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|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Define CS, fit into CC                   | <div>1. CUSTOMER SEGMENT(S)<div>CS</div></div> <div>Customer who need to identify the digit from handwritten form</div>                                  | <div>6. CUSTOMER CONSTRAINTS<div>CC</div></div> <div>It requires much more computation than more standard OCR techniques</div>                                                                                                         | <div>5. AVAILABLE SOLUTIONS<div>AS</div></div> <div>Handwritten digit recognition using MNIST dataset is a major project made with the help of Neural Network.It basically detects the scanned images of handwritten digits</div> | Explore AS, differentiate                |
| Focus on J&P, tap into BE, understand RC | <div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&amp;P</div></div> <div>Differrent people handwriting varies from each other and they struggle to identify</div> | <div>9. PROBLEM ROOT CAUSE<div>RC</div></div> <div>From the number 0 to 9 it's shapes and design are vary.Further according to individual person their handwriting also varies.Thus this handwritten digit recognition is needed</div> | <div>7. BEHAVIOUR<div>BE</div></div> <div>The output of an OCR run for an clear image and comparing it to the original version of the same text gives good accuracy</div>                                                         | Focus on J&P, tap into BE, understand RC |

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| Identify strong TR & EM | <b>3. TRIGGERS</b> <b>TR</b><br><br>While they recognition the handwritten digit                         | <b>10. YOUR SOLUTION</b> <b>SL</b><br><br>Neural Network is used to recognise and predict the handwritten digits.Dataset are trained using gradient descent back propagation algorithm and tested using the feed forward algorithm.<br>Observing the system performance with variation of number of hidden units and iteration.Using this method, digits recognised and its accuracy will be high upto 99% .So we get good output | <b>8.CHANNELS of BEHAVIOUR</b> <b>CH</b><br><b>8.1.ONLINE</b><br>Here extract from block<br><b>8.2.OFFLINE</b><br>Here extract from different user for handwriting | Extract online & offline CH of BE |
|                         | <b>4. EMOTIONS: BEFORE / AFTER</b> <b>EM</b><br><br>Dilemma,exhausted into satified ,hopeful and comfort |                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                    |                                   |