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SAP LEONARDO IOT FOR THE INTELLIGENT ENTERPRISE
OPTIONAL IDEATION CHALLENGE

EARLY BREAST CANCER DETECTION VIA SAP IOT
CATEGORY: HEALTH / MEDICINE

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EARLY BREAST CANCER DETECTION VIA SAP IOT

In New Jersey, John lives with mother. John is very intelligent and kind heart personality. He completed bachelor degree in computer science with specialization of Artificial Intelligence and joined an IT company in artificial intelligence field. His work is going very interesting way like he is involving to derive AI logic, Machine learning and developing the new products. John mother also very pleased to see him. His mother always used to tell john. Be a lifelong learner and Always helpful for others. This will assist for your entire life and you would live in meaningful way of life. After few years John mother died because of breast cancer. This cancer found in final stage. So the cancer spread through the whole body. John could not bear this great loss in his life. Then he left the job. Not able to do anything. Because entire her life sacrificed for John.
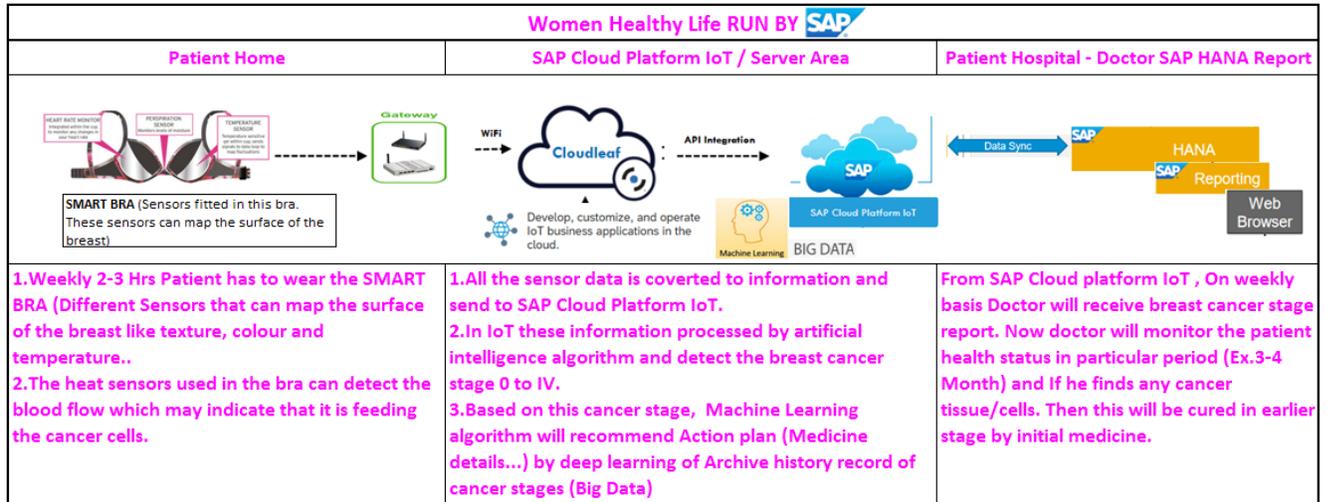
After few months John started to job search. During this period of time SAP launched new team of SAP Leonardo. For this SAP posted vacancy for Artificial Intelligence/ Machine Learning expert. John attended the interview, Based on his knowledge selected for this position. He is very happy. But his mother is no more to share his happiness. Finally he joined SAP America and started induction program. During induction program SAP team explain about their SAP Vision **"At SAP, our purpose is to help the world run better and improve people's lives. Our promise is to innovate to help our customers run at their best…"**Based on this vision his mind started to think about his mother. She died because of breast cancer. This we found in final stage. Due to this I could not saved my mother. If this find in early stage may be my mother is alive now. Like this how many persons suffering in this world. Then he started search in the internet about statistics of breast cancer. Lung and breast cancers were the most common cancers worldwide, each contributing 12.3% of the total number of new cases diagnosed in 2018.

Rank	Cancer	New cases diagnosed in 2018	% of all cancers (excl. non-melanoma skin cancer)
	All cancers*	17,036,901	
1	Lung	2,093,876	12.3
2	**Breast**	**2,088,849**	**12.3**

Finally he decided to develop new innovative product to detect this cancer in early stage. For this also he searched in the internet, till now it is under proto type stage only. That too SMART BRA concept to detect the early stage cancer without complete scenario. John mind evolving to

develop this innovative product. Because SAP is technologically equipped organization. SAP will encourage this innovative product. Now John is working very hardly to derive this new business model. Finally he prepared architecture presentation and explaining to his project manager.

Women Healthy Life RUN BY SAP		
Patient Home	SAP Cloud Platform IoT / Server Area	Patient Hospital - Doctor SAP HANA Report
1.Weekly 2-3 Hrs Patient has to wear the SMART BRA (Different Sensors that can map the surface of the breast like texture, colour and temperature.. 2.The heat sensors used in the bra can detect the blood flow which may indicate that it is feeding the cancer cells.	1.All the sensor data is coverted to information and send to SAP Cloud Platform IoT. 2.In IoT these information processed by artificial intelligence algorithm and detect the breast cancer stage 0 to IV. 3.Based on this cancer stage, Machine Learning algorithm will recommend Action plan (Medicine details...) by deep learning of Archive history record of cancer stages (Big Data)	From SAP Cloud platform IoT , On weekly basis Doctor will receive breast cancer stage report. Now doctor will monitor the patient health status in particular period (Ex.3-4 Month) and If he finds any cancer tissue/cells. Then this will be cured in earlier stage by initial medicine.

After seeing above mentioned presentation project manager is in high spirits. He told to john, really good job but in real time this immense project is it possible, whether company will provide enough funds to finish this project. For that also I have a solution. NCI are funding for breast cancer research to uplift the women life in society. Also Triumph International is a company making brassier product since 1886. They are also proud sponsor of breast cancer foundation around the world. I have derived new business model as below.

Women Healthy Life RUN BY SAP		
Technology Partner	Product Development Partner	Breast Cancer Research & Fund Partner
New Business Model		

Project Manager approached to higher management. They decided to approve this project will **improve people's lives.** Now SAP started to disclose this plan to partners. "**Whoever saves a life, it is as though he had saved all mankind**". **BE A WORLD CITIZEN to save the people around the world...**

The Story End but Innovation will begin from SAP