

| Journey Steps Which step of the experience are you describing? | Discovery Why do they even start the journey? | Registration Why would they trust us? | Onboarding and First Use How can they feel successful? | Sharing Why would they invite others? |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Actions What does the customer do? What information do they look for? What is their context? | <div data-bbox="740 301 870 440">The purpose of this study is to create an automated framework that can recognise similar handwritten digit strings</div> | <div data-bbox="1156 301 1286 440">The list is a compilation of terminology and meanings used in this report.</div> <div data-bbox="1341 301 1471 440">Many similar studies were influenced by our work on digital identification</div> <div data-bbox="1526 301 1656 440">using machine learning techniques such as an SVM (support vector machine)</div> | <div data-bbox="1854 301 1984 440">subset of machine learning and are at the heart of deep learning algorithms</div> <div data-bbox="2072 301 2202 440">Their name and structure are inspired by the human brain</div> <div data-bbox="2289 301 2419 440">mimicking the way that biological neurons signal to one another</div> | <div data-bbox="2552 301 2682 440">To start the training of the model we can simply call the model</div> <div data-bbox="2738 301 2867 440">fit() function of Keras</div> <div data-bbox="2923 301 3053 440">It takes the training data</div> |
| Needs and Pains What does the customer want to achieve or avoid? <i>Tip: Reduce ambiguity, e.g. by using the first person narrator.</i> | <div data-bbox="652 581 782 720">using machine learning techniques such as an SVM (support vector machine)</div> <div data-bbox="837 581 967 720">the generative models can perform recognition driven segmentation</div> | <div data-bbox="1162 581 1292 720">detection of vehicle number</div> <div data-bbox="1347 581 1477 720">banks for reading cheques</div> <div data-bbox="1533 581 1662 720">post offices for arranging letter</div> | <div data-bbox="1861 581 1991 720">based on shape analysis of the digit image and extract slant or slope information</div> <div data-bbox="2062 581 2192 720">They are effective in obtaining good recognition accuracies</div> <div data-bbox="2296 581 2426 720">called Slope Detail (SD) features for handwritten digit recognition</div> | <div data-bbox="2552 581 2682 720">This project is beginner-friendly and can be used by data science newbies.</div> <div data-bbox="2738 581 2867 720">We have created and deployed a successful deep learning</div> <div data-bbox="2923 581 3053 720">draw a digit on the canvas then we classify the digit and show the results</div> |
| Touchpoint What part of the service do they interact with? | <div data-bbox="740 832 870 971">based on shape analysis of the digit image and extract slant or slope information</div> | <div data-bbox="1156 832 1286 971">the process to provide the ability to machines to recognize human handwritten digits.</div> <div data-bbox="1341 832 1471 971">It is not an easy task for the machine because handwritten digits are not perfect.</div> <div data-bbox="1526 832 1656 971">vary from person-to-person</div> | <div data-bbox="1854 832 1984 971">important role for digital libraries</div> <div data-bbox="2072 832 2202 971">textual information into computers by digitization</div> <div data-bbox="2289 832 2419 971">image restoration</div> | <div data-bbox="2552 832 2682 971">Mean center the each training digit</div> <div data-bbox="2738 832 2867 971">Form the Covariance Matrix</div> <div data-bbox="2923 832 3053 971">Knearest neighbor classifier</div> |
| Customer Feeling What is the customer feeling? <i>Tip: Use the emoji app to express more emotions</i> | <div data-bbox="773 1107 837 1164">😬</div> | <div data-bbox="1373 1107 1438 1164">😞</div> | <div data-bbox="2072 1107 2137 1164">😞</div> | <div data-bbox="2770 1107 2835 1164">😬</div> |
| Backstage | | | | |
| Opportunities What could we improve or introduce? | <div data-bbox="587 1421 1026 1528">Increase/decrease a leading metric by improving X or</div> | <div data-bbox="1172 1421 1611 1528">Increase/decrease a leading metric by improving X or</div> | <div data-bbox="1757 1421 2195 1528">Increase/decrease a leading metric by improving X or</div> <div data-bbox="2293 1402 2423 1537">Neural Network</div> | <div data-bbox="2585 1421 3023 1528">Increase/decrease a leading metric by improving X or</div> |
| Process ownership Who is in the lead on this? | <div data-bbox="740 1673 870 1808">Accurate Recognition</div> | <div data-bbox="1341 1673 1471 1808">Satisfaction</div> | <div data-bbox="2039 1673 2169 1808">Clarification</div> | <div data-bbox="2738 1653 2867 1789">Perfect Digit</div> |