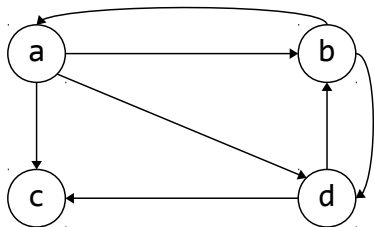# Example

Transition matrix:

$$\begin{bmatrix} 0 & 1/2 & \mathbf{0} & 0 \\ 1/3 & 0 & \mathbf{0} & 1/2 \\ 1/3 & 0 & \mathbf{0} & 1/2 \\ 1/3 & 1/2 & \mathbf{0} & 0 \end{bmatrix}$$

– New **transition matrix:**

$$\begin{bmatrix} 0 & 1/2 & \mathbf{1}/\mathbf{4} & 0 \\ 1/3 & 0 & \mathbf{1}/\mathbf{4} & 1/2 \\ 1/3 & 0 & \mathbf{1}/\mathbf{4} & 1/2 \\ 1/3 & 1/2 & \mathbf{1}/\mathbf{4} & 0 \end{bmatrix}$$

– Eventually, $\vec{v} = [1/5,\ 4/15,\ 4/15,\ 4/15]$.