

### **Bridging the Digital Divide**

toolkits

#### **Financing Government-Assisted PC Purchase Programs**

As we transition to a more connected world, Information Communication Technology (ICT) and ICT skills are becoming increasingly important to the well-being of individuals and countries. PCs are becoming the means by which workers and businesses gain access to economic opportunity, citizens get access to government and healthcare services, and children build the knowledge and 21st century skills necessary to compete in tomorrow's knowledge-based economy.

Today, PC ownership correlates strongly to income level, creating a digital divide between the top 15% of the world's population and the rest whose incomes have not allowed them access to ICT. Fortunately, government leaders, educators, and community and business leaders have the awareness and vision of what technology can do for their people, and the commitment to make it accessible. Advances in silicon process technology and microprocessor architecture, combined with new manufacturing and distribution efficiencies, are making PCs more affordable. At the same time, deregulation and increased competition are lowering telecommunications costs, and industry-standard technologies such as WiMAX are bringing connectivity to under-served areas. Together, these trends are creating an environment where mass adoption of PCs and access to the Internet can become reality.

At the same time, there are still numerous barriers preventing broad access to PCs among lower-income consumers. Typical barriers include:

- Limited disposable income
- · Lack of credit and credit history
- · Lack of adequate financial literacy
- Limited access to collateral to borrow against
- · Poor financial infrastructure, systems and processes
- Prohibitive government policy, rules, regulations such as high import duties, lack of protection for lenders, etc.

In spite of these obstacles, there are proven methods that clearly demonstrate how the right combination of public and private cooperation can make PCs affordable for many lower-income consumers.

# GAPP (Government Assisted PC Purchase) Financing Methods

Financing approaches fall into several broad categories: tax incentives, subsidies and grants, consumer or commercial credit, and emerging models such as microfinancing. Successful PC purchase programs often use some combination of these.

The feasibility and choice of financing options may be different for each project, country and region. Methods also vary in terms of relative impact and difficulty to implement.

#### **Tax Incentives, Subsidies and Grants**

Governments can subsidize PC purchases through tax credits or waivers to consumers, small businesses, employers or PC sellers. Tax credits to consumers effectively lower their purchase price. Some examples include personal income tax credits, waiver of penalties for borrowing against retirement funds, and waiving sales or VAT taxes on qualifying PC purchases. (In some cases, these tax waivers might be offset in the long term through sales taxes on PC peripherals and add-ons, software, consumer electronics such as digital cameras, online transactions, etc.)

Tax credits to employers are used as an incentive for the employer to under-write employee PC purchases, for example, as part of an employee PC leasing program. Governments may grant direct corporate tax credits in return for employee PC purchase subsidies, or they may allow businesses to write off employee PC purchase programs as employee benefits.

Governments may also give tax incentives to small businesses to adopt PCs for business use. For example, in Japan and Turkey, the governments have implemented limited-time tax waivers, tax holidays, capital depreciation accelerators, and other reductions to small and mediumsize businesses (SMBs) that adopt ICT. Governments have also granted special legal or regulatory subsidies to businesses in certain industries (for example, granting tax credits to doctors who use PCs to digitize patient records and provide better point of care or to teachers who buy PCs to gain skills).

Seller tax credits give sellers incentives to offer PCs at a lower price or to offer payment plans. In some countries, such as Brazil, the government has reduced the VAT for PCs below set price points.

One of the more impactful ways that government has reduced PC and related ICT costs is by reducing import duties on PCs and related components. Increases in tariffs can have a negative effect on ICT adoption, usage, and impact. In India, in 2004, the government implemented significant reductions in import tariffs on PCs, thus accelerating adoption and use of technology across the country.

Direct government grants are used to lower PC prices or to make loans available to target consumer populations such as students or senior citizens. Money is typically granted out of national budget allotments for areas such as education or healthcare. Grant money can be applied in the form of purchase vouchers to consumers, direct price support to vendors, or under-writing of loan interest so that banks can offer interest rates as low as 0%.

#### Consumer Credit or Commercial Financing

In many emerging markets, there has historically been little if any consumer credit available, and lower-income consumers are considered bad risks, leaving banks reluctant to venture into consumer lending banks. However, consumer financing is a critical tool to make PCs affordable. GAPP programs in various regions have been able to promote consumer credit by lowering risks for lenders, by working with other lenders in addition to banks, and by leveraging existing infrastructure for loan administration.

One very successful model has been to combine PC loans with another recurring payment. For example, banks can bundle PC purchase loans within a mortgage payment, or they may offer low- interest loans on PC purchases as a way to increase their customer base while at the same time decreasing customer acquisition costs. In other cases, telephone service providers have included PC purchase payment within the customer phone bill while offering a range of connectivity options and telephony services. For college students, PC loans have also been combined with standard student loans used to cover tuition.

In all of these cases, loan payments are handled efficiently through an existing process, and lender risk is lower because the PC purchase is tied to a non-discretionary item such as housing or phone service. There is also the added benefit of working from a known customer base.

Lastly, another way to mitigate lender risk is to secure the consumer loan with money in an employee pension fund or with government funds held in escrow.

#### **GAPP Program Enablers**

Each organization or individual participating in GAPP programs has different goals and concerns. Strong collaboration between the private and public sectors has the maximum program benefit.

#### Government

**Role:** Create public policy and define initiatives that are favorable to broad ICT adoption; Provide support, incentives, subsidies, assurances, promotion and awareness that enable broad adoption of PCs and the Internet; Implement ICT skills training; Public endorsement of program.

**Benefits:** Improve country competitiveness and innovation; Bridge the digital divide; Enable better government (increase efficiency and provide e-Government services).

**Best Practices:** Create favorable policies and incentives for ICT adoption and use; Publicly endorse and promote ICT literacy and usage; Measure and report success.

### Non-Governmental Organizations (NGOs), Aid Organizations

**Role:** Provide funds and assurances for broad adoption of PCs and the Internet; Potentially involved in program implementation; Implement ICT skills and training.

**Benefits:** Economic and social development in a country, region, or population; Improved access to government and social services; Improving quality of life for new PC users.

**Best Practices:** Measure and report results; Publicly endorse and promote ICT literacy and usage; Public and private partnership, align resources to common goal.

#### **IT Industry**

**Role:** Provide ICT technology and services; Define and develop targeted platforms and solution offerings; Potentially involved in program implementation.

**Benefits:** Support local industry growth; New route to market creating the right offering; Promotion and awareness.

**Best Practices:** Publicly endorse and promote ICT literacy and usage; Create simple, easy-to-use processes for purchaser qualification, loan applications, reporting, etc.

#### **Financial Institutions**

**Role:** Provide finance package with affordable terms and conditions.

**Benefits:** Help establish credit; Provide opportunity for new services; Increase customer base.

**Best Practices:** Competitive terms and conditions vs. market rate; Simple application and payment process; Measure and report success.

#### Service Providers (Telco and ISPs)

**Role:** Implement billing systems; Potential involvement in program administration; Provide training and support.

**Benefits:** Service agreements and warranties; Provide opportunities for new services; Increase customer base.

**Best Practices:** New route to market creating the right offering; Publicly endorse and promote ICT literacy and usage.

## Employers (Trade associations and Unions)

**Role:** May offer link to existing HR and training benefits; Publicize and endorse program.

Benefits: Increased productivity; Retain and attract staff.

**Best Practices:** Create simple process for participating in the program; Provide incentives for program participants e.g. training and career development.

#### **Best Practices**

There are a number of best practices, gathered from our experience with GAPP programs worldwide, which will make your programs smoother and more successful, regardless of the financing method(s) chosen.

#### When initiating a GAPP program:

- Identify key decision makers in the government, NGOs, business and consumer organizations.
- Carefully define the target consumer segment, its ICT needs and skills, interests and purchasing patterns.
- · Identify clear financial and social objectives.
- Build the business case, evaluating program costs against reach and expected social and economic impact.
- Align internal stakeholders around specified goals and processes.
- Enlist the government and business partners to help public endorsement for the program.

#### For building the program:

- Plan for a pilot to identify and correct issues before deploying the program on a broad scale.
- Clearly define program administration, delivery, tracking, training, and support processes. (In particular, gaining agreement on tracking methods and metrics is key to long-term program success.)
- Engage the IT ecosystem to help define solutions and delivery and support processes
- Consider a range of PC and Internet offerings, ranging from entry-level to mid-range and high performance, as well as both desktop and mobile computers.

#### For deploying and scaling the program:

- Set up processes for ongoing stakeholder management, tracking, reporting and program evaluation, and to make needed adjustments over time.
- Ensure adequate marketing and publicity efforts to reach initial participation goals and to publicize ongoing program success.
- Identify early adopters in target consumer populations who can influence and help train others.
- After completing the initial phase of the program, consider a refresh of the program to extend the benefit more broadly.

#### **Conclusion**

There is no single approach that fits every country, region, or GAPP program. But numerous methods have been proven to enable affordable access to PCs, and with your creativity and the right combination of financing sources, PCs can be made affordable for the next billion people.