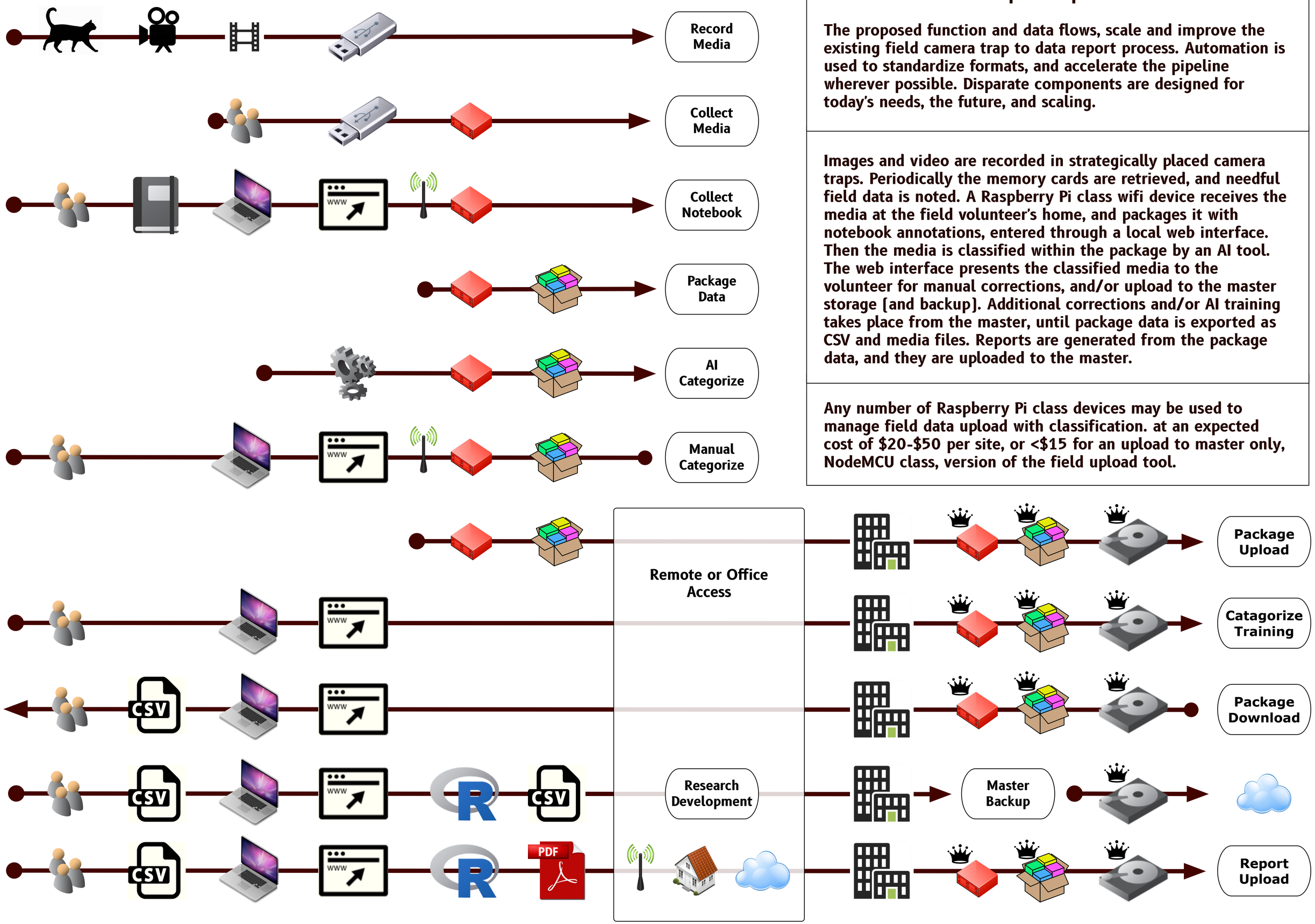

Camera Trap to Report Workflows

The proposed function and data flows, scale and improve the existing field camera trap to data report process. Automation is used to standardize formats, and accelerate the pipeline wherever possible. Disparate components are designed for today's needs, the future, and scaling.

Images and video are recorded in strategically placed camera traps. Periodically the memory cards are retrieved, and needful field data is noted. A Raspberry Pi class wifi device receives the media at the field volunteer's home, and packages it with notebook annotations, entered through a local web interface. Then the media is classified within the package by an AI tool. The web interface presents the classified media to the volunteer for manual corrections, and/or upload to the master storage (and backup). Additional corrections and/or AI training takes place from the master, until package data is exported as CSV and media files. Reports are generated from the package data, and they are uploaded to the master.

Any number of Raspberry Pi class devices may be used to manage field data upload with classification. at an expected cost of $20-$50 per site, or <$15 for an upload to master only, NodeMCU class, version of the field upload tool.