should not reference the PostScript definitions corresponding to PDF procedure sets (see Section 10.1, "Procedure Sets"), which are subject to change.

4.8 Images

PDF's painting operators include general facilities for dealing with sampled images. A *sampled image* (or just *image* for short) is a rectangular array of *sample values*, each representing a color. The image may approximate the appearance of some natural scene obtained through an input scanner or a video camera, or it may be generated synthetically.



FIGURE 4.25 Typical sampled image

An image is defined by a sequence of samples obtained by scanning the image array in row or column order. Each sample in the array consists of as many color components as are needed for the color space in which they are specified—for example, one component for **DeviceGray**, three for **DeviceRGB**, four for **DeviceCMYK**, or whatever number is required by a particular **DeviceN** space. Each component is a 1-, 2-, 4-, 8-, or (in PDF 1.5) 16-bit integer, permitting the representation of 2, 4, 16, 256, or (in PDF 1.5) 65536 distinct values for each component. (Other component sizes can be accommodated when a **JPXDecode** filter is used; see Section 3.3.8, "JPXDecode Filter.)