discounts are applied, according to statistics, 67% of consumers claim that they have made an unexpected purchase after noticing the discount and 80% of buyers note that they have made a purchase with discount from particular platform which may help to boost CLV and sales rate; therefore, P = 2 and I = 6
R9	SEO measures	Monitoring changes, search terms and rankings can help to reduce the cost of advertisement over internet and with weekly planned schedule of monitoring, the probability of occurrence is significantly low; however, low ranking, changed keywords may lead to notable drop in monthly revenue; therefore, P = 2 and I = 8
R10	Return/Refund policy	Despite the fact that the risk is positive, if the policy is put into action, we lose from the financial side, at the same time, gain from buyer satisfaction side which may assist on buyer retention; probability of happening the case is low because all details of product(s) is(are) shared on the description and few unexpected reasons (changed mind, late shipping) may result in the return/refund state; therefore, P = 4 and I = 3 (rate is calculated as a damage)
R11	System failure	Probability of having a downtime because of system dependent reasons is low because it will be kept under regular maintenance (daily monitoring); yet DDoS attacks, PaaS and DNS provider downtimes will increase the probability. According to the last year's statistics, the cost of downtime on average for this kind of business is ~$10K/min; therefore, P = 7 and I = 9
R12	Database failure	Error-free configured database with sync backup service may keep the probability of happening the case on average; however, system failure (as a part of infrastructure) or damage to physical storage may increase the probability – 7. If the data loss happens which means the loss of user/historical data, transactions, it is equivalent to data breach; therefore, the impact is 10

R13	Shipping delay	Probability rate highly depends on the responsibility of transport service; if the case repeats more than to be tolerated, then project manager and lawyer take the responsibility and act accordingly. Impact rate is correlated with the number of shipping requests - the average rate has been taken; therefore, P = 5 and I = 5
R14	USD rate	According to the statistics, USD weakens and may collapse by the end of 2021; thus, the probability for the risk to occur is quite low – 3. In case of occurrence, having the project budget - $300K (contingency reserves is not included) and hiring new CS representative for half a year may cost ~$50K higher than this year which is not a big deal for the project budget; therefore, impact is 3

Impact of each risk is defined cooperating with finance manager according to the rate of impact by the monetary values.

Impact value criteria

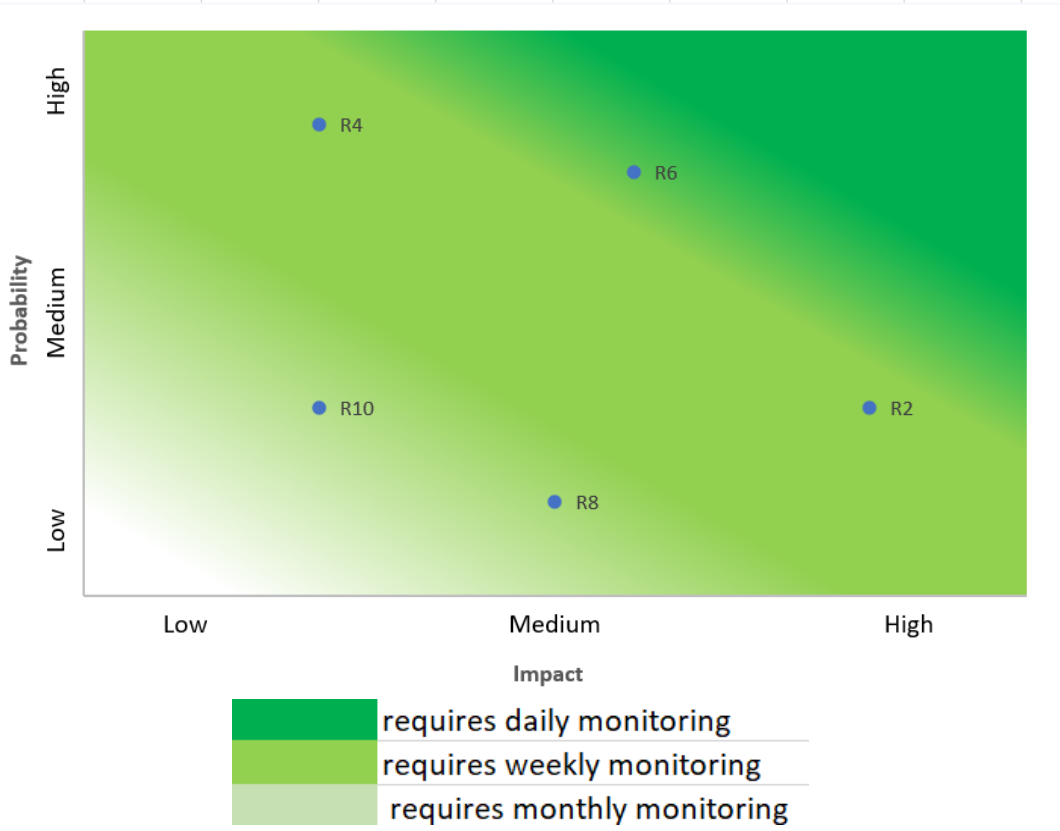
Rate №	Damaging the project ($)	Bringing profit to the project ($)
1	15K	135K
2	30K	150K
3	45K	165K
4	60K	180K
5	75K	195K
6	90K	210K
7	105K	240K
8	120K	255K
9	Requiring more than contingency reserves	270K
10	Cancelling project	Hitting BEO before estimated time

Top 10 risks

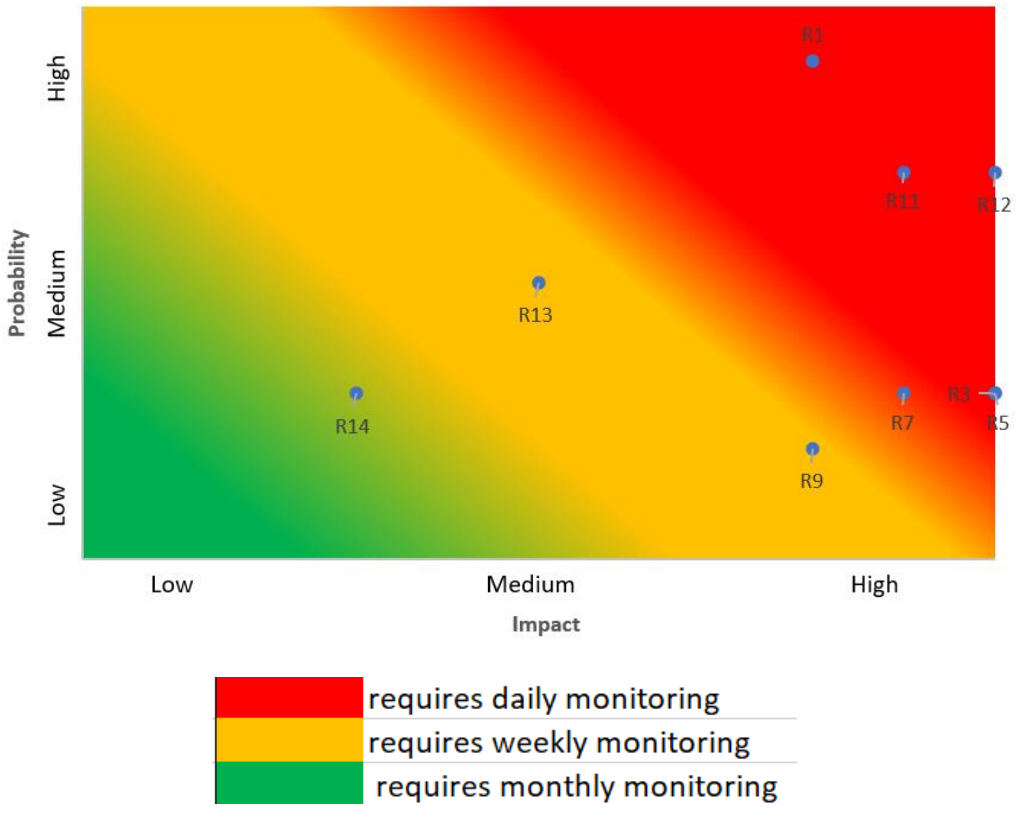
#	Name	Probability	Impact	Score (I * P)
R1	Security threat	9	8	72
R12	Database failure	7	10	70
R6	Platform	9	7	63
R11	System failure	7	9	63
R2	User feedback	4	10	40
R3	User privacy	3	10	30
R4	Advertisement	10	3	30
R5	Budget overrun	3	10	30
R7	Time excess	3	9	27
R13	Shipping delay	5	5	25

Probability/Impact Matrix

For positive risks



For negative risks



Risk Responses

#	Response	Explanation
R1	Mitigation	As the clients and infrastructure of the business is under danger, the effort should be put to minimize the impact
R2	Exploitation/Enhancement	Due to the probability of risk, marketing strategies should be implemented to exploit and enhance the social and economic influence in case of occurrence
R3	Avoidance	Exposing sensitive data has an inevitably negative impact on the reputation and budget such that for newly initiated project, cancellation might be the most suitable option
R4	Enhancement	More platform is advertised, more social effect and profit margin may increase
R5	Avoidance	Without enough funding, product cannot be delivered
R6	Exploitation	Frontend and backend design/development should be done in a way that meets the latest standards of web-based businesses
R7	Mitigation	Delivering the product on time requires schedule compression and by implementing the techniques, which require additional financial resources, the impact of the risk may be diminished
R8	Acceptance	-
R9	Mitigation	Social and economic impact should be decreased by identifying and applying technical strategies
R10	Acceptance	-
R11	Mitigation	Social and economic impact should be decreased by identifying and applying technical strategies
R12	Mitigation/Avoidance	Depending on the reason of failure the impact can be mitigated (system crash, network/power failure, config bugs) or avoided (natural disaster, physical storage corruption, cyber-attack to data)
R13	Transference	Responsibility should be shared with transfer service provider
R14	Acceptance	The risk globally impacts the market