
Designing organizational solutions to integrate work and life

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Abstract

In September 1996, Fleet Financial Group and the Radcliffe Public Policy Institute undertook a one-year pilot project addressing a "dual agenda" – reexamining work processes to achieve positive business outcomes while also helping employees better integrate work responsibilities with life outside of work. The chosen sites for the experiments were a retail/small business banking unit and a portfolio management unit. Radcliffe-Fleet Project researchers employed two key methods: dual context and action research. Using this methodology, interventions and measures of success of the interventions were developed collaboratively with management and employees. Even in these competitive, deadline-driven work environments, quantitative measures and qualitative assessments at each site showed a positive relationship between business outcomes and quality of life outcomes. The researchers develop guidelines for companies interested in replication of this project. Several principles are also identified for sustaining the success of effective work-life integration interventions and institutionalizing the "dual agenda" in the workplace.

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Project background

Having a better integration of work and life is a challenge faced by female as well as male workers in the modern workplace. Achieving better integration requires, first, a close examination of work practices and of assumptions underlying these practices and, second, making a change in the way work is done (Bailyn *et al.*, 1997). Fleet Financial Group and the Radcliffe Public Policy Institute undertook such a project in September 1996. The Radcliffe-Fleet project's goals were to make the work-life integration concerns of employees visible workplace issues and to effect changes in work organization as a result. The project also developed ways to document impacts on business outcomes and on the work-life interface.

The challenges confronted by Radcliffe and Fleet, as they embarked on this project, were significant. The company and its employees faced major ongoing changes, and, internally and externally, the company had failed to earn a reputation for "family-friendly" policies. Fleet Financial Group, the nation's 11th largest bank holding company in 1997, exemplified many of the major transformations experienced by the banking industry and other large corporations: wholesale mergers and acquisitions coupled with extensive downsizing, reorganization and implementation of cost-saving strategies. Within one decade, Fleet acquired or merged with more than 75 banks; within a three-year period (1993-96), the company eliminated 6,000 jobs. In these ways, Fleet is typical of many companies and the results of this project are relevant to a broad range of American businesses.

The research approach

The Radcliffe-Fleet project (RFP) built upon recent initiatives in the work-life field to address workers' need for better integration of their lives at and outside of work. Recent studies have begun to demonstrate the connection between bottom-line business goals

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and issues affecting employees' quality-of-life. Some have measured the costs and benefits of specific personnel programs such as providing on-site child care. Others have documented employer opinions regarding the business benefits of family policies and flexibility programs in terms of greater employee satisfaction, commitment, loyalty, and reduced turnover (see Friedman, 1991; Friedman, 1998; Galinsky and Bond, 1998). Clear quantitative and qualitative measures using data from before and after work process interventions were implemented have been collected only rarely, however. These measures are important if businesses are to be convinced of the worthiness of such efforts. The project team therefore sought to build upon existing research and to add measurements relevant to business and work-life impacts.

RFP researchers employed two key methods: dual context and action research. "Dual context" entails collecting information about both the larger economic context of the industry being studied as well as on the specific firm. The interplay of change at the industry and firm levels – for example, large-scale technological advances in the banking industry and how these play out in a specific firm – greatly affect bottom line outcomes and employees' quality of work-life. Researchers gain an understanding of how organizational change within a firm (or a unit within the firm) is linked to larger economic, social, and political phenomena[1].

The term "action research" stems from the 1940s work of the social psychologist Kurt Lewin (Lewin, 1951). Lewin's approach linked theory to practice for the benefit of both: "there's nothing as practical as a good theory", he wrote; "you can't understand an organization until you try to change it". This approach differs from traditional research because of its emphasis on collaboration with organization members to define the nature of the experimental changes to be instituted. It differs from consulting because of its emphasis on careful assessment of the intended and unintended effects of the changes introduced.

The internal process and site-based field work conducted for this research were based on procedures developed in a Ford Foundation-supported action-research project conducted at Xerox Corporation from 1991-95. In this pioneer project in the area of work-life and gender issues, a team of researchers

including Lotte Bailyn, Joyce K. Fletcher, Deborah Kolb and Rhona Rapoport developed a field work methodology designed to elicit underlying assumptions regarding the structure and timing of work and to identify possibilities for changing these assumptions (see Rapoport and Bailyn, 1996; Bailyn *et al.*, 1997).

In keeping with this method, the RFP emphasized the following four perspectives, which are illustrated later in our experiment descriptions:

- (1) *Continuous interaction*. Product depends on process. Throughout, researchers interacted closely with employees. During data collection and analysis, researchers played a lead role, while during experiment implementation, employee oversight was key.
- (2) *Culture*. The collision between new ways of thinking and resistance to change creates tension. Workplace culture – the practices and expectations surrounding the accomplishment of business goals in each of the sites studied – was the focus of the analysis.
- (3) *Collective/systemic*. The project dealt with the systemic impact of the work organization on individuals. This required a collective approach – jointly agreed to and applied to the whole work group – rather than a private accommodation between individual and manager. Collaboration and communication were essential.
- (4) *Dual agenda*[2]. In interviews, experiment design and assessment, and throughout the process, researchers considered jointly the needs of employees and the business. Work and employees' personal needs were seen as complementary, not necessarily adversarial.

The RFP experiment sites were selected based on a number of criteria developed collaboratively by researchers and members of Fleet's human resources departments[3]. The chosen sites were a retail/small business banking unit in Framingham, Massachusetts and a portfolio management unit in Providence, Rhode Island. For both sites, the research team used a range of quantitative and qualitative research tools to gather baseline data, track the experiments in progress, and collect post-experiment data. The team posed three main questions:

- How is work organized in the unit and what are the business measures of success?
- How does this work organization affect employees' personal lives?
- How can changes in the work process positively affect business outcomes and employees' lives?

Fieldwork activities

Following background research on the banking industry and Fleet's history, the Radcliffe team conducted a work-life survey in both sites. In addition, several spouses and partners of site employees were interviewed about how their partner's employment at Fleet affected their personal and family lives[4]. This article reports on the process and results of the following activities[5]:

- Researchers conducted individual and group interviews of unit employees, managers of related units, and company executives to assess the work-life issues that were most salient at each site, to understand the company context for the unit's work, and to elicit commitment to the project goals.
- Researchers in each site analyzed the interview data to determine the underlying assumptions and possible points of leverage for change[6]. Researchers reported back to the experimental groups, and project design and implementation groups were formed at each site to work collaboratively with researchers to develop experiments and methods for measuring results.

Table I presents a flow chart summarizing in general form the steps taken to develop and implement the RFP at each site. Fleet employees in the unit were the primary designers of the experiments and had significant involvement in the monitoring of results. Employees from the units joined experiment committees to turn ideas into workable experiments. Each committee developed a short proposal describing a plan and expected outcomes. Group members and researchers then jointly reviewed the proposals. The researchers' major role was to coach participants.

Throughout the process, researchers met with Fleet senior executives in order to elicit

senior management support, which was crucial for the success of the project. Researchers also met with the unit management to discuss implementation issues, including resources, time, and support for the experiments. The research teams for both sites also conducted post-experiment interviews.

The Framingham Business Banking Unit

Background analysis

As part of a 1996 reorganization, Fleet split its sales and underwriting functions, and several underwriting departments were combined to form a new "business banking" small business loan-development unit employing 300 people. An important event for employees in this unit was its relocation that year, when about 200 Fleet Business Banking employees were moved from a building in downtown Boston to an old Shawmut Bank building in Framingham, Massachusetts. The move involved significant cuts in administrative support for the unit.

Traditional underwriting, one of the business banking unit's major functional areas, comprised the RFP experimental group. This group employed 30 people – 25 traditional underwriters, four team leaders and a manager – divided into teams who worked with non-branch sales staff (relationship managers) from different parts of the Northeast region. The underwriters generally worked on business loans in the \$100,000 to \$500,000 range and interacted on a daily basis with employees who processed the loan application files, including bookkeepers, gatekeepers and workflow coordinators.

Through employee interviews and meetings, Radcliffe researchers found that several aspects of the corporate culture were generating work-life tensions in the unit. To inform collective decisions regarding experiment design, researchers presented to the unit employees and senior management an analysis of the hidden costs for both business and work-life of specific work practices and work decisions. This analysis is summarized in Table II.

Researchers suggested some assumptions possibly underlying these decisions and work practices. The decision to relocate assumed that cutting business costs to be "competitive" in the banking industry was more important than the costs of the dislocation. It

Table I Project activities

1 Site selection	2 Introduction of project and project team to site	3 Selection of subgroup	4 Information gathering	5 Generation and selection of intervention(s) or project	6-7 Implementation 6 Initial implementation	7 Interim steps and changes	8 Evaluation
	Description of project approach and of "dual agenda", take questions Formation of project committee	Meetings to decide on subgroup within unit Meet with managers and team leaders of subgroup to enlist support	Project team conducts individual interviews Project team prepares analysis Project team presents analysis for feedback to managers and team leaders of subgroup	Present analysis to employees in subgroup Steering committees of employees formed Steering committees formulate and circulate proposals Projects team meets with management team to prioritize proposals	Steering committees propose measurements Project team requests human resources measures	Steering committees meet to exchange feedback on implementation Project team meets with committee chairs to review and adjust measurements Employee focus groups for feedback	Celebration with senior management present Employee focus groups and interviews with managers and team leaders for feedback and suggestions

Table II Areas of worklife difficulties at Framingham and their costs

Work practice/decision	Business costs	Work-life costs
Office relocation (from Boston to Framingham, MA)	Loss of skilled support staff Added training time for new staff Filing system problems Added setup time	Longer commutes Added stress Increased transportation
Cuts in administrative support	Extra clerical tasks (copying, filing, writing loan commitment letters, etc.) took time away from underwriters' primary responsibilities Computer systems were out of sync with unit's data collection and information processing needs	Extra administrative work meant longer workdays for underwriters and a decreased ability to manage their workloads
Focus on quantity (Measuring productivity by the quantity of loans processed; emphasis on measurement and control)	Did not capture unit's use of peer reviews, training, mentoring and teamwork to ensure a high quality product The broad set of skills and understanding of loan processes was being squeezed by the drive to reduce the number of people doing traditional underwriting	Emphasis on management control meant that individual flexible work schedules were subject to change when managers changed Work segmentation and loss of "big picture" could limit options for career growth

also assumed that employees could relocate to work anywhere in New England or be replaced with minimal cost to business. The focus on quantity and production numbers assumed that fast turnaround was the key to

getting new customers. It also assumed that segmenting work would increase production, and that quantitative measurements were the "real" indicators of output. Finally, researchers suggested, it was assumed that cuts in

administrative staff would not significantly affect the core business and that computer systems could compensate for the loss of support staff, increase efficiency, and reduce costs. There seemed to be little awareness of the negative effects of these cuts on the underwriters' workloads.

The Framingham experiments

Researchers and participants looked for ways to leverage change in all of the above areas, to push at the assumptions about how the work was done. Many good ideas for work practice experiments came out of group meetings. The interventions ultimately chosen – a redeployment of administrative tasks and a new loan/credit reassignment strategy[7] – are discussed in detail below.

Administrative redeployment

Before this experiment began, one administrative assistant supported all 30 people in the traditional underwriting group. With such minimal support, many administrative tasks were performed by underwriters, who were getting paid a professional's salary to use their underwriting skills, not to do clerical tasks. The experiment committee, co-chaired by an underwriter and the administrative assistant, developed a series of proposed work process changes in order to reduce the hours spent on administrative work and increase the time for underwriting, thereby making more efficient and effective use of underwriters' time.

The experiment shifted several administrative tasks from underwriters to the administrative assistant, who would delegate clerical tasks to a new temporary employee. The "temp" would take on delivering faxes and mail, photocopying, and pulling credit reports. This change entailed an added cost from the temp's salary, but would free up the administrative assistant to prepare commitment letters and undertake information-gathering tasks, which would in turn free up the underwriters to do more loan underwriting work[8]. Finally, two underwriters worked with the administrative assistant to develop a standard wording for loan "commitment letters" – letters granting credit that were prepared previously by underwriters only. Significant training time was needed to enable the administrative assistant to prepare

commitment letters for a small set of underwriters.

Credit reassignment

Before this experiment began, underwriters were organized into three regional sub-teams headed by team leaders. Each of the underwriters was assigned to work with certain relationship managers within their region. These relationship managers sent in loans to their respective underwriters. When underwriters had backlogs, they "swapped" loans within their regional team at the initiative of the team leader. Loans were rarely swapped across regional teams.

Chaired by an underwriter, the experiment committee planned two changes to the existing system. First, one manager would be responsible for the backlog process for the entire group (a rotating responsibility), keeping a log to monitor loan backups. Second, all underwriters would gain the power to swap loans at their own initiative, even across regions. The committee expected that these modified mechanisms for assigning loan applications would enhance underwriters' ability to manage their workload as well as increase the diversity of the type of loans they handled.

Results from the Framingham experiments

Researchers gathered feedback on the experiments through individual interviews, focus groups, surveys and analyses of 1997 human resources and production data. Focus groups were conducted at the end of the experiment period and included 21 underwriters, the team leaders and the manager. Surveys were administered three times: at the beginning, middle, and end of the experiments.

The administrative redeployment experiment

On a "1 to 10" scale (with 10 indicating success and 1 indicating failure), underwriters rated this experiment an 8.8 – a strong success. The administrative assistant completed an increasing number of commitment letters (from 61 in July to 115 in August) and "1CPH"[9] loan status screens (30 in June; 56 in July; 34 in August[10]; and 80 in September). This cut down on underwriters'

clerical work, giving them more time to focus on underwriting, so they “went home earlier” The average time underwriters spent preparing commitment letters decreased (from 3.2 to 1.7 hours per week) as did their time processing ICPH screens (from 1.7 to 1.1 hours per week) and logging in and out of the “AFS” loan information system (from 2.8 to 1 hour per week).

Relationship managers rated the quality of commitment letters produced under the new system 6.2, 7.1, and 6.5 out of 10 in the three respective surveys. Most underwriters reported an improvement in the quality of the letters and expected that to continue. About one-third of the respondents wrote favorable comments about the letters, with the incidence of positive comments rising from 30 to 47 percent positive during the course of the experiment. Complaints regarding spelling, typing, and formatting errors fell from 33.3 to 12.5 percent, and there were fewer complaints about inconsistencies and content errors (from 13.3 to 6.3 percent).

By reducing the number of distractions underwriters faced, the experiment resulted in more effective work processes and less work-day fragmentation for underwriters.

The credit reassignment experiment

The reaction to this experiment was mixed but still positive, with underwriters rating it a 7.6 on a scale of 1 to 10. Surveys showed that although initially skeptical, underwriters came to value having the option of using credit reassignments. It cut back on interruptions and saved time. Both underwriters and managers liked having one manager oversee all credit assignments and the backlog on a rotating basis, rather than having separate managers oversee assignments by region. Managers could “more effectively see the whole picture” because one person was in charge of the whole unit. Underwriters thought the new log system generated a more accurate set of numbers for backlogs. Underwriters’ new power to manage their own backlogs and decide which loans to swap and when made a big difference in how they felt about their work and their ability to deal with backlog pressure. It raised the overall capacity for self-direction, a key element for worker satisfaction. The system also promoted a feeling that the unit constituted a regional group, rather than several disconnected state groups.

Combined results of both Framingham experiments

One measure of quality of life that has a noted impact on work productivity is getting a “good night’s sleep”. This clearly improved during the experiments. The surveys showed that disturbed sleep, a common manifestation of stress, had decreased dramatically. In just a 90-day period, the percentage of participants reporting sleeplessness either “frequently” or “sometimes” declined from 79 to 50 percent, while those suffering sleeplessness “rarely” or “never” grew from 21 to 50 percent. Managers realized that sleep distress often results in more mistakes and poorer communication at work, and a well-rested workforce is a boost to efficiency.

Participants reported improvements in their overall satisfaction with the current system of administration after the experiments. Those who reported being “satisfied” or “very satisfied” rose from 15.4 to 54.6 percent while those “not satisfied” or “somewhat satisfied” declined from 86.4 to 45.5 percent. Participants also reported greater satisfaction with their sense of control over the management of their work (from a rating of 6.2 to 7.3 (out of 10)). They also felt more at ease with their ability to integrate their work at Fleet with their personal lives (from 6 to 6.9). Underwriters’ sense that their work was valued increased (6.9 to 7.6) as did their satisfaction with their personal lives (from 7.1 to 8).

The average percentage of time spent doing “real underwriting” (as opposed to support tasks) went up from 52 to 60 percent. Moreover, average weekly evening hours declined from five hours to three. Average weekly hour trends were more difficult to gauge. The before-after survey showed that average hours worked per week increased from 43.8 hours to 46.7 hours during the experiment[11]. (The experiment was initiated during a seasonal peak in credit-line renewal and in the month of August, when vacations required some shifting of loan assignments.) Meanwhile, the administrative redeployment survey – which was conducted during a different week – indicated a decline in the average hours, from 45.7 to 44.5[12]. Looking at these results as a whole, it appears that the sense of control over the management of work and the ability to accomplish underwriting tasks increased even as hours worked increased. Trends in weekly work hours for

the group as a whole will need to be monitored in the future.

Human resources measures

Turnover rates[13] (quits, firings and transfers) were computed for the experimental group and for the rest of the unit (the non-experimental group) to measure human resources impacts. For the first three quarters of 1997, the average quarterly turnover rate was 4.5 percent for the experimental group versus 6.9 percent for the non-experimental group.

Meeting production goals

Productivity in the unit was sustained throughout the experiments. Managerial goals for production continued to be met while participants experienced work-life improvements. From late May through late August, selected productivity indicators were within target range:

- The total number of backlogged credits (loans) per day peaked at more than 80 credits and gradually declined to 50 as applications tapered off. This trajectory was typical for that period of the year, and it held for the total group as well as for the regional subgroups within the unit. Interviewees reported that the process of “working the backlog down” went more smoothly during the experiment.
- The unit’s turnaround goal was to make underwriting decisions in seven days or less. For virtually all experiment weeks, 80 percent of applications were turned around within this time frame, thus meeting the manager’s desired range.
- An important measure of performance was the average dollar amount per decision[14]. Throughout the period, this quality goal was maintained at close to \$250,000 per decision, a loan size considered desirable for this group.

The Providence Portfolio Management Unit

Background analysis

The Reporting/Management Information Systems (MIS) group in Fleet’s Portfolio Management unit pulled together analytical reports for various senior executives, boards, committees, and outside regulatory bodies in order to measure and analyze the bank’s risk exposure and that of its customers. The group

was formed in 1994 from seven different units — most from merged or acquired banks — that were combined to “standardize, streamline, and centralize” (two-thirds of the units’ employees were laid-off in the process).

Each of the merged/acquired banks brought different management information systems which required integration into a single system in order for overall bank risk analysis to be timely and accurate. Sometimes the incoming data processing cultures clashed with Fleet’s. Concurrently, technological changes enabled a timelier and more flexible reporting of ratios and measures that, as recently as five years previously, would have been unthinkable. The reporting/MIS group was increasingly expected to use such measures in its reports. This meant that the volume and scale of the data the unit was responsible for verifying and analyzing was growing and requiring the unit to become more automated.

Work was divided among five teams, each managed by a team leader: one MIS team, two reporting teams, a production team, and a LIMITS[15] team. Most of the approximately 35 employees worked for the two reporting teams, which were assigned several regularly scheduled reports as well as ad hoc requests from senior management. The unit was busy in its efforts to integrate systems, gather data from new sources, and measure them in new ways. Clearly, the rapid set of mergers and reassignments and the survival of only a minority of those who had performed the function previously for the main bank had intensified pressures on the unit to maintain its organizational integrity and performance. This no doubt explains some of the sense of “frenzy” that Radcliffe researchers found in their interviews with staff.

Radcliffe researchers analyzed the qualitative data from the initial set of interviews in the Providence unit, and pointed to two work practices that contributed to this frenzied workplace. These are summarized in Table III.

Researchers outlined four characteristics of the unit’s culture that they felt were underlying these difficulties with the board report cycle and ad hoc reports:

- (1) an activity orientation, creating a sense that the only way to deal with pressure was to work harder and put in more time;

Table III Areas of work and life difficulties at Providence and their costs

Work practice/decision	Business costs	Work-life costs
Board report cycle amidst frequent mergers/acquisitions (Fixed board meeting dates for which reports must be delivered in advance; frequent report iterations necessary)	Six weeks of the 12-week quarter were always frenzied for at least some group in the unit Extra time needed to bring merged banks' data into Fleet formats	Long hours for the whole unit, including evenings and weekends Frenzy = stress
Increase in ad hoc report requests (Impromptu requests by senior management for trend analyses; a small but rising portion of the unit's work)	Extra time needed to devise new software report formats to pull ad hoc information from existing databases Miscommunication often resulted in the need for multiple report iterations	Long hours for isolated individuals under severe time pressures

- (2) work practices entrenched in routine, leaving little time to consider alternative ways of working;
- (3) a reactive tendency, leading staff to respond to all requests and assume that everything must be done, with little opportunity to prioritize or to discover the essence of what was really needed;
- (4) an emphasis on control – understandable in a financial reporting environment – resulting in supervisors' needs to oversee employees and thus provide them with little flexibility in the location and timing of work.

In short, the unit operated in a competitive, deadline-driven environment which generated tighter managerial control and little flexibility, and offered few opportunities for the consideration of alternative work arrangements. Researchers believed that these assumptions embedded in the workplace culture made it difficult for employees to integrate their work with their personal lives, and undermined the effectiveness of the work itself.

The Providence experiments

The project team collaborated with the unit employees to design two work practice experiments. The first entailed telecommuting and flextime. The second created standard forms for ad hoc requests.

Flex: telecommuting and flextime

Few unit employees had benefited from flexible work schedules before the RFP, and telecommuting was at the top of their list of

suggestions. The implementation team discussed the entire spectrum of flextime and telecommuting options from least to most ambitious[16]. One of the more ambitious options for a flex experiment was ultimately adopted: employees would get PCs networked from their homes to the unit's LAN through another Fleet facility, including dedicated phone lines and printers[17]. The involvement of outside researchers encouraging everyone to experiment helped make this ambitious option feasible, as did the dual agenda framework, which enabled participants to view problems like conflicts over home telephone use – and thus the need for a second line dedicated to a modem – as legitimate work environment concerns.

Ad hoc request form

Poorly defined ad hoc report requests coming from both inside and outside the reporting/MIS teams were repeatedly cited as a problem. Typically, requests were very general at first, and then revised and made more specific after the first report drafts were presented to the requester. The new ad hoc request form was designed to provide more clarity and detail in requests to avoid the need for multiple report iterations. Designed to be completed by the requester, the form asked for technical details about the desired format of the requested report.

Preferring more regularized reports, a minority of MIS staffers resisted fulfilling any ad hoc requests. However, management wanted the unit to shift away from predefined reports – which would eventually be generated electronically using sophisticated software – toward more flexibility and analysis. The new

form was seen as one way to render more predictable the workload created by the growing number of ad hoc requests.

Results from the Providence experiments

Providing feedback on the Providence experiments were three post-experiment focus groups that included most unit employees and individual post-experiment interviews with several unit managers and executives. A before-after experiment survey and weekly log surveys filled out by flexers and non-flexers were also utilized, as were trends in 1997 human resources and production data.

The flex experiment

On the whole, the flex experiment was deemed a success. Using a 1 to 10 scale, focus group participants rated the experiment an average of 8, with a range from 6 to 10. Unit employees generally agreed that the experimental changes lessened the "misery" of an extremely busy quarter, and that work and life would have been considerably worse without them. Portfolio management employees working outside the reporting/MIS unit (non-participants) noted a positive change in demeanor among the unit's employees, with more smiles and nods, less frenzy and fewer "crazy" hours. They also noted that unit staff planned projects more effectively.

After a somewhat rocky start, the telecommuting experiment was given a tremendous send-off when, unexpectedly, the office LAN went down for a whole week: only the off-site telecommuters could get any work done. In the weekly log surveys, "flexers" (telecommuters and those with flexible schedules at the office) reported positive impacts on their ability to do their work. About half reported positive effects in all weeks, with no negative effects reported in any weeks except one. Both flexers and non-flexers reported that having colleagues telecommute had no adverse impact on their own work. Others reported that the need to divide their tasks into those best done alone and those requiring interaction with colleagues compelled them to do more planning.

The telecommuting experiment had the greatest positive impact on telecommuters' ability to integrate work with their personal lives. Across all weeks except one, positive

effects were reported by 70-80 percent of telecommuters. Many found that work previously requiring weekends or late nights at the office could instead be done at home. This meant that employees could participate in more family and community events (birthday parties, supper with the kids, sports, elder care, etc.) that would have been missed under the old routine.

Almost all flexers mentioned improved productivity due to uninterrupted work time. However, some telecommuters noted that they worked longer hours at home than in the office because having the equipment at home made them feel guilty if they were not working all the time. Telecommuters also encountered technical and equipment problems, particularly early on [18].

Others issues requiring attention were cultural. People had to be encouraged to avoid saying telecommuters were "out" or "having the day off", and use "working from a remote location" instead. It also seemed that, early on, schedules were still often decided individually, or only within a team, without enough collective consideration of how these schedule changes would affect others in the group.

Managers on the whole were supportive, but a little cautious, because the experiment required them to interact with staff in new ways. They reported that the experiment enhanced everyone's awareness of what others were doing. It also focused attention on the issue of cross-training – and how more of it could help staff in their jobs and make it easier to manage varied schedules.

The ad hoc request form experiment

Post-experiment interviews showed that the forms were used primarily by MIS staff with internal customers but not with the bank's senior management. Reaction to the forms was mixed. On the one hand, some resisted them passively, and the forms were more typically completed by MIS staffers rather than by requesters. On the other hand, MIS employees reported that the forms were a real benefit to their work, improving their understanding of what questions to ask requesters.

By their mere existence, the forms helped increase awareness of the need for clear communication of data requests. Even some of the "resisters" acknowledged this benefit. More attention to the format and introduc-

tion of the forms would be needed to increase their use and impact.

The work and life interface

Work hours data showed a consistent pattern that was generally positive for the flexers but often negative for the non-flexers. Those who flexed worked an average of an hour less per week, but non-flexers actually worked an average of two and a half hours more per week[19]. Evening and weekend hours followed the same pattern, but by lesser amounts. Nine of the 15 flexers reduced their evening work hours, and seven reduced their weekend hours. By contrast, none of the non-flexers reduced their evening hours, and only one reduced weekend hours. The small number of employees involved makes it difficult to interpret this pattern. Even if the work hours' difference could be explained by more efficient use of time by flexers (as was reported in qualitative interviews), it still might be seen as a direct transfer of work hours from flexers to non-flexers – a perception that would threaten the sustainability of the flex experiment.

Flexers reported gaining considerably more control over their work. On a “1 to 10” scale, this rating increased by almost two points by the end of the experiment, with ten of the 15 flexers increasing this rating (one by as much as nine points) and only one decreasing it (by one point). By contrast, non-flexers' ratings stayed more or less the same.

The amount of information received on time and in adequate form increased for both groups, but more so for the experimental group. Flexers reported a 15 percent increase in the amount of information received in adequate form and an 11 percent increase in the percent received in good time[20]. This compares with increases of 9 percent and about 3 percent[21] respectively, reported by non-flexers.

In sum, the introduction of flexible schedules and telecommuting had a clear double payoff for participants: shorter hours and more effective work practices. To avoid perceptions that this payoff came at the expense of non-flexers, we suggested that the unit as a whole determine the schedules according to the best way to accomplish the work and the needs of every member, no matter how they wished to work individually. This would require compromise and could only be handled by collective deliberations,

not individually or only within the separate teams.

Human resources measures

For the second and third quarters[22] of 1997, the average quarterly turnover rate was 3.9 percent for the experimental group and 6.6 percent for the rest of the unit.

Meeting production goals

Keeping track of report production was a challenging task for this unit given the wide variety of reports. Additionally, the requirement that board reports never be late affected the timely production of other reports. Participation in the experiments compelled the unit to design ways to keep track of productivity. Table IV presents one striking example of a newly designed measure: the decreasing number of days it took the production team to complete assigned reports (asset quality and others) for each month.

The team credited its use of flexible schedules – along with greater planning, systems enhancement, and dedication – with its ability to complete reports more quickly. Production goals for other reports were also maintained for the unit[23]

Lessons from the Framingham and Providence sites

The RFP team learned several key lessons that will be instructive for researchers undertaking work-life integration research efforts in the future:

- Quantitative and qualitative measures at each site showed a positive relationship between quality of life outcomes and business outcomes.
- Effective communication within a workplace unit or team is necessary in order for change to be successful. A site researcher noted that a senior manager's early focus on communicating project goals, method, and timetables – and a continued focus on communication throughout the project – was instrumental in addressing questions and defusing concerns about the project's aims.
- Productivity improves when employees gain time to concentrate and focus on their “real” work.
- Involving employees in collaborative projects increases commitment and

Table IV Production team output tracking

Report	Days			
	June	September	October	November
Balance AIMS to G/L (outstanding)	16	14	13	12
Distributing SCO flash/flowrate	n/a	13	13	12
Balance aims to G/L (charges/recoveries)	15	14	13	12

energy. The input of the employees who actually do the work is critical to creating effective work process and culture changes. Employees told us that changes initiated with this project were different from previous work redesign efforts because the changes were for their benefit.

- Telecommuting arrangements challenge individuals to manage their time at home – either by eliminating distractions or by resisting the compulsion to keep working beyond reasonable hours – and require ongoing attention to the technical support required to make off-site work possible and productive.

Guiding principles of successful work and life integration efforts

In light of this project, several principles for perpetuating the success of effective work-life integration interventions and institutionalizing the dual agenda (enhancing work-life integration and improving business outcomes) in the workplace can be identified:

- *Owning the experiment.* All stakeholders – employees, supervisors and upper-level managers, including the chief executive officer, chief financial officer, and, if possible, board members – must “buy in” to the experiment. At each site, this support and willingness to invest time and resources were key to the experiments’ success.
- *Team approach.* Experiments must be designed collaboratively by all, to define how work can be redesigned at the team level to increase productivity and enhance work-life integration for the whole team. This interdependent process differs from typical human resources projects that stress the individual.
- *Clear indicators of productivity and of quality of life improvements.* Indicators need to be jointly defined and accepted by all involved, including management.

For example, the measure of sleeplessness at Framingham was useful in that it clearly linked life outside of work to productivity.

- *Assurances to employees.* Employees must be given assurances that increases in productivity will not be used to undercut work-life gains.
- *Rewards.* All participants should be rewarded and given corporate appreciation for the risk-taking and creativity involved in the development and implementation of the experiments.
- *Communicating results.* A clear mechanism for disseminating findings must be developed so that the entire company can gain from such experiments. The institutionalization of new, positive ways of working is essential to overall success.
- *Incorporate work-life concerns in corporate planning.* Future work reorganization efforts should include integrating work productivity and family/community outcome measures. As experiments are implemented, productivity gains should be linked to work-life gains.

Creating change in the corporate culture

We began this paper by noting that Fleet was typical of many workplaces in corporate America. There is much to be learned from Fleet’s experiences as it reexamines its work processes to meet the dual agenda of more effectively accomplishing its business goals while helping employees better integrate work responsibilities with life outside of work. For example, a key lesson from Providence was that even the most competitive work environments can see results. Employees and managers in competitive, deadline-driven work environments can understand and quickly adopt the dual agenda as a goal, and develop projects that deliver measurable results within a short period of time – even when these projects seem counter to the work

culture. At Providence, the long-accepted “frenzy” of the work teams began to abate noticeably within the first ten weeks of the experiment.

To successfully replicate this kind of “dual agenda” project, we advise companies to take the following steps:

- *Retrain management.* A management retraining investment is necessary – from the top of the hierarchy down to the level of direct supervisor – and on the scale of continuous quality improvement and other forms of organizational redesign.
- *Change the myth of the ideal worker.* The belief that “a worker out of sight is a worker out of control” which prevails in many organizations must be changed in order for any flexibility experiment (particularly telecommuting) to be taken seriously as a work management tool.
- *Create new measurements.* Measuring productivity in non-manufacturing sectors is complex and requires substantial creativity and effort by managers and employees. While individual supervisors may know which workers are “producers”, service organizations have had difficulty generating reliable measures of productivity. Client services are not easy to measure, products (and their complexity) change rapidly, and quality is as important as quantity, but more elusive.
- *Take a systemic approach.* To sustain experiments in the long term, planning work at the collective, systemic level is very important. In our experience, flexibility experiments implemented as a benefit for individual workers foundered due to lack of workload coordination within and across teams.
- *Involve the operations side.* While, historically, human resources departments have been the corporate locus for initiating people-oriented policies, our approach requires that those instigating change work in concert with operations managers. Change must take place in managerial and staff thinking about work organization even if the requisite work process changes are limited in scope.
- *Elicit the commitment of leadership.* A company’s leaders must demonstrate their commitment by allocating needed resources for the project or it will not succeed. Support from the top gives employees the security they need to

commit themselves to the effort. It encourages participation and input, and fosters the belief that risk-taking will be rewarded.

- *Get an outsider’s perspective.* This can help managers and employees see other ways of thinking and working. Here, researchers’ roles are different from those of conventional consultants because they do not impose solutions from the outside; instead they encourage the affected personnel to devise and shape possible changes themselves. Their role should be to facilitate the change process and make sure all voices are heard by eliciting commitment from the top, eliciting input and “buy-in” from personnel, helping legitimate concerns expressed at different stages of the process, and reaffirming the project’s goals (e.g. the dual agenda).

This last point is critical because too often organizations focus either on work-life benefits efforts or on work redesign to improve business outcomes. The dual agenda approach seeks to achieve both goals simultaneously. It is our belief – a belief confirmed by the results of this project – that workplace changes designed to strengthen and facilitate the connections between work, family, and community can create a win-win situation for employees and employer alike.

Notes

- 1 In the words of social scientist C. Wright Mills, the dual context connects “biography to history” (Mills, 1961).
- 2 This term comes from the study at Xerox.
- 3 Criteria included geography, gender ratios, and interdependence of the units to others at Fleet.
- 4 Due to space limitations, results of these studies are not reported here but are available in Radcliffe’s full reports of the RFP (Bailyn *et al.*, 1998). Some broad characteristics of the populations in both sites were as follows: the mean age of the population studied was 35 years old; three-quarters of the workers were married, and 68 percent had a spouse or partner who also worked outside the home; 85 percent of the participants were white; the majority had a college degree; 60 percent had children living at home, and 12 percent had elder-care responsibilities; men made up 52 percent of the total study population.
- 5 The project team was active in the work sites from January through September 1997, and implementation of the experiments began in late May and early June. Monitoring by the team ended in December 1997.

- 6 In keeping with methods developed by Bailyn and Rapoport in the 1996 study at Xerox Corporation.
- 7 An additional mini-experiment with telecommuting was also set-up for two staff members: one worked one day a week in a branch office closer to home, and one worked one day a week at home. The results of this pilot experiment are available in the larger RFP report at Radcliffe.
- 8 The administrative assistant was reassigned to report to underwriting management.
- 9 Loan status information needed for credit processing.
- 10 Lower due to vacation schedule.
- 11 This survey spanned the longest time period, from the project's inception to its end.
- 12 A temporary schedule change for one employee could affect the weekly average noticeably.
- 13 Turnover can result from a range of factors apart from any experimental changes, and these factors may affect each group differently.
- 14 The total dollar amount of loans receiving decisions divided by the number of underwriting decisions made each week.
- 15 LIMITS was the system Fleet used to track certain types of exposure. The LIMITS team was responsible for monitoring counter-party risk, which refers to market risk exposure to financial service firms and commercial customers of the bank.
- 16 These ranged from flextime within one work day or across the week, to working from home with various levels of connectivity ranging from using diskettes on a laptop, to having continuous direct access from a home PC to the unit's LAN.
- 17 This was not implemented all at once, but progressively over the course of the experiment.
- 18 Problems included lack of direct LAN connectivity and a frequent inability to log into mobile e-mail. Also, printers were clearly missed at home, and for some, installing an extra phone line for the modem would be necessary.
- 19 This excludes one person who reported going from working eight hours total per week to working 40 hours, which may of course represent an error in recording, but is clearly an idiosyncratic response. If this person is included in the data, the increase in work hours in the control group is seven hours per week. Of course, there was wide individual variation. Only five flexers actually reduced their weekly hours, but they did so by significant amounts. Six others increased their hours, but by relatively small amounts. In contrast, only one non-flexer's weekly hours decreased.
- 20 From 63 to 78 percent and from 61 to 72 percent, respectively.
- 21 From 62 to 71 percent and from 74 to 77.5 percent respectively.
- 22 Figures for the first quarter were not comparable because of unit consolidations.

- 23 For details on other production measures, see Bailyn *et al.* (1998).

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