Let $G$ be a compact, connected, simply connected Lie group, and let $LG$ denote the loop group. There is a one-one correspondence between proper Hamiltonian $LG$-spaces and compact quasi-Hamiltonian $G$-spaces. We prove a 'norm-square localization' formula for the quantization of a quasi-Hamiltonian $G$-space, with terms indexed by the components of the critical set of the norm-square of the moment map of the corresponding $LG$-space. An important application is to give a new proof of a quantization-commutes-with-reduction theorem. This is joint work with E. Meinrenken.