

5VghfUW

DfcVW`gg a]b]b[]g Ub UfYU h UhgYY_g hc Yl hfUW]bg[\hg Zfca Yj Ybh`c[g cVhU]bYX Zfca k cf_ dYfZcfa YX Vm]bZca Uh]cb grghYa g" 5`h\ci [\ h\YfY \Ug U`fYUXmVYYb g[b] VWbh]a dfcj Ya Ybhcj Yf hYVX]b]ei Yg XYj Y`cdYX Zcf dYfX]W]j Y dfcVW`gg a]b]b[ž h\Y hfYbX]g hc k UfXg]bhYfdYh]b[h\Y XYhU]`g cZ h\Y Vi g]bYgg dfcVW`gg hc a U_Y VYhYf XYW]g]cbg" FYW`bhghi X]Yg dc]bh hc h\Y bYYX hc]bhYfdYh h\Y fYgi `hg cVhU]bYX k]h gi VX hYVX]b]ei Yg" H\]g dcghYf U]a g hc g\`ck fYgYUfVX cddcfhi ! b]h]Yg UbX V\U`Yb[Yg YbV\i bhYfYX]b Ub Yl d`cUhcfmfYj]Yk V\`bXi V\YX Ug dUfhcZ h\Y Ui h\`cf g XcV\`cfU` dfc`YVW`

7i ffYbhUddfcUW`Yg

DfYX]W]j Y DfcVW`gg A cb]hcf]b[fDDA ž k \]VX U]a g hc dYfX]W]h h\Y VY\Uj]cfž dYfZcfa UbVW UbX fYgi `hg cZVi g]! bYgg dfcVW`gg Uhfi bh]a Y Q&Q

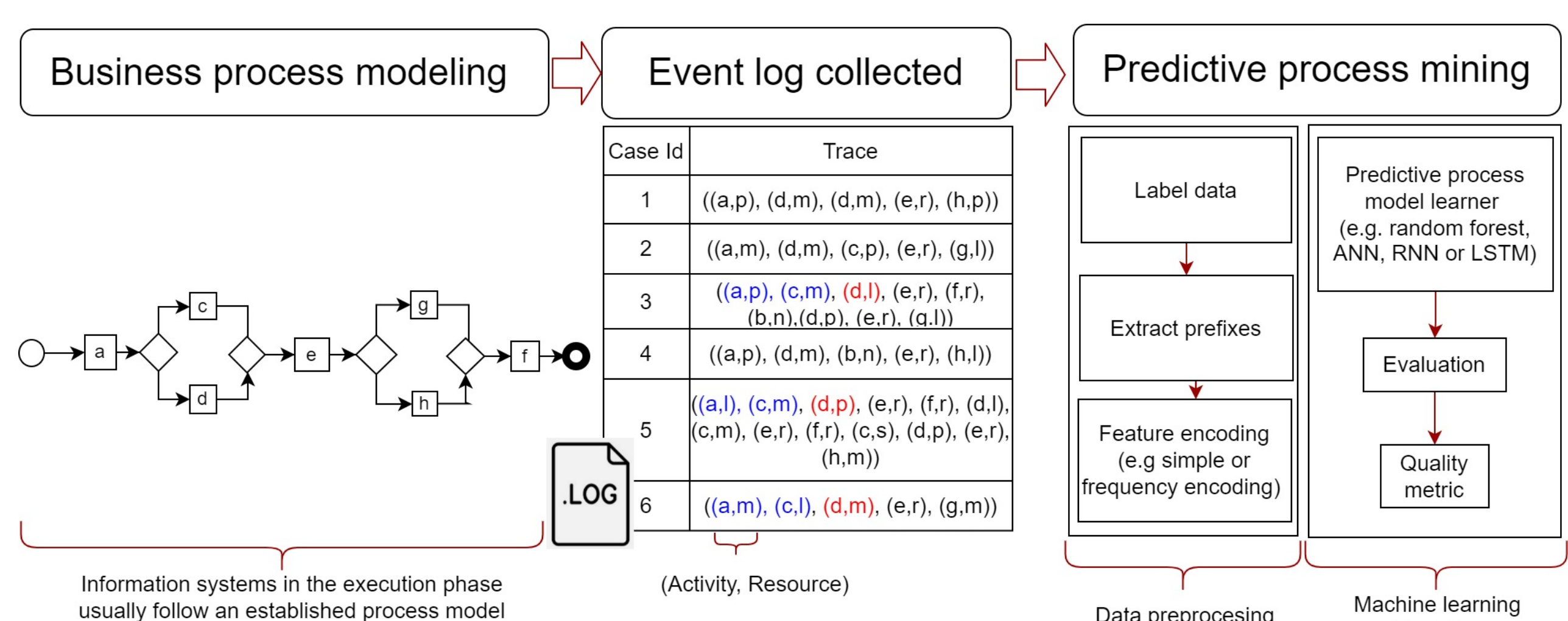


Figure 1. Traditional approaches in predictive process mining.

Cddcfhi b]h]Yg

- I bXYfghUbX]b[dYfX]W]cb]b Vi g]bYgg dfcVW`gg"
- A cb]hcf]b[Vi g]bYgg dfcVW`gg Yl YW h]cb
- A]b]a]nY h]a Y Zcf ci h\`ta Y dfcVW`gg"
- 9b\UbVW V\`ta d`Yh]h]cb h]a Y UbX ?D-g a Yhf]Vg"
- Gi ddcfh fYU`cVW]cb fYgci fVW`g"
- X]Ybh]ZmVchY bYW` VYZcfY h\YmcVW`f"
- DfYX]W]h UbX U`hYf h\Y fYgi `hcZU fi bb]b[V\W`gY"
- 5`ck Yl Ua]bY h\Y fYUgcbg Zcf h\Y fYgi `hg]b U V\W`gY"

DfcVW`gg a]b]b[]b ci f fYgYUfVX [fci d

K Y UfY dUfh cZ U [fci d cZ fYgYUfVX Yfg]bhYfYghYX]b h\Y XYj Y`cda Ybh cZ h\Y DfcVW`gg A]b]b[Y`Xž]b 6fUn` Q%Q Ci f [cU`]g hc kcf_ cb h\`fYY Zfcbhg. (i) fYgYUfVX]b dfcVW`gg a]b]b[ž X]gV\j Yf]b[dfcVW`gg a cXY`gž hfUW` Wl ghYf]b[UbX cb]bY dfcVW`gg a]b!]b / (ii) i gY cZ V\`ta di hU]cbU`]bhY`][YbW` hcc`g hc]a dfcj Y ghfUhY]Yg Zcf dYfZcfa]b[dfcVW`gg a]b]b[hUg_g/UbXž (iii) XYj Y`cda Ybh cZ\i a Ub fYgci fVW`g hc dfca chY h\Y W`hi fY cZ dfcVW`gg a]b]b[]b 6fUn`]Ub cf[Ub]nU]cbg"



Figure 2. Process mining research group [URL: <http://processmining.each.webhostusp.sti.usp.br/>]

7\U`Yb[Yg]b h\Y UfYU

ž j c`]b[]bhYfdYhU]`]mUbX Yl d`U]bUV`]m]b h\Y UfYU cZ dfcVW`gg a]b]b[]g j Yfm]a dcfhUbh VYW]i gY]h Yb! f]VX Yg h\Y]bZcfa Uh]cb Uj U]`UV`Y hc Vi g]bYgg gdYVW`U!]ghž gdYVW`U`m]b W]h]W` Xca U]bg" H\YmUfY fYU`m]b! hYfYghYX hc _bck k \mgi V\ U dYfX]W]cb k Ug a UXY O Q

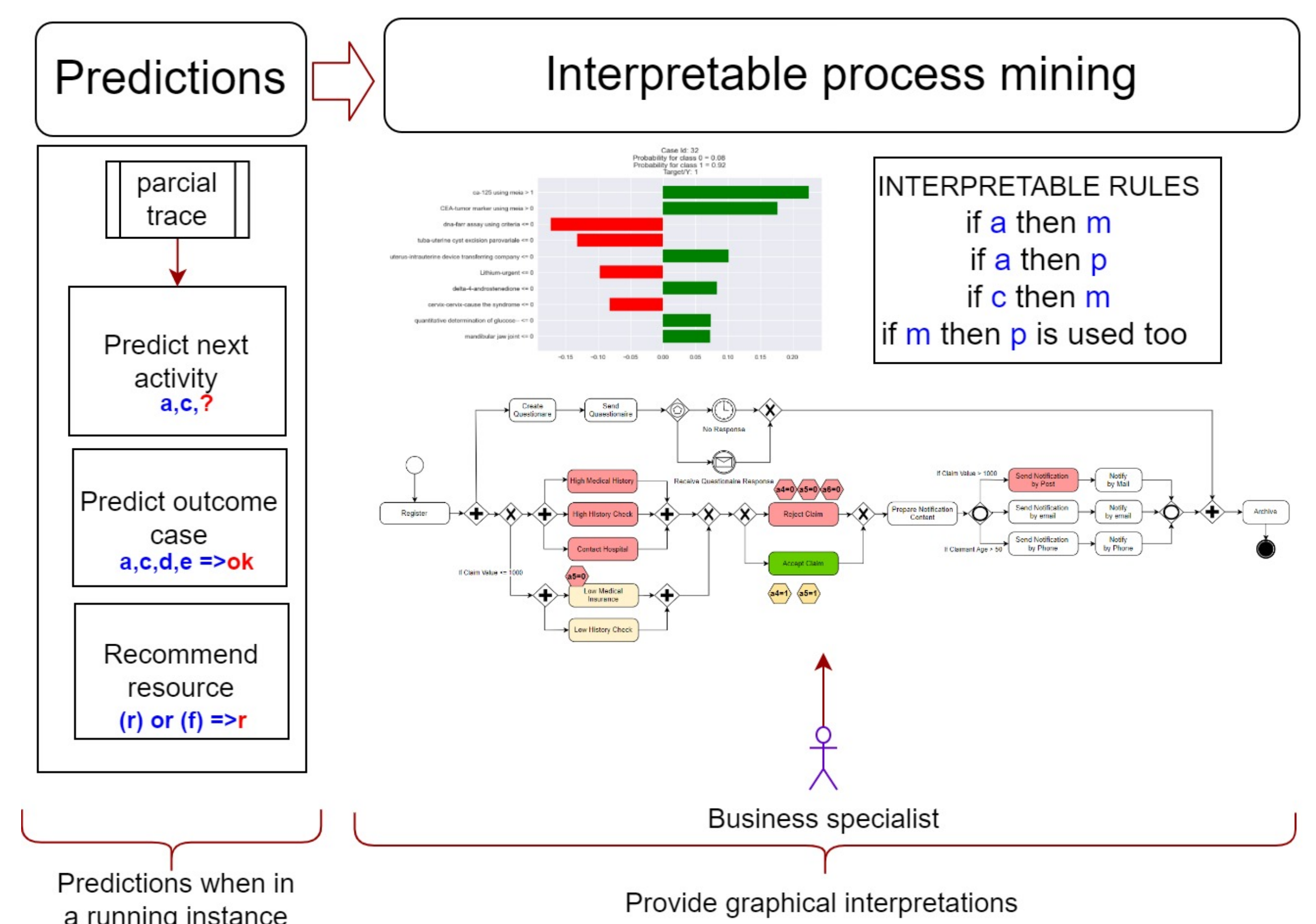


Figure 3. New challenges in process mining seek to show interpretable results.

K cf_]b dfc[fYgg

H\]g k cf_]g dUfhcZ h\Y dYgYbh]b[Ui h\`cf g XcV\`cfU` h\Yg]ž h\Y V][YghV\U`Yb[Y cZ h\]g dfc`YVW]g hc i gY h\Y dchYbh]U` cZYI]gh]b[U[cf]h\ a g]b h\Y fYVW`bh Y`X cZL5=hc []j Y a YUb]b[hc h\Y fYgi `hg cZ dYfX]W]j Y U[cf]h\ a g]b h\Y UfYU cZ dfcVW`gg a]b]b[k]h\]b cfXYf hc XY`j Yf a cfY fYUXUV`Y fYgi `hg Zcf h\Y Vi g]bYgg gdYVW`U`]gh" H\Y dfcV`Ya UXXfYggYX]b h\]g dfc`YVW` \Ug [fYUhUdd`]W]h]cb dchYbh]U` g]bVW`]h]g U V\`bhYl h\UhfYei]fYg]bhYfX]gV\`d`]bUfmk cf_ VYhk YYb gdYVW`U`]ghg]b a UW`]bY `YUfb]b[UbX Vi g]bYgg"

FYZfYbW`g

Q%QDfcVW`gg A]b]b[FYgYUfVX ; fci dž &&&"
 Q&QA " 8i a Ugž A " @U FcgUž > A YbX`]b[ž UbX < " FY]Yfg" *Fundamentals of Business Process Management* Gdf]b[Yfž &\$\$% "
 O Q=" HY]bYa UUž A " 8i a Ugž A " @U FcgUž UbX : " A U[[]" Ci h\`ta Y!cf]YbhYX dYfX]W]j Y dfcVW`gg a cb]hcf]b[. fYj]Yk UbX VYbW`a Uf_ " *ACM Transactions on Knowledge Discovery from Data (TKDD)*ž % f&Ł %) +ž &\$\$% "