DJUHHPHQW GHVLJQHG IRU WKH IDVWHVW GHYHORS
QRORJ\ $JUHHPHQW ,7$ LQ WKH :RUOG 7UDGH 2UJDQL]DWLR
RI WKH ,7$ FRQFOXGHG LQ GXH WR D ORQJVWDQGLQJ
HFRQRP\ KDV EHHQ HVWDEOLVKHG DQG VHYHUDO SURGXFW
OHWH RU WXUQHG LQWR VHUYL@`...µ L Œ`6I W0W0Tõ` ...À L^ìªëÍ%R X W

FRQWLQXHG

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:RUOG 7UDGH 2UJDQL]DWLRQ ,QIRUPDWLRQ 7
LQIRUPDWLRQ WHFKQRORJ\ FXVWRPV FODVVLÀFDW

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DJUHHPHQWV KDYH KDG WKH LPSDFW RI W
$JUHHPHQW ,7$ QHJRWLDWHG XQGHU WKH :RUOG 7UDG
DJUHHG DQG VLJQHG GXULQJ WKH :72 0LQLVWHULDO &R
KDV SURYLGHG IRU RQH RI WKH PRVW DPELWLRXV DQG
FXVWRP GXWLHV IRU HOHFWURQLF JRRGV ,7$ QHJRWLDWHG
PRVW VLJQLILFDQW WUDGH OLEHUDOLVDWLRQ WKDW KD
DQG RQO\ VHFRQG WR WKH 8UXJXD\ 5RXQG LQ WKH VFDO

)ROORZLQJ WKH ,7$ WKH WUDGH LQ LQIRUPDWLRQ WHFK
WHFKQRORJ\ ,&7 JRRGV KDV PRUH WKDQ GRXEOHG ZKL
KDV IDFLOLWDWHG DQG FRQWULEXWHG WR WKH UDSLG S
DOVR KHOSHG WR VSXU WKH LQFOXVLRQ RI PRUH GHYHO
DOORZLQJ IRU VSHFLDOLVDWLRQ DFFRUGLQJ WR WKHLU
QRORJLHV EHFRPLQJ DIIRUGDEOH WR PDQ\ PRUH SHRSO
DUH XVHG V\QRQ\PRXVO\ VHFWRU FRQWULEXWHV VLJQL
DQG WR WKH ZRUOG HFRQRP\ DV D ZKROH

8QOLNH SOXULODWHUDO DJUHHPHQWV VXFK DV WKH :72
WKDW UHVWULFWV WKH EHQHILWV WR LWV VLJQDWRULH
PHQW ZKHUH WKH IRXQGLQJ PHPEHUV DJUHHG WR HOLPL
ZDV H[WHQGHG WR DOO PHPEHUV RI WKH :72 LQFOXGLQ
PHQW DFFRUGLQJ WR WKH SULQFLSOH RI PRVW IDYRXUH
]HUR WDULIIV VKRXOG DSSO\ WR DOO ,7 SURGXFWV LQFO
LV VXEMHFW WR D PRUDO KD]DUG SUREOHP JLYHQ WKH

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H FRQVLGHULQJ
&DQDGD WKH
UHVW RI WKH GH
UWK WUDGH VHH
WUDGH RI GHYH
KQRORJLFDO XS
QJ JRRGV IRU H[S
OG H[SRUWV RI ,7

6HFRQG VLQFH WKH ,7$ ZDV LQWURGXFHG WKH ZRUOG
UHYROXWLRQ QDPHO\ WKH ,QWHUQHW DQG WKH HVWDEO
VSXUUHG JOREDOLVDWLRQ DQG KDG D FUXFLDO LPSDFW
WDNHV SODFH LQ WKH ZRUOG :LWK LW FDPH DQ XQSUHF
FRPSRVLWLRQ RI ,&7RI VH\àSpð

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VWLSXODWHG LQ WKH FXUUHQW ,7$ WH[W LV
ZKHUH WKH +6 FRGHV RI WKH LQFOXGHG SURGXFWV DUH
HUHG E\ WKH DJUHHPHQW EXW ZKLFK HDFK SDUWLFLSDQ
FDWHJRU\ 7KH VXEMHFWLYH DVVHVVPHQW LQ WKH ODWV
ZRUN ² E\ GHVFULSWLYH LOOXVWUDWLRQV RI SURGXFWV
SURGXFWV)RU H[DPSOH IXUQDFHV DUH QRW JHQHUDOO
WRU PDQXIDFWXULQJ RXJKW WR EH FRYHUHG $V PHQWL
LQ WKH PDNLQJ DW WKH :RUOG &XVWRPV 2UJDQL]DWLRQ
1HYHUWKHOHVV VXFK DPELJXLW\ FUHDWHV URRP IRU LQ
LV URRP IRU LQWHUSUHWDWLRQ WKHUH LV URRP IRU GL
JRRGV RXJKW WR EH FRYHUHG LQ D IXWXUH ,7$ RU D ,Q

7R VWDUW WHOHRORJLFDO LQWHUSUHWDWLRQ RI ZKDW
SUREDEO\ KDYH YHU\ OLWWOH UHOHYDQFH \HDUV ODW
DQG FRQVXPHU SURGXFW LV DOVR LQFUHDVLQJO\ LQGLV
SURFHVVRU VSHHG PHPRU\ FDSDFLW\ RU KDQGOLQJ RI
FDSWXUHG LQ D WDULII OLQH GHVFULSWLRQ 5HSHDWHG
FRQVXPH PDUNHWV ZLWKLQ D IHZ \HDUV RU HYHQ MXVW
RU ,&7 SURGXFW LV ² WKH 2(&' KDV VRPH IXQG WKH
DQG FRPPXQLFDWLRQ E\ HOHFWURQLF PHDQV LQFOXGL
GHWHFW PHDVXUH DQG RU UHFRUG SK\VLFDO SKHQRPH

6LPLODU EXW VLPSOHU SKUDVLQJ ZRXOG EH WR VLPSO
OHWWHUµ L H DV LQIRUPDWLRQ DQG WHFKQRORJ\ ILU
WHQGHG IRU PDQDJLQJ LQIRUPDWLRQ ZKLFK PHDQV WK
FRPPXQLFDWH RU UHQGHU LQIRUPDWLRQ ² RU DUH SDUW
ZRXOG H[SDQG WKH FRYHUDJH IURP SURIHVVLRQDO DQG
LFV ² ZKLOH H[FOXGLQJ D ZLGH UDQJH RI JRRGV WKDW F
,7 SURGXFWV SHU VH VXFK DV PLFURZDYH RYHQV ZDVK
IROORZLQJ WKLV SULQFLSOH VRIWZDUH DSSOLFDWLRQ
GLJLWDO LPDJHU\ DQG PXVLFDO UHFRUGLQJV ZRXOG EH

6HFRQG LWHP RQ WKH DJHQGD QXVW EH DVVXPHG WR EH WHFKQR
WR PHFKDQLFDO RU SURGXFWV EDVHG RQ DQDORJ SURF
QRW FRQWDLQ LQWHJUDWHG VHPLFRQGXFWRUV ² IRU H[
WR D GLJLWDO VWLOO RU YLGHR FDPHUD ,Q VXFK0@H À

:&2 DV D WHFKQLFDO IRUXP LV EHWWHU HTXLSSHG WR K
QHJRWLDWLRQ GULYHQ :72 7KLUG D QHJDWLYH OLVWL
HFRQRPLF JDLQV EXW ZRXOG DOVR FUHDWH VWUXFWXU
UHYLHZ WKH FRYHUDJH RQ D UHJXODU EDVLV RU DV RI
:72 PHPEHUV IDFH DXWRPDWLF LQFOXVLRQ RI VXFK SUR
OLEHUDOLVDWLRQ UDWKHU WKDQ WRZDUGV WKH VWDWX

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• • LQ WKH 'RKD 5RXQG DUH FXUUHQWO\ RXWVL
%UD]LO &KLOH 0H[LFR DQG 6RXWK $IULFD 7RJHWKHU Z
QHJRWLDWLQJ LWV DFFHVVLRQ WR WKH :72 WKHVH QRQ
SRUW YROXPHV ZKLOH WKH UHPDLQLQJ YROXPHV E\ QRQ

ZLWK RWKHU WUDGH EORFV DV WKH (8 &DULFRP DQG $Q
LV RQH RI WKH PRVW SUROLILF HFRQRPLHV LQ WKH ZRU
ZLWK WKH 86 &DQDGD WKH (8 ()7$ $XVWUDOLD .RUHD
RQH RI WKH IHZ HFRQRPLHV WKDW VLJQHG RQH ZLWK &K

WKLV EULQJV IXQGDPHQWDO FKDQJH WR IXWXUH QHJRW
YROXPHV RI WUDGH WKH SOXULODWHUDO ,7$ UXQV WKH
LQJ VLPLODU IODZV WKDW EORFN WKH 'RKD 5RXQG IURP
OLEHUDOLVDWLRQ LV VRXJKW WKH DFFHGLQJ PHPEHUV
VLJQLQJ RQ WR IXWXUH QHJRWLDWLRQ RQ WKH FRYHUDJ
YDULDEOH JHRPHWU\ LV D FRDOLWLRQ RI WKH ZLOOLQJ
IRU IXWXUH GHHSHQLQJ UHYLVLRQV QHHG WR EH WDNHQ

)LQDOO\ RQH VKRXOG QRW XQGHUHVWLPDWH WKH YDOX
PRUH WKDQ WUDGH YROXPHV HYHQ LQ WKH FDVH RI 0H[L

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• • QRQ WDULII EDUULHUV 17%V IURP WKH RULJL
GHFLVLRQ RU SHUKDSV HYHQ D QHFHVVLW\ ZLWKRXW ZI
:KLOH WKH (8 ZDV D VWURQJ DGYRFDWH RI LQFOXGLQJ
DQG LQ SDUWLFXODU WKH $VLDQ HFRQRPLHV ZHUH VWUI

17%V DUH E\ IDU ELJJHU REVWDFOHV WR ,&7 WUDGH WRO
WLRQ RI ELODWHUDO)7$V DV WKH\ DUH WKH RQO\ WUDG
WLRQV RQ 17%V 'HVSLWH WKH HPHUJHQFH RI JOREDO S
,7 JRRGV KDYH DOVR EHHQ VXEMHFW WR VLJQLILFDQW E

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7KHVH ILYH FRXQWULHV DORQH UHSUHVHQW DERXW R
17%V LQ WKH UHPDLQLQJ ,7$ PHPEHUV ZHUH]HUR WKH

,Q SDUWLFXODU WKHUH LV D VWURQJ FDVH IRU DFFHSW
6WDQGDUG SURWHFWLRQLVP E\ QRW UHFRJQLVLQJ WHVW
HUV· KRPH FRXQWULHV DQG GHPDQGLQJ GXSOLFDWH WH
EHFRPH VWDQGDUG SUDFWLFH WR GLVFRXUDJH LPSRUW
VLJQLILFDQWO\ GHOD\ QHZ SURGXFW LQWURGXFWLRQ E
DVVHVVPHQW ERGLHV DQG HYHQ VWRS LPSRUWV HQWLU
IRU GXSOLFDWH WHVWLQJ ZRXOG VLJQLILFDQWO\ UHGXF
WLRQLVW GRXEOH WHVWLQJ UHTXLUHPHQWV UHGXQGDQ
HQIRUFH WKHLU RZQ UHJXODWLRQ 7KLV LV D WHFKQLTX
PDQGDWRU\ WKLUG SDUW\ FHUWLILFDWLRQ IRU H[DPSO
WULHV KRZHYHU RSSRVH 6'R&V DV WKH\ ORVH WKHLU P
RI D SRVW PDUNHW VXUYHLOODQFH V\VWHP DV WKH\ GR
JRRGV :KLOH VXFK FODLPV DUH MXVWLILHG LW LV LPSR
JOREDO ² LW LV TXLWH XQOLNHO\ WKDW WKHUH DUH OR
RQH FRXQWU\ DQG XQVDIH LQ DQRWKHU 0XFK RI WKH (0

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LPSRUWDQFH RI ZRUOG WUDGH LQ VHUYLFHV
LW KDV VR IDU QHYHU EHHQ D SDUW RI WKH ,7$ QHJRWLL
QHJRWLDWLRQV DERXW WDULII UHGXFWLRQV VHUYLFHV
FRPSOLFDWHG E\ H[HPSWLRQV GRPHVWLF UHJXODWLRQV
YHULI\ $V PHQWLRQHG LQ WKH LQWURGXFWLRQ ,7$ LV
LQWURGXFWLRQ RI WKH ,QWHUQHW -XVW WR LOOXVWUD
PRQ PHGLXP IRU PXVLF ZKHQ WKH ,7$ FDPH LQWR IRUFH
'9'V GLG QRW \HW H[LVW DQG 9+6 WDSHV ZHUH VWLOO WK
ODUJHVW YHQGRU RI PXVLF &'V LQ WKH ZRUOG DQG WKH
ZRUOG·V ODUJHVW ,QWHUQHW SR[WDLWQDWLRQ LQ HDUO
JUHDWO\ EHQHILWWHG WKH GHYHORSLQJ FRXQWULHV W
WKH ELJJHVW WXUQRYHU LQ ZRUOG WUDGH LQ FRPSXWH
JURZWK LV WKH IDVWHVW JURZLQJ WUDGH FDWHJRU\

7KH *HQHUDO $JUHHPHQW RQ 7UDGH LQ 6HUYLFHV *$76
5RXQG DQG VXEVHTXHQW OLEHUDOLVDWLRQV WKURXJK
KHUR RI WKLV GHYHORSPHQW 7KH *$76 DQQH[RQ WHOH
DUH DFFRUGHG RSHQ DFFHVV WR DQG XVH RI SXEOLF W
QRQ GLVFULPLQDWRU\ WHUPV DQG FRQGLWLRQV WKH 5HIHUHQF
WLRQ GHHSHQHG WKH FRPPLWPHQWV RQ XQLYHUVDO V
LQWHUFRQQHFWLRQ UHJXODWRU\ DXWKRULWLHV DQG WHOH
ZDV SLYRWDO LQ FUHDWLRQ RI WKH GLJLWDO HFRQRP\
FLDOO\ LQ WKH DUHD RI WHOHFRPPXQLFDWLRQ VHUYLFH
VHQVLWLYLWLHV DQG H[FHSWLRQV ² DQG H[SDQGLQJ WK
WXUQ WKH DJUHHPHQW LQWR DQ DOO HQFRPSDVVLQJ DJ

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:KLOH WKHUH LV QR XQLYHUVDOO\ DJUHHG GHILQLWLRQ
VKRXOG DW OHDVW LQFOXGH FRPSXWHU DQG UHODWHG
LQGXVWU\ WHUPV LW LPSOLHV DW OHDVW QHWZRUN DF
FRQVXOWLQJ DQG VXSSRUW VHUYLFHV SURYLVLRQ RI D
DVSHFWV RI RQOLQH FRQWHQW SURYLVLRQ

$QG DUJXPHQWV IRU ZK\ ,&7 VHUYLFHV RXJKW WR EH LQ
)LUVW² WKH ,&7 LQGXVWU\ KDV EHFRPH LQFUHDVLQJO\ G
EXVLQHVV DFWLYLWLHV DUH VHUYLFHV)HZ ,&7 JRRGV F
H[DPSOH PRELOH SKRQHV DQG WDEOHWV KDYH EHFRPH
WR QHWZRUNV RU FRQWHQW VHUYLFHV VXFK DV JHR SI
RU EXVLQHVV DSSOLFDWLRQV FDQQRW GHOLYHU WKHLU
DSSOLFDWLRQV DUH KRVWHG FHQWUDOO\ 7KLV SKHQRP
VHUYLFHV FRPSOHPHQWDU\ DQG XQDEOH WR IXQFWLRQ I
VHHQ ZLWK WKH H[DPSOH RI &'V DQG YLGHR JRRGV DUH
DOVR WDNLQJ SODFH RXWVLGH FRQVXPHU PDUNHWV DQG
QHWZRUNV DUH LQFUHDVLQJO\ SURYLGHG ZKROHVDOH D
QLFDWLRQ RSH YKLF+WÄ`K

VWUXFWXUH ,W HQDEOHV FRQVXPHUV DQG EXVLQHVV W
DQG WHOHYLVLRQ E\ RQH VLQJOH VHUYLFH SURYLGHU

6HFRQG QHZ HPHUJLQJ VWDQGDUGV DUH NH\ WR ,&7 JU
H[DPSOH RQ PRELOH WHFKQRORJ\ )RXUWK JHQHUDWLR
VHUYLFHV EXW LW DOVR FRQYHUJHV WRZDUGV QHZ LQW
RXV QDWLRQDO RU UHJLRQDO SURWRFROV 7KLV JUHDW

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WKH DVVHPEO\ VHHP WRGD\ HYHQ RXW RI WRXFK ² :72 PH
WRULXP WKDW UHIUDLQV WKHP IURP WDULIIV RQ ¶RQOL
DIIHFWHG E\ WDULIIV WKDW DUH LPSRVHG RQ GRXG $
IRU IXUWKHU RSHQLQJ RI &56 LQ WKH 'RKD 5RXQG KDYH
FRYHUDJH RI &3& ·

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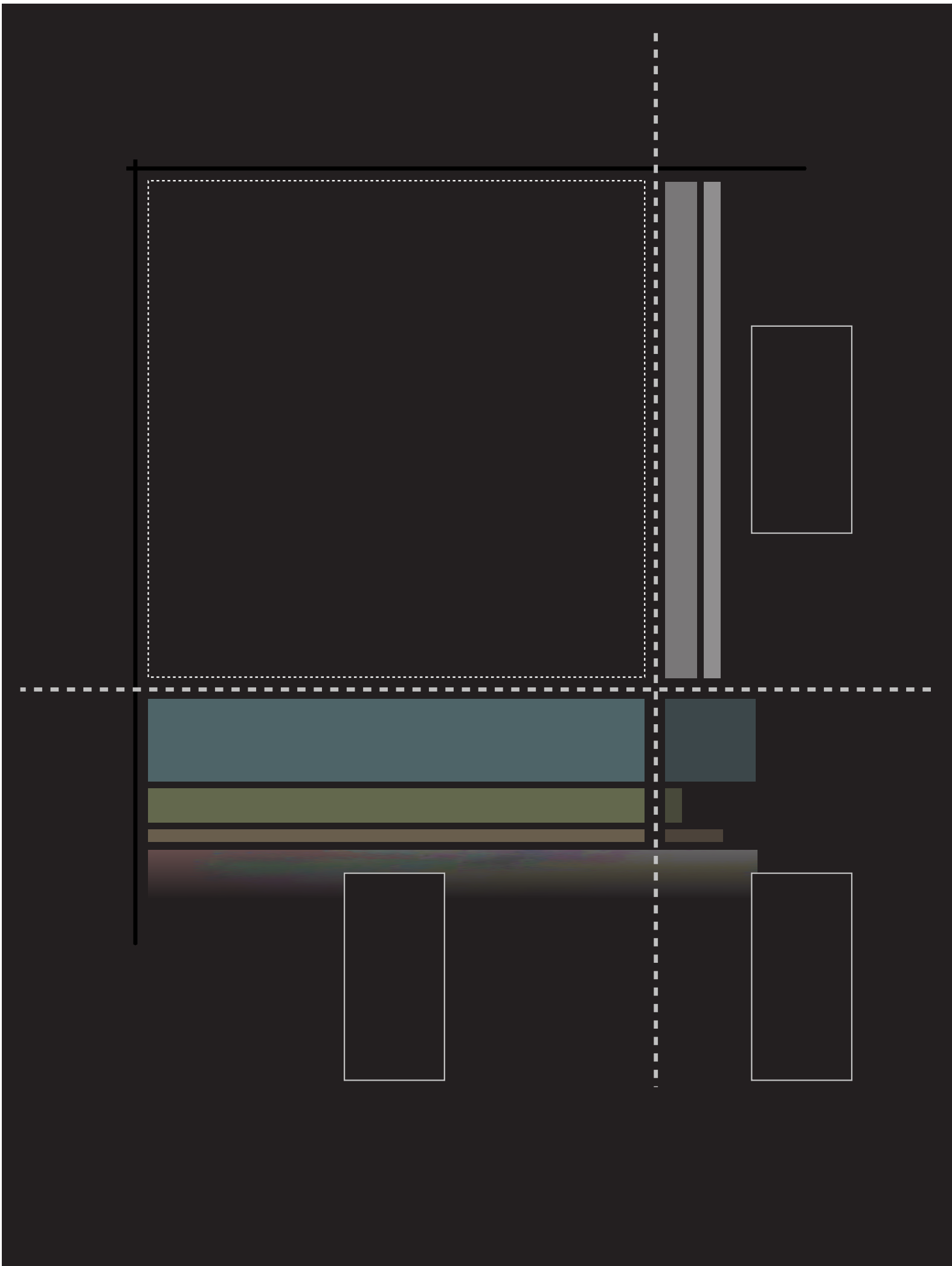

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&KHPLFDO HOHPHQWV GRSHG IRU XVH LQ HOHFWURQ
XVH LQ HOHFWURQLFV

3ULQWLQJ PDFKLQHU\ XVHG IRU SULQWLQJ E\ PHDQV
SRQHQWV RI KHDGLQJ RWKHU SULQWHUV FRS\LQJ
QRW FRPELQHG SDUWV DQG DFFHVVRULHV WKHUHRI

0DFKLQH WRROV IRU ZRUNLQJ DQ\ PDWHULDO E\ UH
SKRWRQ EHDP XOWUDVRQLF HOHFWUR GLVFKDUJH HO
SODVPD DUF SURFHVVHV

0DFKLQH WRROV IRU ZRUNLQJ VWRQH FHUDPLFV FR
IRU FROG ZRUNLQJ JODVV

7\SHZULWHUV RWKHU WKDQ SULQWHUV RI KHDGLQJ

&DOFXODWLQJ PDFKLQHV DQG SRFNHW VL]H GDWD U
ZLWK FDOFXODWLQJ IXQFWLRQV DFFRXQWLQJ PDFKLQH
FKLQHV DQG VLPLODU PDFKLQHV LQFRUSRUDWLQJ D FD

$XWRPDWLF GDWD SURFHVVLQJ PDFKLQHV DQG XQL
FKLQHV IRU WUDQVFULELQJ GDWD RQWR GDWD PHGLD L
GDWD QHVRL

2WKHU RIILFH PDFKLQHV IRU H[KHFWRJUDSK RU \
PDFKLQHV DXWRPDWLF EDQNQRWH GLVSHQVHUV FRLQ
PDFKLQHV SHQFLO VKDUSHQLQJ PDFKLQHV SHUIRUDWL

3DUWV DQG DFFHVVRULHV RWKHU WKDQ FRYHUV F
RU SULQFLSDOO\ ZLWK PDFKLQHV RI KHDGLQJ WR

PDFKLQHV DQG DSSDUDWXV RI D NLQG XVHG VROHO
FRQGXFWRU ERXOH SU Qì L UKHDp°€@ G€0 S G€7 G÷U†i t’@ 1U

VSHFLILHG RU LQFOXGHG HOVHZKHUH LQ WKLV FKDSWHU

&RPSRXQG RSWLFDO PLFURVFRSHV LQFOXGLQJ WKR

0LFURVFRSHV RWKHU WKDQ RSWLFDO PLFURVFRSHV

'UDZLQJ PDUNLQJ RXW RU PDWKHPDWLFDO FDOFXO
PDFKLQHV SDQWRJUDSKV SURWUDFWRUV GUDZLQJ VHW
PHDVXULQJ OHQJWK IRU XVH LQ WKH KDQG IRU H[DPSO

,QVWUXPHQWV DQG DSSDUDWXV IRU PHDVXULQJ RU
YDULDEOHV RI OLTXLGV RU JDVHV IRU H[DPSOH IORZ P
H[FOXGLQJ LQVWUXPHQWV DQG DSSDUDWXV RI KHDGLQJ

,QVWUXPHQWV DQG DSSDUDWXV IRU SK\VLFDO RU FK
WRPHWHUV JDV RU VPRNH DQDO\VLV DSSDUDWXV LQVW
YLVFRVLW\ SRURVLW\ H[SDQVLRQ VXUIDFH WHQVLRQ

5HYROXWLRQ FRXQWHUV SURGXFWLRQ FRXQWHUV
OLNH VSHHG LQGLFDWRUV DQG WDFKRPHWHUV RWKHU

2VFLOORVFRSHV VSHFWUXP DQDO\VHUV DQG RWKHU
FKHFNLQJ HOHFWULFDO TXDQWLWLHV H[FOXGLQJ PHWH

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/DERUDWRU\ JODVVZDUH ZKHWKHU QRW JUDGXDWH
VLOLFD

0DFKLQHU\ SODQW HTXLSPHQW QRW HOVHZKHUH
PDNLQJ KRW GULQNV IRU FRRNLQJ KHDWLQJ IRRG ZKHW

3DUWV RI PDFKLQHU\ SODQW ODERUDWRU\ HTXLSP
FOXGLQJ IXUQDFHV RYHQV RWKHU HTXLSPHQW RI KHD

2WKHU FHQWULIXJHV LQFOXGLQJ FHQWULIXJDO GU
GU\HUV

2WKHU PHFKDQLFDO DSSOLDQFHV ZKHWKHU QRW K
VSUD\LQJ OLTXLGV SRZGHUV H[FOXGLQJ

3DUWV RI PHFKDQLFDO DSSOLDQFHV ZKHWKHU QRV
VSUD\LQJ OLTXLGV SRZGHUV ILUH H[WLQJXLVKHUV ZKH
DQFHV VWHDP VDQG EODVWLQJ PDFKLQHV VLPLODU M

3DUWV DFFHVVRULHV IRU PDFKLQHV RI KHDGLQJ

3DUWV DFFHVVRULHV IRU PDFKLQHV RI KHDGLQJ

,QMHFWLRQ PRXOGLQJ PDFKLQHV

3DUWV RI PDFKLQHU\ IRU ZRUNLQJ UXEEHU SODVW
WKHVH PDWHULDOV QRW VSHFLILHG LQFOXGHG HOVHZK

,QGXVWULDO URERWV QRW HOVHZKHUH VSHFLILHG

2WKHU PDFKLQHV PHFKDQLFDO DSSOLDQFHV RWK
IRU WUHDWLQJ PHWDO

3DUWV RI PDFKLQHV PHFKDQLFDO DSSOLDQFHV K
LQFOXGHG HOVHZKHUH LQ WKLV &KDSWHU

0RXOGV IRU UXEEHU SODVWLFV LQMHFWLRQ FRPSU

3UHPDU\ FHOOV SULPDU\ EDWWHULHV OLWKLXP

,QGLFDWRU SDQHOV LQFRUSRUDWLQJ OLTXLG FU\V
GLRGHV /('

3DUWV RI WKH DSSDUDWXV RI

2SWLFDO LQVWUXPHQWV DSSOLDQFHV IRU LQVSH
VSHFWLQJ SKRWRPDVNV UHWLFOHV XVHG LQ PDQXIDFWX

2WKHU RSWLFDO LQVWUXPHQWV DSSOLDQFHV RW

3DUWV DFFHVVRULHV RI WKH LQVWUXPHQWV DSS

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$XJXVW · 3HWHUVRQ ,QVWLWXWH IRU ,QWHUQDWLRQD

81 &RQIHUHQFH RQ 7UDGH DQG 'HYHORSPHQW ,QIRUPDW

:RUOG %DQN ¶%H\RQG WKH ,QIRUPDWLRQ 7HFKQRORJ\ $
7UDGH LQ (OHFWURQLFV· :% 'HYHORSPHQW 5HVHDUFK *U
3DSHU $SULO

:RUOG &XVWRPV 2UJDQL]DWLRQ ¶ $PHQGPHQWV· -XQ

:RUOG 7UDGH 2UJDQL]DWLRQ ,QIRUPDWLRQ 7HFKQRORJ\

:72 *HQHUDO $JUHHPHQW RQ 7UDGH LQ 6HUYLFHV *$76

:72 1HJRWLDWLRQ *URXS RQ %DVLF 7HOHFRPPXQLFDWLR

:72 ´&RPSXWHU DQG UHODWHG VHUYLFHV %DFNJURXQG

:72 8QLWHG 6WDWHV ² 0HDVXUHV DIIHFWLQJ WKH FURVV
LFHV :7 '6 $% 5

:72 &KLQD ² 0HDVXUHV DIIHFWLQJ WUDGLQJ ULJKWV DQG
DQG DXGLRYLVXDO HQWHUWDLQPHQW SURGXFWV :7 '6

:72 (XURSHDQ &RPPXQLWLHV DQG LWV 0HPEHU 6WDWHV
7HFKQRORJ\ 3URGXFWV '6 '6 '6

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