We enrich the Chow Quotient of a toric variety $V$ by a subtorus $H$ of its torus, constructed by Sturmfels, Kapranov and Zelevinsky, with the structure of a toric stack. The additional stack structure is natural and described by explicit combinatorial information. We then relate this Chow Quotient stack with the stack of logarithmic stable maps of Gromov-Witten theory and the stack of stable toric varieties of Alexeev and Brion. (Received September 03, 2014)