ELIMINATING HEALTHCARE FRAUD – THE HEALTH INFORMATICS WAY

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Problem Statement

- In the current scenario, a manual billing system has no way of verifying the fraudulent activity.

- There is no feasible way of identifying whether the bills generated are real or fraudulent.

- Analysis during audits have recovered services of 90,000$ rendered to illegal charging of services by upcoding the services in the final bill provided to the patients and has traced 5 personnel involved in this fraud.

Solution

- The vision is to build a multifaceted solution by developing an unassailable AI integrated billing verification system named MedTrack that prohibits human errors and upcoding.

- MedTrack provides access to authorized personnel only because of the two-factor authentication system.

- It stops fraudulent activities created by entry of wrong services imputed by humans, converts a complete manual, paper-based system to an electronic AI integrated system.

- The investment of $2,40,000 will be contributed towards getting the licensure for the software, integration of services, training, and onboarding of the IT staff, implementation of the new hardware infrastructure and finally fees towards maintaining the software.

Benefits

- Fraud Elimination in the Billing system.

- Increase in net revenue by decreasing write-offs.

- Increase in Regulatory Compliance.

- Increase in the reputation of the brand.

- Code of ethics maintained among the healthcare personnel.

ROI Analysis

Initial Investment – 2,40,000$

Financial Benefits – First year - $500,000,

Second year - $700,000,

Third Year - $900,000

	Current Year	First Year	Second Year	Third Year
Present value of estimated future benefits		462,963	600,137	714,449
Discount Rate is 8%				
Total net present value of estimated future benefits		$1,537,549		
Calculating the value of the investment				
Calculating the simple rate of return at day 1		641%		
Rate of return by year	292%	208%	292%	375%
Calculating the value based on a revenue multiplier of 6.4		$3,200,000	$4,480,000	$5,760,000
Calculating the value based on EBITDA (net income) multiplier of 20.0	$10,000,000	$14,000,000	$18,000,000	

- There is a positive net present value, hence, future benefits are going to be more than the initial investment of 2,40,000$.
- Hence, the implementation and integration of the tool will be beneficial financially for the hospital. The rate of Return shows that in the next 3 years, there will be an increase by a huge profitable margin.
- As seen for the EBIDTA multiplier, the revenue generated for the future years shows that the valuations would be more than the investment which is made in the current year.
- Hence, all the measures (NPV,ROI,and EBIDTA multiplier) are showing profitability for the next 3 years.

Risks

Procurement of this technology,

Hiring of new technical employees for the audit team,
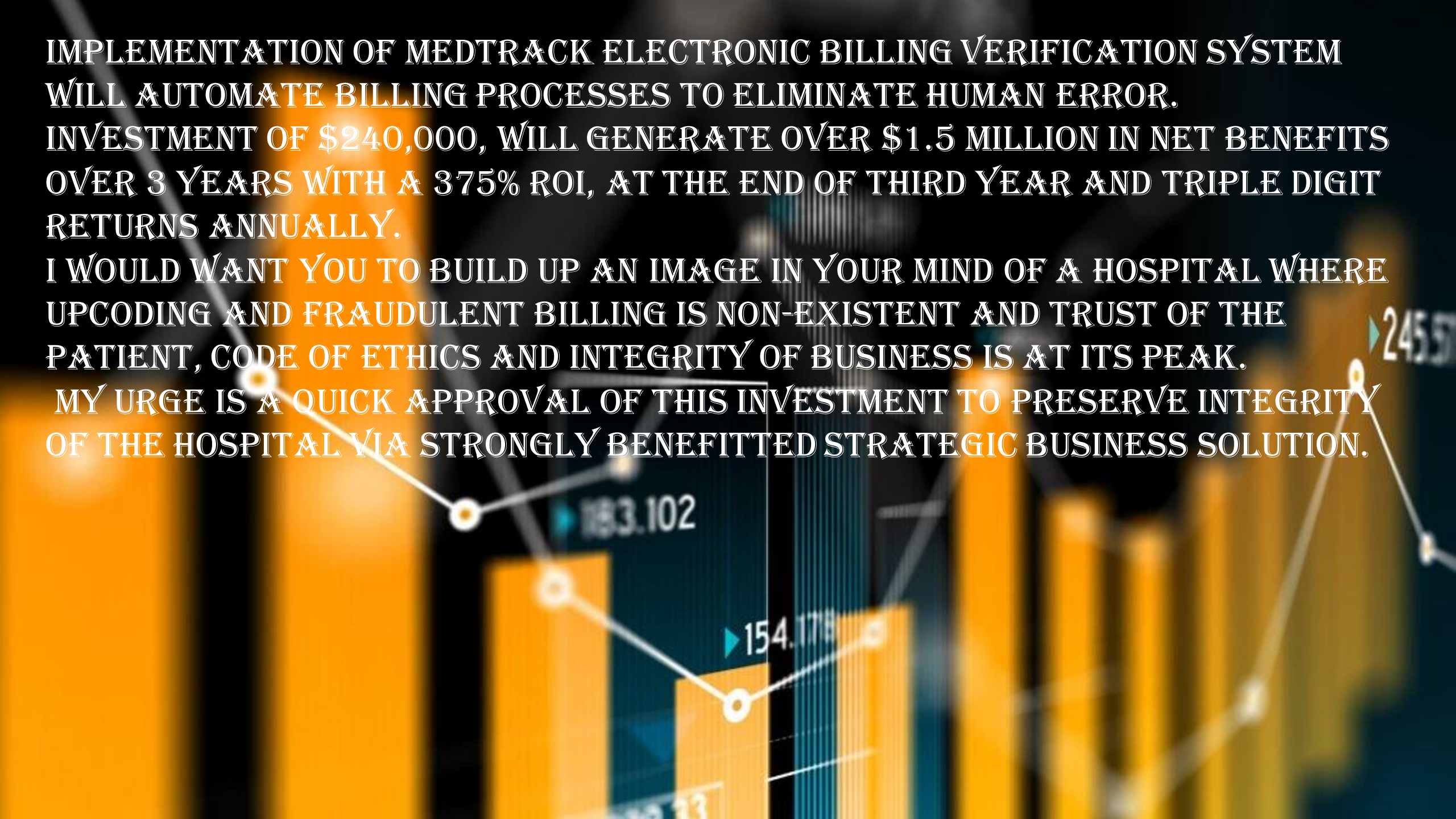
Lack of funds for funding,

Resistance to change seen from healthcare personnel,

Increase in bias leading to non-compliance of new system.

IMPLEMENTATION OF MEDTRACK ELECTRONIC BILLING VERIFICATION SYSTEM WILL AUTOMATE BILLING PROCESSES TO ELIMINATE HUMAN ERROR.

INVESTMENT OF $240,000, WILL GENERATE OVER $1.5 MILLION IN NET BENEFITS OVER 3 YEARS WITH A 375% ROI, AT THE END OF THIRD YEAR AND TRIPLE DIGIT RETURNS ANNUALLY.

I WOULD WANT YOU TO BUILD UP AN IMAGE IN YOUR MIND OF A HOSPITAL WHERE UPCODING AND FRAUDULENT BILLING IS NON-EXISTENT AND TRUST OF THE PATIENT, CODE OF ETHICS AND INTEGRITY OF BUSINESS IS AT ITS PEAK.

MY URGE IS A QUICK APPROVAL OF THIS INVESTMENT TO PRESERVE INTEGRITY OF THE HOSPITAL VIA STRONGLY BENEFITTED STRATEGIC BUSINESS SOLUTION.

THANK YOU